

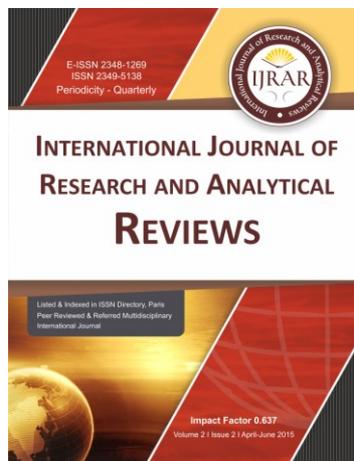
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National Conference was conducted on 23rd march 2019 on the theme Management, Technology & Innovation in the VUCA world "Role in Value Creation".

VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) conflates four distinct types of challenges that demand four distinct types of responses. It is a challenging situation to prepare strategy and planning to face the VUCA world. The conference emphasizes on the discussion of relevant topics in order to provide a holistic facet on strategies to face the challenges of VUCA world.

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ORGANIC FARMING STATUS AND PROBLEMS FACED BY FARMERS

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ABSTRACT: Organic farming in India is the 2.59% (1.5 million Hectares) of organic cultivation area in world. The problems faced by farmers in organic farming are way different from the Traditional farming practices. As the organic farming is the sustainable solution for health of consumer and environment, the issues should be dealt with. This paper presents an analysis of problems faced by the farmers in organic farming, status of organic farming and it's methods to support from the government. This paper will uplift the possible solutions to overcome the challenges in this sector.

Keywords: organic farming, agriculture, main problems, sustainability, organic farmer.

INTRODUCTION:

Organic farming has good impact on environment. Organic farming is more beneficial for human welfare. Organic farming is combining the concepts of tradition, innovation and science. Organic farming started at early 20th century. Organic farming has different fertilizers such as compost manure and green manure. Crop rotation and mixed cropping are very necessary to maintain the good fertility of soil. The organic food demand in all the countries are growing high. Till 2019, Approximately 70000000 hectares (170000000) acres worldwide were doing farming organically. Population in the world is increasing rapidly hence we need to maintain the agriculture production more. Organic farming techniques are present from past thousand of years. All organic practises were followed in agriculture. Cows excrement is the best fertilizer and which Enriches the soil. Cows and bullocks are not only raised for milk consumption but also for farming purpose. Organic farming basically avoids other inputs such as pesticides, fertilizers etc. Organic farming slowly gaining the importance in the society and creating a huge demand for the organic products farmers are getting more benefited because of the premium price of the organic products. In the year 1940, in Japan the microbiologist called Masanobu fukukoka. Who works on soil science and pathology, and left his job as a research scientist, and went back to his native farm, and contributed for the next 30 years in order to develop no-till organic method for growing grain, which is popularly known as "fukukoka farming". India has almost 7lakh Organic producers hence we can contribute and emerge in the world but initially the farmers are facing the problems in yield reduction in the initial years because of shift from inorganic farming to the organic farming, hence they are facing a gap between availability of organic source of nutrients and lack of pest disease occur. Hence farmer is asking for the support price for organically grown crops and market infrastructure as main problem in promoting organic farming.

Methods of organic farming:

Soil management:

Soil management is very important when you do organic farming. Soil management techniques and practises are needed to protect and conserve soil resources. New microorganisms will be developed in the soil. Crop rotation is very important to maintain the fertility of the soil. It mainly helps in maintaining the nutrient balance of soil.

Weed management:

weed plants will compete with our crop plants. Weed management is very important factor to be considered. Weed growth can be stopped by using plastic films and the process is called as mulching. Mulching will protect the soil from weeds. Organic crop rotation results in weed suppression.

Crop diversity:

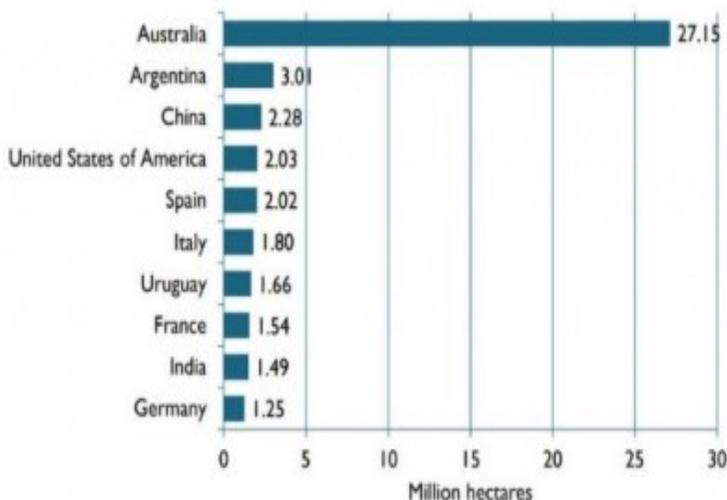
Monocropping was followed in ancient times. Now we make use of polyculture that means growing multiple crops at the same place. Hence it improves the soil health and benefit soil microorganisms.

World scenario:

Organic product demand is more at developed countries. Organic farming practices are followed from 162

countries. Totally 37 million hectares of land is managed in organic methods with 1.8 million farm households. The largest area which practices organic methods are Oceania (12.1 million hectares which is almost 33 percent of global organic farmland). Europe being the second consists of (10.6 million hectares) followed by Latin America (6.8 million hectares).

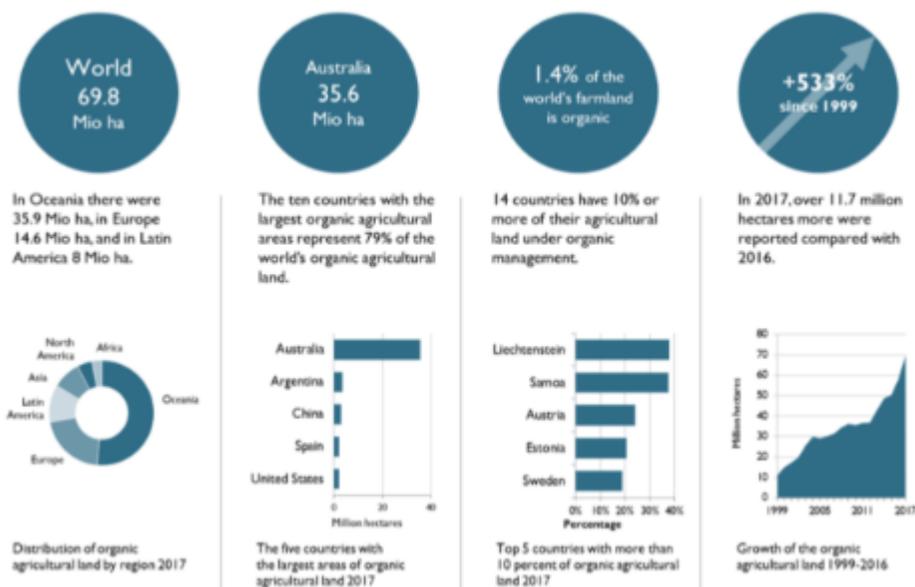
The ten countries with the largest areas of organic agricultural land :



Source: FIBL survey 2018

It can be seen from the above table that Australia has the largest area of organic agriculture land (27.15 million hectares) followed by Argentina with 3.01 million hectares and china with 2.28 million hectares of organic agriculture land. India has contributed around 1.49 million hectares of organic agriculture land.

Organic farmland 2017 table:



Source: FIBL survey 2019.

In 2017, Increase in organic land area at all continents is found and the data is collected. Totally at the end of year 69.8 million hectares of land were organically farmed. The above figure represents almost twenty percent growth it has increased. Only 14 countries are reporting that 10 percent or more of their land is under organic management.

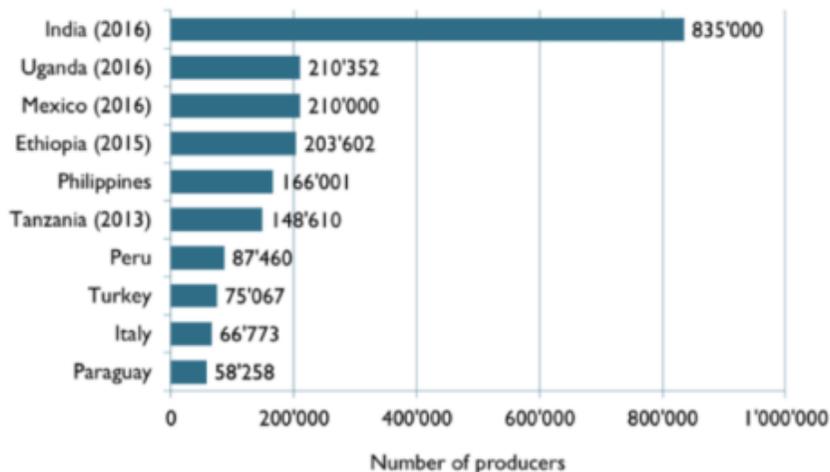
India scenario:

In India organic agriculture is followed from several years traditionally, due to green revolution and modernization has led to the more usage of chemicals.

In organic agriculture the yield is reduced and due to more usage of chemical inputs, soil fertility is decreased environmental awareness is very low. Presently many private agencies and few states started the promotion for organic farming India. Few state departments and government departments at central and state level are promoting organic farming.

The traditional cultivated land without any use of chemical fertilizers and pesticide are eligible for certification. The main challenge is certifying the farms, since all farmers have small holdings (60% of all farms in India are less than one hectare). Small farmers are not able to pay the price for certification; since these farmers are not educated they don't know how to maintain the records. India has ranked top on the list for largest number of organic producers, with nearly 8, 35,000 organic producers.

The ten countries with the largest number of organic producers 2017:



Source: FIBL survey 2019

Suggestions for organic farming in India:

We all know that Indian civilization was “prosperous” because India for than 50 centuries it had top soil. (Top soil means we can grow any type of crop in that land). If we see our Indian culture it's always divine humped cows which made the rich fertile soil through Gomaya (dung) and Gomutra (urine). Recently Padma Sri awardee Subhash Palekar came with an idea after several years of research on Gomaya and Gomutra from all Indian cow breeds he found that all desi cows have natural medicinal properties from it's urine and dung.

Subhash Palekar came to the conclusion that only desi cow dung and urine is effective, but not Jersey Holstein-Friesian breeds (foreign cow breeds), we should not use Jersey breed dung and urine because they are harmful bacteria present in their dung. Subhash Palekar tested Gomaya and Gomutra from all desi cow breeds on every crop, the result was positive all time. If we take one gram of Gomaya contains about 3000 to 5000 million beneficial microbes. Fresh dung and old urine of desi cow should be used for farming. All medical elements like phosphorus, potassium, copper, nitrogen, manganese, boron are inherited in desi cow dung. So in organic farming only desi cow's dung and urine is effective. Hence fertilizers or pesticides are not used in this method; desi cow dung is main component to enrich the soil.

Organic pest control methods:

1. Insecticide:

- Desi cow urine (10 litres).
- Desi cow dung (5 kg).
- Neem leaves (10 kg).
- Water (200 litres).

2. fungicide:

- Black pepper powder (200 grams).

- Desi cow milk (5 litres).
- Water (200 litres).

Farmer can prepare both Insecticide and Fungicide himself. Hence farmer can control the crop pests.

Problems and solutions for farmers:

1) Why farmers are not able to fix a price for their product produced in farms?

Farmers are not able to sell their produce at their own price because all products are fixed or govern by market. Government of India is coming up with minimum support price for some agriculture products.

The farmer is not getting good price because of the following reasons:

- **Demand supply:** The sugar industries have more sugar stored in their inventory hence the sugar price is less, hence industries are not able to pay for the farmers.
- **Middle man or dealers:** producer will not get higher price per the product they produce. End user has to pay 2times the higher price because of middleman and dealers.
- **Farmer understanding:** farmer will see the market price of a particular goods. Hence the farmers will increase the area of a particular goods. Hence the inflow is more in the market due to this prices will be reduced.
- **Quality of products:** farmer will think of getting good yield rather than getting good quality of products.
- **Availability of products:** when the papaya farmer gets low price because of the availability of papaya increases.
- **Productivity of the particular products:** if some viral or pest infection are infected for a crop or season then price will surge automatically due to low supply or production.

2) Organic farming will reduce the yield, why?

- It may vary to the crops and geography. Sometimes insufficient supply of nutrient demand to the crops. Sometimes yield may reduce due to weeds present nearby. Due to insects the yield loss occurs.

3) Why organic farming is not encouraged by government?

- The government should motivate and educate the farmers. Government should encourage by giving necessary details to the farmers about organic farming and it's uses.

4) Organic products are not beneficial for farmers, it's more over beneficial to dealers and retailers for making profit, why?

- The dealers and retailers will pay less price than the market price to the farmers. Farmer doesn't get the market price which is required to make profits. The huge profits are earned by the dealers and retailers. hence dealers and retailers are more benefited by organic products.

5) Organic farming method is a long term process, how can a small farmer make a profit in short term.

- Small farmer will have difficult times in organic farming if we consider in short term. Small farmer has to wait for few years then the investment will be reduced hence he can gain profit in long term process. Crop rotation is must to gain profits and less risk.

6) Why government is not creating local farmers market?

- Government is not creating local farmers market because they face many problems like land acquisitions and infrastructure developments. The government's market interventions like procurement of food grains through food corporation of India or market intervention scheme have mostly helped large farmers, even that too, partially. The dominant small and marginal farmers have been bypassed by the market Interventions.

7) Why farmers are not able to cure virus related diseases in plants organically?

- Few virus diseases like ring spot virus in papaya, mosaic virus are very difficult to control when they are attacked to the crops. Organic solutions don't really cure the virus it may avoid virus infection to some extent.

8) What are the reasons that a farmer is not able to create a market himself?

- Farmer who are from poor economic background and financially backwards are not able to create a market for himself. Farmer doesn't have money to invest in creating market to himself. Small farmers don't have time to think over the situations they are facing and how to comeback from the situations.

9) Organic farming requires more physical effort and time consuming than the chemical farming.

- Organic farming is a long term process it requires more time and efforts compared to chemical farming. To do organic farming we need to collect the animal waste, which acts as a good fertilizer for the plants. More physical efforts and skills are required for organic farming.
- 10) How farmers can eliminate the middleman and dealers?
- co-operative set-up will eliminate the middleman and dealers in the market. In co-operative setup farmer will get at least 60% of market price of their produce. warehouses should be built or available near to the farms. Hence farmer can store their products and search for better market prices. Farmer can search for new start-up's who will purchase their products for better price. So farmer must make use of technology to eliminate middleman and sell directly to the start-up's.
- 11) how can small farmer support his family financially, when he adopts organic farming.
- For small farmers it's very difficult to adopt organic farming. Since small farmers can't wait for over a period of years and financially he cannot support his family within a short period.
- 12) why farmer profession is not taken up by young generation people?
- Current generation young people are mainly focused on education and getting a job in MNC companies. In India all parents ambition is to make their children's either a doctor or engineer but only few parents and students think off farmer profession. Why youth is not attracted because it requires more physical work and they think it's a poor man's job. Hence young generation people must get motivate to become a farmer.

Advantages of organic farming:

- Farmer input cost/production cost is reduced in organic farming when you compare to conventional farming.
- Organic fruits and vegetables are more tasty and nutritious because they are grown as per the time; no chemicals are used in their growth stage.
- Organic farming will protect environment and doesn't make use of chemicals. The chemicals are harm to the environment and soil.

Disadvantages of organic farming:

- people has to pay more price for the organic food than other food products. When you compare with conventional farming.
- Organic farming methods and practises are very difficult to follow and require skilled labours.
- Organic farming methods requires more time to grow their crops hence we may not be able to meet the world's demand.

Conclusion:

As farmers are facing huge problems in organic farming we tried to give some solutions and made them understand that may help the farmers. However government should take initiative to help and reach out every farmer in india.

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A DESCRIPTIVE STUDY ON THE BUYERS' PREFERENCE TOWARDS THE PURCHASE OF MOTORCYCLE IN VOLATILE ENVIRONMENT WITH REFERENCE TO CLASSIC MOTORS IN CHENNAI CITY

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ABSTRACT: *The research work titled "A descriptive study on the buyers' preference towards the purchase of motorcycle in volatile environment with reference to Classic Motors in Chennai. The research was carried to study the influence of the medium in creating awareness about the motor cycles in this volatile and uncertain environment. The study of consumer behaviour is complex and uncertain in nature due to impact of various factors like change in fashion, style, pattern and awareness etc.*

Primary data collection was made through structured questionnaire and sample was collected among the motor cycle in Chennai. The respondents are chosen as per convenience. SPSS was used to obtain results for statistical analysis. Percentage analyses, Chi-square tests, independent samples test, ANOVA were used for analysis in the study.

From the study some interesting findings such as there exists a relationship between age of customer and the person who makes the purchasing decision. When the customer is below 25 years of age, in most cases purchasing decision are made by his/her parents.

When a purchase decision is made in volatile environment, customers attach more significance to the comfortableness while driving the vehicle besides other factors like price, quality, mileage, etc. Further when a motor cycle is bought on full settlement of cash more significance is attached to the price of the vehicle. Most of the buyers make use of loan facilities for buying motor cycles. Considering the volatility and uncertainty nature of the environment, the buyers may change their decisions with regard to purchase of motorcycles.

Keywords: *Buyers Preference, purchase decision, post purchase behaviour, volatility, uncertainty.*

INTRODUCTION

The Indian industrial sector has undergone profound regulatory changes in recent times as a consequence of the economic reforms program put together in between 1988 and 2001. Consequent to these reforms some of the industries that have been influenced the most have been the consumer durables industry, the automobiles industry and certain financial services. In an evolving industry especially in emerging economies like India, it is extremely important to formulate optimal policies on competitions in order to promote both competition as well as growth.

India is the second largest manufacturer of two wheelers in the world. It stands next only to Japan and china in terms of the number of two wheelers produced and sold respectively.

Here in this study, the researcher carried out the study to analyse about the number of two wheelers and how many people are using two wheeler, what motivates and influence them to buy two wheeler, what is the most preferable choice in two wheelers in case of motor cycles and scooters and the most recent two wheelers choice in the market, the satisfaction level, who influenced them and the reasons to purchase motorcycle.

OBJECTIVES OF THE STUDY

- To determine the factors that influence purchase of Motor cycles by the customers.
- To determine the relative significance of various attributes of motor cycles in determining purchase behaviour of customers.
- To study the significance of various advertising media in influencing the purchase of motor cycle among the customers.
- To study the factors of the motor cycle that contributes to post-purchase behaviour or

satisfaction level of customers.

SCOPE OF THE STUDY

The study is to analyse the Buyer's preference of customers towards the purchase of motorcycle in Classic Motors, Chennai. The study covered only the area of North Chennai. So, the information and the conclusion derived from the study are only relevant to this area alone.

LIMITATIONS OF THE STUDY

1. Numbers of respondents were restricted due to the time factor.
2. The study is restricted to North Chennai where the Dealer is located.
3. The study cannot be generalised as the study is limited to the customers who purchase from Classic Motors.

REVIEW OF LITERATURE

The study carried out by Omesh (2011), reveals that most of the customers are aware of popular brands in motor cycles. The customers give more importance to fuel efficiency than to other factors. They believe that the brand name tells them something about the product quality, utility, technology and the like. The consumers prefer to purchase motor cycles which offer high fuel efficiency, good quality, technology, durability and reasonable price.

According to Dabawala (2010), in current market scenario, respondents give maximum no. of weight age to price then after they consider mileage and colours respectively. The availability of credit in no way influences the purchasing behaviour.

According to Pankaj (2009), while buying a motor cycle economy is the main consideration in terms of price of the motor cycle and its fuel efficiency. Hero Honda is considered by his respondents as the most fuel efficient motor cycles on Indian roads. Young people in the age group of 18 to 30 years prefer stylish motor cycles.

According to Neoh, Osman, Ramayah, Mohamad (2007), the durability of the vehicle, its price, maintenance cost, and advertisements play considerable roles in influencing the purchase behaviour of the customers.

RESEARCH METHODOLOGY

RESEARCH DESIGN

The Research Design adopted in the study is Descriptive Research Design as the study describes the characteristic features of the customers, the reasons for the purchase of motorcycle. From the review factors like price of the motor cycle, fuel efficiency, maintenance cost, easy driving, durability has been identified. This study is carried out to ascertain the distinguishing roles played by the demography of buyers in attaching relative significance to various attributes of the motor cycles.

SAMPLING METHOD

The sampling technique used here is non-probability sampling. Non-probability sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected. To be most specific in choosing a non-probability sampling method the researcher has adopted a convenience sampling method. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

SAMPLE SIZE

Information was collected from a sample size of 150 respondents in Chennai which included both males and females. All of the above were completed in all respects. Therefore, data has been tabulated from the 150 completed forms.

DATA COLLECTION

The data collection methods are of two type's namely primary and secondary data collection method. Primary data are those which are collected for the first time and so are in crude form. Primary data are always collected from the source. The primary data method adopted by the researcher is survey method. A secondary data research project involves the gathering and/or use of existing data for purposes other than those for which they were originally collected. These secondary data may be obtained from many sources, including literature, industry surveys, compilations from computerized databases and information

systems, and computerized or mathematical models of environmental processes. Secondary data's collected through company annual reports, websites and company newsletters.

STATISTICAL TOOL FOR DATA ANALYSIS

The following tools are used for analysis of data.

- Percentage analysis, Chi-square test, ANOVA.

DATA ANALYSIS AND INTERPRETATION

PERCENTAGE ANALYSIS

**TABLE NO.1
 AGE OF THE RESPONDENTS**

AGE IN YEARS	NO.OF RESPONDENTS	PERCENTAGE
18-20	6	4%
21 - 25	67	44.67 %
26- 30	65	43.33%
ABOVE 30	12	8%
TOTAL	150	100%

INFERENCE:

From the above table and chart it is inferred that 4% of the respondents fall under age group of 18 to 20 years of age, 44.67% of the respondents fall under age group of 21 to 25 years of age and 8% of the respondents are above 30 years of age.

**TABLE NO.2
 DISTRIBUTION OF MOTOR CYCLE BRANDS AMONG RESPONDENTS**

MOTOR CYCLE BRAND	NO. OF RESPONDENTS	PERCENTAGE
BAJAJ	30	20%
HERO HONDA	27	18%
HONDA MOTOR	24	16%
HERO	22	14.67%
YAMAHA	12	8%
ROYAL ENFIELD	5	3.33%
DO NOT POSSES	30	20%
TOTAL	150	100%

INFERENCE:

From the above table and chart it is inferred that 20% of the respondents has Bajaj motor cycle, 18% of the respondents are has Hero motor cycles, 16% of the respondents are has Honda motor cycles, 14.67% of the respondents are has Yamaha motor cycles, 8% of the respondents are has Royal Enfield motor cycles, 3.33%, of the respondents and do not have motor cycles, 20% of the respondents.

**TABLE - 3
 OCCUPATION OF THE RESPONDENTS**

OCCUPATION	NO. OF REPDONDENTS	PERCENTAGE
Students	93	62%
Salaried	44	29.33%
Business men	13	8.67%
TOTAL	150	100%

INFERENCE:

From the above table and chart it is inferred that 62 % of the respondents are students, 29.33% of the respondents are salaried and 8.67% of the respondents are businessmen.

**TABLE NO.4
INCOME OF REpondENTS**

INCOME IN Rs. PER MONTH	NO. OF RESPONDENTS	PERCENTAGE
15000	21	14%
15001-25000	71	47.33%
25001-35000	40	26.67%
ABOVE 35001	18	12%
TOTAL	150	100%

INFERENCE:

From the above table and chart it is inferred that 14 % of the respondents Income is Rs.15000 per month, 47.33% of the respondents earn between Rs.15001 to Rs.25000, 26.67% of the respondents are earn between Rs.25001 to Rs.35000, and 12% of the respondents and earn above Rs.35000 per month.

**TABLE NO.5
DECISION MAKER**

DECISION MAKER	NO. OF RESPONDENTS	PERCENTAGE
Decision by parents	105	70%
Own decision	32	21.33%
Nearer or dearer ones	13	8.67%
TOTAL	150%	100%

INFERENCE:

From the above table and chart it is inferred that 70% of the respondents say that the decision to purchase the bike is made by their parents, 21.33% of the respondents make their own decision to purchase the bike and 8.67% of the respondents say that the decisions are made by their near and dear ones to purchase the bike.

**TABLE NO.6
MODE OF PURCHASE**

MODE OF PURCHASE	NO.OF RESPONDENTS	PERCENTAGE
Purchased on full settlement	72	48%
Purchased on loans	78	52%
TOTAL	150	100%

INFERENCE:

From the above table and chart it is inferred that 48% of the respondents are aware through Purchased on full settlement and 52% of the respondents are aware from Purchased on loans.

**TABLE NO.7
MEDIUM OF AWARENESS**

MEDIUM OF AWARENESS	NO. OF RESPONDENTS	PERCENTAGE
T.V	84	56%
NEWSPAPERS	37	24.67%
FRIENDS	16	10.66%
OTHER MEDIA	13	8.67%
TOTAL	150	100%

INFERENCE:

From the above table it is inferred that 56% of the respondents are aware through T.V, 24.67% of the respondents are aware through newspapers 10.66% of the respondents are aware through friends and 8.67% of the respondents are aware from other sources.

STASTICAL ANALYSIS

Chi-Square tests

TEST NO.1

Chi-square between test Age and Ownership

Ho: There is no significant relationship between age and motor cycle ownership of the respondents

H1: There is a significant relationship between age and motor cycle ownership of the respondents

TABLE NO. 8
Chi-square test Between Age and Bike Ownership

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.407(b)	1	.121		
Continuity Correction(a)	1.815	1	.178		
Likelihood Ratio	2.433	1	.119		
Fisher's act Test				.154	.089
Linear-by-Linear Association	2.391	1	.122		
N of Valid Cases	150				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.80.

INFERENCE:

Since the 2-sided Asymp. Sig value is > 0.05, the null hypothesis is accepted. That is there is no significant relationship between age and motor cycle ownership of the respondent

TEST NO.2

Chi-square test between Occupation and Ownership

Ho: There is no significant relationship between occupation and motor-cycle ownership of the Respondents

H1: There is a significant relationship between occupation and motor-cycle ownership of the Respondents

TABLE NO 9
Chi-Square Tests between Occupation and motor cycle ownership

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.028(b)	1	.866		
Continuity Correction(a)	.000	1	1.000		
Likelihood Ratio	.028	1	.866		
Fisher's Exact Test				1.000	.521
Linear-by-Linear Association	.028	1	.867		
N of Valid Cases	150				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.40.

INFERENCE:

Since the 2-sided Asymp. Sig value is > 0.05, the null hypothesis is accepted. That is there is no significant

relationship between occupation and motor-cycle ownership of the respondents

Independent samples t-test

TEST NO. 1

Age and attributes of Motor Bike

H₀: There is no significant difference between age and attributes of Motor cycle with respect to buyer's preference towards purchase of the bike.

H₁: There is significant difference between age and attributes of Motor cycle with respect to buyer's preference towards purchase of the bike.

TABLE NO 10
T-test for significant difference between attributes of the Motor Bike and age group of the Respondents

Attributes of Motor Bike	Age group in years	Mean	S.D	t value	P value
Price	Upto 25	3.64	1.39	1.16	0.244
	More than 25	3.45			
Maintenance	Upto 25	3.57	1.40	3.65	0.135
	More than 25	3.53			
Style	Upto 25	3.91	1.26	3.01	0.122
	More than 25	3.99			
Durability	Upto 25	3.22	1.38	3.65	0.361
	More than 25	3.17			
Mileage	Upto 25	3.47	1.22	2.65	0.635
	More than 25	3.55			
Easy Driving	Upto 25	3.22	1.29	3.20	0.426
	More than 25	3.11			
Brand Image	Upto 25	3.11	1.66	1.68	0.122
	More than 25	3.11			
Colour	Upto 25	2.81	1.28	2.01	0.247
	More than 25	2.79			

INFERENCE:

Since P value is greater than 0.05, the null hypothesis is accepted at 5% level of significance with regard to attributes of the Motor Bike and Age group of the respondents. So there is no significant difference between age and attributes of Motor cycle with respect to buyer's preference towards purchase of the bike.

TEST NO. 2

Independent samples T-test

Age group and attributes of Showroom

H₀: There is no significant difference between age group and attributes of Showroom with respect to buyer's preference towards purchase of the bike.

H₁: There is significant difference between age group and attributes of Showroom with respect to buyer's preference towards purchase of the bike.

TABLE NO. 11
T-test for significant difference between attributes of the Showroom and age group of the Respondents

Attributes of the Showroom	Age group in years	Mean	S.D	t value	P value
Availability	Upto 25	3.80	1.19	1.42	0.153
	More than 25	3.93			
Knowledge	Upto 25	3.18	1.30	2.86	0.172
	More than 25	3.24			
After sales Service	Upto 25	3.41	0.85	2.54	0.145
	More than 25	3.38			
Other Services	Upto 25	3.18	1.35	3.12	0.177
	More than 25	3.18			
Infrastructure	Upto 25	3.05	1.21	1.87	0.695
	More than 25	3.25			

INFERENCE:

Since P value is greater than 0.05, the null hypothesis is accepted at 5% level of significance with regard to attributes of the Showroom and Age group of the respondents. So there is no significant difference between age and attributes of Showroom with respect to buyer's preference towards purchase of the bike.

ANOVA

NULL HYPOTHESIS (H₀): There is no significant difference between the age of the respondents and distribution of ownership

ALTERNATIVE HYPOTHESIS (H₁): There is significant difference between the age of the respondents and distribution of ownership

TABLE NO. 12

ANOVA for significant difference between the age of the respondents and distribution of Ownership

Age of the respondent (years)	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-20	6	1.00	.000	.000	1.00	1.00	1	1
21-25	67	1.00	.000	.000	1.00	1.00	1	1
26-30	65	1.00	.000	.000	1.00	1.00	1	1
Above 30	12	2.20	.422	.133	1.90	2.50	2	3
Total	150	1.12	.383	.038	1.04	1.20	1	3

TABLE NO.13
ANOVA for F value

	Sum Of Squares	Df	Mean Square	F	Sig.
Between Groups	12.960	3	4.320	259.200	.000
Within Groups	1.600	96	.017		
Total	14.560	99			

INFERENCE: The table value of F is 259.200, since the calculated value of F is more than its table value the null hypothesis is rejected. Hence we conclude that there is significant difference between the age and distribution of ownership.

FINDINGS

- 4% of the respondents fall under age group of 18 to 20 years of age , 44.67% of the respondents fall under age group of 21 to 25 years of age and 8% of the respondents are above 30 years of age.
- 20% of the respondents has Bajaj motor cycle, 18% of the respondents are has Hero motor cycles, 16% of the respondents are has Honda motor cycles, 14.67% of the respondents are has Yamaha motor cycles, 8% of the respondents are has Royal Enfield motor cycles, 3.33%,of the respondents and do not have motor cycles, 20% of the respondents.
- 62 % of the respondents are student, 29.33% of the respondents are, 26.67% of the respondents are salaried, and 8.67% of the respondents are while the rest are businessmen.
- 14 % of the respondents are Income earn up to Rs.15000 per month, 47.33% of the respondents are earn between Rs.15000 to Rs.25000,26.67% of the respondents are earn between Rs.15000 to Rs.25000,12% of the respondents and earn above Rs.35000 per month.
- 80% of the respondents are possess ownership, 20% of the respondents and Do not possess ownership.
- 70% of the respondents say that the decision to purchase the bike is made by their parents, 21.33% of the respondents make their own decision to purchase the bike and 8.67% of the respondents say that the decisions are made by their near and dear ones to purchase the bike.
- 48% of the respondents are aware through Purchased on full settlement and 52% of the respondents are aware from Purchased on loans.
- 56% of the respondents are aware through T.V, 24.67% of the respondents are aware through newspapers 10.66% of the respondents are aware through friends and 8.67% of the respondents are aware from other sources.
- There is no significant relationship between age of the respondents and motor cycle ownership
- There is no significant relationship between occupation and motor-cycle ownership of the respondents
- There is no significant difference in the ratings of attributes of motor cycles due to age of respondents.
- There is no significant difference in the ratings of variables of showrooms due to age of the respondents.
- There is significant difference between the Age and distribution of ownership of the respondents.

SUGGESTIONS

On the basis of the findings, the following suggestions are made:

- Advertisements play a significant role in creating awareness about motor cycles among customers. So they can be effectively employed to exploit this potential.
- In most cases the purchase decisions are made by parents. A detailed study on the factors parents are looking in a motor cycle can be carried out so as to bring the motor cycle brands closer to the parents and buyers.

- Credit availability influences the purchasing decision significantly. Most of the customers
- make use of loan facilities to buy motor cycles. Motor cycle brand promoters can create attractive credit facilities to attract customers.
- Mass media play a significant role in creating awareness about the features of motor cycles. In particular Television play a vital role in brand promotion. Motor cycle brand promoters can employ these media for brand promotion.
- Age of the consumer has a significant relationship on decision-making. Parents make purchasing decisions in most cases when the age of the buyer is up to 25 years of age. Thus when the motor cycle is actually meant for person up to 25 years of age the preferences of parents shall be taken care of.
- Salaried people are more price sensitive than students. This distinction shall be taken care while promoting motor cycles which are particularly targeting salaried people.
- There exists a relationship between the person who makes the decision and the weight age he attaches to easiness in driving. Further study can be carried out to utilise this opportunity.

CONCLUSION

The study is carried out to ascertain the roles played by various demographic factors like age of the buyer, occupation, income level, credit availability, role of media in attaching relative significance to various attributes of motor cycles. From the study it is clear that the advertisements play a significant role in creating awareness about motor cycles among customers. There exists a relationship between the person who makes the decision and the weight age he attaches to easiness in driving. Credit availability influences the purchasing decision significantly. Most of the customers make use of loan facilities to buy motor cycles. Mass media play a significant role in creating awareness about the features of motor cycles. In particular Television plays a vital role in brand promotion. Age of the consumer has a significant relationship on decision-making. Parents make purchasing decisions in most cases when the age of the buyer is up to 25 years of age. Salaried people are more price sensitive than students. As fashion, fad, style, takes the central stage of volatile dynamic environment. The organization need to consider advertising in different media to attract and retain the customers.

To conclude, the results show that the companies are playing on the peripheral cues to maintain their Total Relationship Management and connect to the customers both present and potential.

Consumer behaviour is complex in nature, understanding and influencing forms a critical issue with regard to purchase or sale of motor bikes, so the study provides insight in understanding the nature of consumer behaviour and providing the solution for needs and wants of customers and provides the scope for further research in the study.

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Pay for Performance: A Predictor of Good Governance in Indian Public Sector in a VUCA world

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ABSTRACT: High level of corruption in a country can lead to poor public governance. Quality of public governance is an indicator of growth of an economy. The linkage between high level of corruption, poor governance and low level of global competitiveness is a severe issue curtailing the growth of Indian economy. This study intends to design a conceptual model for improving the performance of Indian public sector by incorporating pay for performance plan. The proposed model is emerged out of the analysis of public governance practices prevailing in countries with low level corruption. The model highlights the significance of performance management centred governance system in the public sector with a systematic performance linked compensation plan. The model also recommends the inclusion of a control on high job security. The authors postulate that introduction of a structured performance linked compensation system can minimise the corruption in Indian public sector in a VUCA world.

Keywords: Corruption, Public Governance, Performance Appraisal Justice, Pay for performance, Job Security

Introduction

Growing public sector is an attribute of an economy's growth. Performance of public sector is crucial for the functioning of a government irrespective of the structure of the ruling system. Governmental role in managing the public sector is a key indicator of the effectiveness of its governance systems. Wong (2012) narrates governance as "the processes by which authority is exercised in the management of a country's economic and social resources" and "the capacity of governments to design, formulate, and implement policy and deliver goods and services". Indian public sector is famous for its political interference and perennial low performance. Prevalence of corruption is capable of fuelling the ill performance Indian Public Sector. Factors like lack of effective monitoring mechanisms for performance evaluation, seniority linked promotions and high job security without performance linkage are acting like a vicious circle in India. Growth patterns of various countries are interweaved with high level of public sector governance, low level of corruption and effective systems for evaluating the public sector performance. This study purports to analyse the Indian public sector in a global framework with an objective to postulate a conceptual framework for enhancing the performance.

Literature Review

India's ranking of 0.10 in governance (on a scale of -2.5 to 2.5) is dangerously lower than global economies in terms of quality of government run services and quality of officials those who are managing the public services. (Indicators, W. G., 2016). India's global competitiveness position of 40 among 140 countries is an indication of the poor performance of the governance systems (Schwab and Sala, 2016). India's rank of 40 in global corruption perceptions index is among highly corrupted countries (Transparency International Index, 2018). Corruption among the employees in public sector is a more severe issue in developing countries than developed countries.

Comparing the ratings of India and other countries like Singapore USA, UK, France and Japan (Table 1, 2 and 3), it is evident that there can be a relationship between corruption and poor governance and resultant low rating of competitiveness. Corruption can undermine the efficiency of public investment and diminishing of growth potential of an economy (Gupta, Davoodi & Tiongson, 2000). Corruption can jeopardize the public governance and growth of an economy. Posani and Aiyer (2009) narrate the widespread corruption, indifference, inefficiency, absenteeism and absolute failure of public services in India. So, there are enough studies to support the view that Indian public sector is ill performing due to various reasons such as corruption, ineffective management and poor governance systems. In order to revamp the performance of Indian public sector, it is essential to redraft the public corporate governance system in India.

Table 1
Worldwide Governance Indicators (1996-2016)
Government Effectiveness of Countries

Country	Percentile Rank (0-100)	Governance Score (-2.5- +2.5)
INDIA	57.21	0.10
CHINA	67.79	0.36
U.S.A.	91.35	1.48
U.K.	92.79	1.61
SINGAPORE	100.00	2.21
JAPAN	95.67	1.83
FRANCE	89.90	1.41

Strong: +2.5, Weak: -2.5

Source: <http://info.worldbank.org/governance/wgi/index.aspx#home>

Table 2
Global Competitiveness Report(2017-18)

Country	Rank (out of 140)	Score (1-7)
INDIA	40	4.59
CHINA	27	5.00
U.S.A.	2	5.85
U.K.	8	5.51
SINGAPORE	3	5.71
JAPAN	9	5.49
FRANCE	22	5.18

Source: http://www3.weforum.org/docs/gcr/2017-2018/Global_Compititiveness_Report_2017-2018.pdf

Table 3
Corruption Perceptions Index 2017

Country	CPI Score 2017	Rank (0 highly corrupt to 100 very clean)
INDIA	40	81
CHINA	41	77
U.S.A.	75	16
U.K.	82	8
SINGAPORE	84	6
JAPAN	73	20
FRANCE	70	23

Source: <http://www.transparency.org/cpi2017#downloads>

Corporate governance in private sector can be effectively performed by monitoring the performance deviations from expected levels whereas public corporate governance involves evaluation of the equity and effectiveness in service delivery (Hodges, et al., 1996). Research findings in the area of public sector governance support the view that corruption can affect the quality of public sector governance. Overall poor performance of the public sector in India has been a concern to the government for long. Public sector organizations are continually in search of ways to improve the performance of its human capital to obtain competitive advantage. In order to revamp public sector, the focus must be on performance restructuring. Public sector needs to be managed with an intention to fulfil the expectations of citizens without diluting the fundamental performance dimensions.

Performance Appraisal Justice

Performance appraisal (PA) is one of the paramount human resource management practices in organizations as it yields important decisions fundamental to diverse human resource actions and outcomes (Jawahar, 2007; Murphy and Cleveland, 1995; Steensma and Visser, 2007). The aim of performance appraisal is not only on evaluating employee performance but also on the improvement of performance; performance appraisal includes various practices like the appreciation of employees' accomplishments and providing them feedback for personal and professional growth. The notion of "fairness" has been recognized as the foremost aspects of employees' responses to performance appraisal meetings (Bretz et al., 1992; Erdogan, 2002). Insight of performance appraisal justice can direct to contentment with performance ratings, PA system, rater and appraisal feedback (Cawley et al., 1998; Jawahar, 2007; Korsgaard and Roberson, 1995; Thurston and McNall, 2010) and to employees' outlook of instrumental power over the appraisal process thus improving their sense of psychological safety, self-worth and group standing (Kahn, 1990; Taylor et al., 1995).

Seven decades old Annual Confidential Report (ACR) system is still considered as the basis for promotions and career related decisions in public sector organizations of several countries irrespective of the per capita income level of the country such as Switzerland, India and Sri Lanka. This yearly appraisal system is confidential and carried out for determining the eligibility for seniority-based promotions. In 2009, Japan has introduced a new performance evaluation system by replacing the seniority-linked appraisal to abilities and performance focused system (Koike, 2013). From the above mentioned studies, we can postulate the possible relationship between factors such as objective, modus operandi and performance appraisal linked feedback and employee performance.

Compensation and corruption

Lack of adequate compensation for employees is causing corruption in Chinese public sector and (Feng and Johansson, 2018). They also detected a positive correlation between low pay packages and firm performance. In the absence of adequate compensation, employees may get tempted to accept bribes. Acceptance of bribe by employees in a rule centred governance structure, the possibility of bypassing of rules will be high. Ignorance of rules will negatively affect the firm performance.

Performance Management

Public sector performance is traditionally governed by rules and regulations mandated by legislators. Performance of public sector has been a widely neglected discretionary parameter in compensation decisions. Several researchers have challenged the rule based governance in public sector and advocated for a performance management doctrine (Kettl, 1997; Pollitt & Bouckaert, 2011). Performance driven system will make the executives more target oriented and accountable for deliverables instead of rule adherence (Moynihan, 2008). A structured performance management system can positively link performance indicators, targets and target achievement of an organization (Boyne, 2010).

Pay for performance

Pay system is the most prominent force which has an impact on the employee behaviour in an organisation (Beer and Gery, 1972). Pay practices act as a communication tool to the employees. It communicates to them what is valued and rewarded in the organisation (Belcher and Atchinson, 1976). Indian private-sector firms have adopted a more rational approach than their public-sector counterparts in a few HR functional areas like compensation and training & development (Barla, 2011). In UK, rigorous research into the growth of pay for performance practices, which changed from a system of individual appraisal to a blend of goal-setting, appraisal and performance linked pay (French, 2005) has contributed to a shift from a slender focus on employee motivation. Buchanan (1974) found that commitment of public sector managers was less compared to private sector managers. He argued that broad public sector goals lead to weak performance-outcome link. In order to revamp public sector, the focus must be on performance restructuring. Ahrens (2013) identified that pay for performance by way of introducing special rewards for excellence in performance was instrumental for the success of public sector governance in Dubai. Incentives linkage to public sector employees can lead to improved performance (Pollitt, 2013). From the above referred studies, it is evident that pay for performance is a factor which can influence the quality of Public sector governance in India.

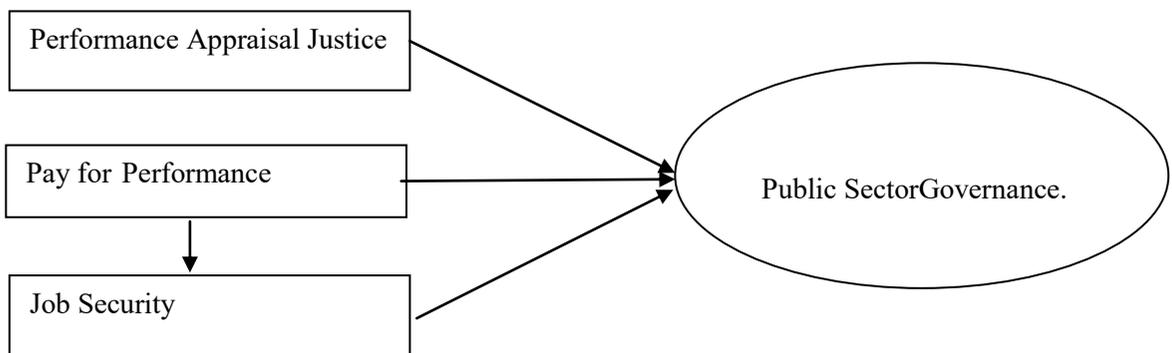
Job security

Job Security is an assurance that an individual will keep his or her job without the risk of becoming unemployed. Private sector jobs are generally believed to offer low job security. Private sector follows a hire and fire policy. The employees have to prove everyday to be on the job. This puts lots of pressure on the employee to keep up-to-date with the latest technology, pursue career development initiatives and provide the best customer service to the consumers. Due to the high job security in government sector, there is not much pressure on the employee to perform. Not all the employees in public sector are self-motivated to perform to their optimum. A fair performance appraisal and performance-based pay can convert the public sector into a result-oriented sector. High Job security tied up with seniority without any provision for rewarding performance excellence is an inbuilt demerit within the structure of public sector (Manuel, 2007). It can be inferred that performance linkage to promotion and pay decisions can influence superior performance in Indian public sector.

Methods

Development of a conceptual model for restructuring the performance of Indian public sector by adapting feasible and proven models from other countries in such a way to suit Indian situations. The method adopted in this study is a critical review of previous researches in the area of public sector performance analysis. Based on the previous researches conducted in various countries with low level of corruption and good governance, the authors postulate a new conceptual framework for improving Indian public sector.

Fig 1: Conceptual Framework



Findings

Rule based public governance without any performance linkage is a handicap of Indian Public sector. High level of job security will act as a negative catalyst in public sector performance. Implementation of Performance Appraisal in a fair manner coupled with pay for performance with a linkage to job security is a predictor of effective public sector governance.

Discussion and Recommendations

Introduction of pay for performance plan with a control mechanism for regulating the high job security can minimize corruption in Indian Public sector. Pay for performance plan will act as a motivational force for public sector employees. It is desirable to conduct a study among various stakeholders in public sector for analysing the match between stakeholder expectations and the reality.

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A study on investor overconfidence on large cap scripts due to firm growth

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ABSTRACT: *The research investigates the overconfidence existing between the investors in the large scripts in India. There are various factors that are used to determine the stock prices but here we take into account how the firm's growth has triggered the investors in the recent times. With the results obtained from the regression analysis, the results showed that the firm's growth does not influence the confidence of the investors and it rather had a significant effect on the long term performance. Afterward the result also showed that the long term performance and the firm's growth are positively related. It also reflects that the investors in the large cap scripts are not overconfident and do not use only a single factor to determine the value of the stocks.*

Keywords: *Volume, long term performance, firm's growth, overconfidence, investors.*

INTRODUCTION

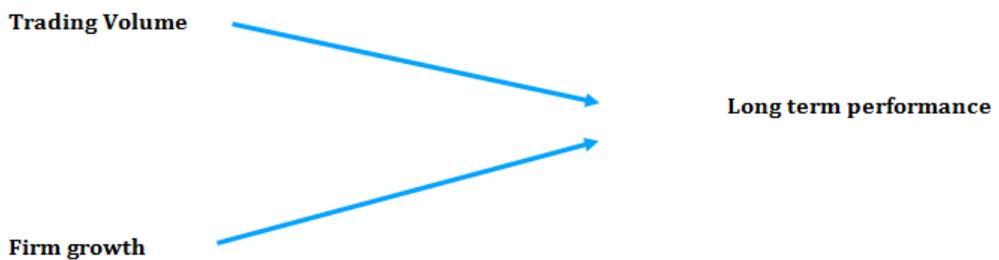
The capital market has been making giant strides. The increase in average trading volume was 267% in the period of 2011-2016. In 2016 the trading frequencies of the stocks in the Indian market was around 23 million times which means the average of buying and selling was 8 days. The evidence indicated tremendous progress of the market in India but also indicated many worries about speculative trading behaviour. In the recent decades we can witness the move away from a completely judicious worldview towards the one where the behaviour has influenced by mental predispositions. The other factors adding towards these were, a evidence on how the psychological bias changes the behaviour and also hard to indulge in full balanced models of security volumes and returns. In any case, pomposity has been reported among specialists and experts, incorporating those in the back calling. For instance, carelessness is seen among corporate budgetary officers and among expert brokers and speculation investors. Individuals will in general be overoptimistic about their life prospects. It doesn't imply that carelessness is the main marvel in behaviour finance, nor that it is taken in as a universally handy clarification for every single budgetary inconsistency. However, arrogance appears to probably be a key factor in monetary basic leadership. Pomposity is a broad mental wonder, and is accordance with a cascading affect. For example, it includes one's position on a populace and over confidence in the accuracy of one's belief. A process that helps the pompous convictions is self attribution inclination, where investors appreciate their own talent for the success in the past and blaming bad luck for failures.

Review of literature:

Bondt and Thaler(1987) on overcompensation speculation in capital market, particularly on numerous budgetary occasions. In their examination, they said that financial specialist will in general go overboard to unforeseen occasions as opposed to the entire of the base-information of the organizations. The eruption conduct would make the stock costs left far from its essential qualities. In this manner, the stock costs were ascending at the brief timeframe though in the long-lasting because of an alteration of the accessibility data it if it were backtracking, it is called stock price inversion. Past work showed the marvels of stock value inversion in numerous money related occasions, for example, IPOs(Agarwal 2008, Ritter 1991, Thomadakis 2012)SEOs(Wadwa 2016). Numerous researchers contended that the stock value inversion at money related occasions because of the current of financial specialist overcompensation in capital market(Vakrman, Kristoufck 2015). This exploration additionally inspect the eruption speculation in capital market, yet not just confined on monetary occasions like IPOs and SEOs. Daniel (1998) said that overcompensation conduct happened because of financial specialist exaggerated on ongoing data in capital market. Along these lines, there isn't just limited on money related occasions, but instead the speculation movement in the market. Numerous past work additionally suggests that the financial specialist carelessness and stocks' cost over-response on venture movement in capital market (Bousaidi 2013). Yet,

the current work not completely clarified how the data in the private signals influenced on the presumptuousness conduct. For instance Agarwa(2018) and Bousadi(2013), they utilized exchanging volume, value inversion, and exchanging instability to catch the financial specialist pomposity and stocks' value overcompensation. "Higher trading volume of stocks has a mean of higher enthusiasm from financial specialist to buy the stocks on account of remissness of their private information". In any case, pomposity is a normal for individuals (Odean at 1998)), and speculator level characteristics are commonly not accessible for different classes of financial specialists on a wide scale. As it were, our paper is butt-centric ogous to a few late examinations that utilization common reserve information to explore advertise wide marvels. For test Chen al (2004) look at the connection between expansiveness of possession and resulting stock returns, and they measure broadness of proprietorship by utilizing the quantity of common finances holding a stock.Frazini (2006) dissects the connection between demeanor impact and post income declaration float. He develops a proportion of capital additions overhang dependent on the port-folios of value common assets. Our paper parallels and supplements the writing on CEO pomposity (Ben-David et al. 2007; Mal-mendier and Tate 2005, 2008).Intuitively, on the off chance that we begin with the equivalent earlier convictions, yet now we dissent, this proposes somewhere around one gathering has data that the other party ought to consider all the more completely ,Auman(1976). In a comparative soul, sound financial specialists ought not put down wagers with one another; the way that the other speculator is happy to take the contrary part of my exchange ought to propose to me he aware of something I don't have a clue (Grosman 1976,Tirole 1981).

Methodology



The main objective of the paper is to analyse the impact of volume traded and the long term performance due to firm's growth of the large scrips and the correlation between the different variables.Firm's growth is taken from 2008-2018 and long term performance is calculated by 2 years stock performance after having high growth. The period of data collection is from 2008 to 2018.The study helps to find out that whether firms growth is one of the many converters that has influenced the sentiment of many investor to buy more stocks in market.This also examine whether firms growth is the main factor that caused declining performance in the future.Secondary data was obtained from financial statements of the companies,Investopedia Webpage for a period of 10 years

The data collected are volume of shares traded and the firm growth.The stratified Random sample is adopted and companies are chosen depending on whether they have been listed from the beginning of the period of study. Out of the 100 companies in large cap scrips 75 companies were selected for the study.Therefore 75 companies were selected on the basis of whetherthe company was listed since before 2008 (As the period of study was 2008- 2018).

Analytical tools

In finance, investing and other disciplines, regression is a statistical techniques which is used to find the impact of the relationship between two variables.Linear and multi linear regression are the two types In linear regression there is one dependent variable and one independent variable while in a multiple linear regression, there is one dependent variable and two or more independent variables.

Linear Regression : $Y = \beta + \beta X + u$

Multiple Regression: $Y = \beta + \beta X_1 + \beta X_2 + \dots + \beta X_t + u$

X-dependent variable

Y-independent variable

In this study, firms growth, volume, long term performance are the independent variable and Volume of

shares traded (VOL) is the dependent variable.

The analysis of this examination partitioned into two stages. Stage 1, this examination break down the connection between firms development and stocks exchanging volume to analyze which data have activated numerous investors to wound up pompous. To manage it, we utilize simple regression analysis.

$$TradingVolume = \beta + \beta.FirmsGrowth + \beta.PAT$$

Trading volume is the measure of stocks that was exchanged at multi day after firms experienced most elevated firms' development. In this exploration deals development use as an intermediary of Firms Growth. Winning after duty (EAT) in model 1 as a control variable of the connection between firms 'development and exchanging volume.

We analyse relation between firms growth and long term performance

$$Long - termperformance = \beta + \beta.Firmsgrowth + \beta.PAT$$

Long term performance is three-year execution of most astounding development firms. In model 2, this examination likewise use EAT as a control variable. To gauge long haul execution, we utilize month to month stock return amid two years after experienced most noteworthy deals development.

The study uses correlation analysis to examine the relationship between firm's growth, long term performance and volume.

Table showing the regression result
 Empirical results and interpretation

Variables	Co-Efficient	Probability
Firm's growth	-0.484481	0.2001

Dependent Variable- Volume of Shares traded

Table showing the regression result

Variables	Co-Efficient	Probability
Firm's growth	2982.533	0

Dependent Variable- long term performance

The significant at 1% level for all the variables. So, Firms growth, PAT, VOL, long term performance are stationary. Table (1) & Table (2) results represents that the growth of the firm is significant on its relation with the long term performance traded and significant in relation with the long term performance. It indicates that majority of the investors are not over confident with respect to the firm's growth. Firms growth & volume have very low negative correlation. The results of above table show that the growth of the firm is insignificant on its relation with the volume of shares traded and significant in relation with the long term performance. It indicates that majority of the investors are not overconfident with respect to the firm's growth. As the correlation test show that whenever the sales growth is higher the firm's growth is also higher.

Conclusion

The study has been undertaken to analyse the overconfidence of the investors with single factor and how that affects the long term performance. Daniel at 1998 clarified the cost of overprice stock would be amended later on because of spreading data accessibility in the market, in this manner, its cost would be once again into its intrinsic value. In other stated, the cost of overprice stocks would decrease later on, in which as a rule called stock price reversal. This investigate contends that speculator who has presumptuous behaviour may have not considered many basic level information of the organisation but as you can see the results show the higher the firms growth it would result in a more positive long term performance. This examination directed to inspect the current of careless conduct in capital market and stock price reversal later on. We estimate that investor presumptuousness does not influence securities exchange to blow up and keep its inherent qualities, it proxied by higher exchanging volume of stocks. Higher exchanging volume does not make stock costs expanding, moreover, its costs dependably relate to its inherent qualities later on. In another word, there are stock costs declining later on. This exploration additionally endeavored to examine the factor which has activated numerous investors to act carelessly. Besides, investigate whether it

cause on the declining stock costs performance later on. Thereafter, we distinguish the crucial factor of the organizations which can push to the declining performance later on.

The exact consequences of this examination demonstrated that numerous investors in capital market don't act arrogantly on huge top scrips. It appeared by the exact outcome in the first hypothesize, which said firm's growth has an inconsequential negative connection on higher exchanging volume of stocks. Speculator will in general act overconfidence on higher development firms, thus financial specialist ask more on its stocks then the stock costs increment responsively and avoid inborn values. Afterward, later on, because of spreading of the accessibility data, stock costs will be revised and it back to its natural values. But contrasted with the Indian stock market (large top scrips) it generally compares to the ebb and flow relating inherent value. Although this examination restricted just on firms' development as the just a single data which may have influenced the presumptuous conduct. The exact consequences of this exploration offer learning to numerous financial specialists. Speculation choices are transient arranging as well as long haul arranging. They should consider and break down much total key data of the organizations cautiously. For instance, take a gander at how the organizations financing its business and after that estimating its risk of the business. Don't pompous on the main great and accomplishment of past execution, for example, higher firm's growth, and so forth. Understanding and breaking down cautiously in general of central pieces' data of the firm, investor liberated on self-attribution inclination on basic leadership. For future research, numerous researchers can present other data which have shown on the overconfidence conduct.

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A study on Organization culture and its impact on productivity in the VUCA World

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ABSTRACT: *Organizational culture defines the way employees complete tasks and interact with each other in an organization. In the VUCA world the cultural paradigm comprises various beliefs, values, rituals and symbols that manage the operating style of the people within a company. Corporate culture binds the workforce together and provides a direction for the company. From time to time, the biggest challenge for any organization in the VUCA world is to change its culture, as the employees are already accustomed to a certain way of doing things.*

Organization culture is linked to employee productivity. Organization culture impacts the way each employee views performance. High-performance cultures foster high performing team members – think of it as positive peer pressure, a tactic long-used by all the corporate.

Good organizational culture creates good society as well as good citizens. So the impact of culture plays a major contribution in any society. Organizational culture is the binder that combines people together and makes them part of the organization experience. A strong corporate culture refers to how broadly and steeply employees hold the companies' strong values and beliefs. Organizational culture guides the sense-making process. It aids employees understand what happens and why things happen in the organization. Culture of corporate also makes it simple for them to understand what will be expected of them and to join with colleagues who are well versed with the culture and believe in the organization.

Keywords: *Organization Culture, Productivity,*

Introduction: Organization culture of an organization, we refer to the behaviour patterns and standards that bind it together. An organization's culture encompasses everything it does and everything it makes. A company's culture tells the people who work for it what is right and wrong, what to believe, what not to believe, how to react and how to feel. And its actions speak louder than its words.

People are constantly surrounded by culture. It forms the strong background of working area, ruddiness everything in an organization. Organizational culture also gives a powerful tool for regulating behavior by affecting how we attach benefit to our world and how we perceive events. The culture of a workplace makes the organization what it is. Culture is the sum of attitudes, customs and beliefs that distinguish one group of people from another.

Organizational culture is no different from ethnic culture except it usually includes people from all different backgrounds and histories. These cross-cultural connections can blossom into ingenuity and understanding that promote a better workplace and arguably a better world community. An office culture creates a unique brand for a company which helps them stand out amongst the rest of their competitors. It also defines standards and set procedures that give the company and furthermore the employees direction as they conduct their daily business. Culture unifies people and allows them to learn from one another and strive to be the best they can be. No company exists without a culture, but every company operates under a different type of one.

How Organization Culture Affects Productivity

Organizational culture and productivity are closely related. Productivity is the art of getting the company's products or services to the customer at the lowest possible cost. But it is more than that - it is related to quality, to customer needs and to labour relations. In other words, productivity and good management are inseparable.

Productivity is a result of motivation, and motivation thrives in a good climate. In VUCA World, Corporate has to transform this fragile good climate into a long-lasting culture for success.

Organization culture can help in turn the following areas for improving the productivity:

1. **Organizational Clarity:** The degree to which the goals and plans of the organization are clearly perceived by its members. To promote organizational clarity, involve all members of the organization in the goal-setting and planning process.
2. **Decision Making Structure:** The main purpose of structure is to facilitate decision making, there should be a free flow of information for decision making throughout the organization, and that the structure for disseminating that information allows positive outcomes.
3. **Organizational Integration:** Cooperation among various units of the organization. To achieve the objectives form groups of people from various disciplines, which sidestep hierarchical structures.
4. **Leadership Style to Culture:** Leadership style should suit the culture. Develop Organizational culture where entrepreneurial traits can enhance innovation is lead and ultimately productivity is increased
5. **Organizational Vitality:** It is measured by the boldness of its goals and its responsiveness to changing conditions. Employees should be allowed to make mistakes. System should encourage employees to take risks for the betterment of the organization without the threat of punishment and find ways of helping them learn from their mistakes.
6. **Compensation:** The compensation system should reinforce a success orientation. Develop a system of compensation that is equitable, competitive and related to long- and short-term performance.
7. **Human Resource Development:** Provide opportunities within the organization for people to develop to their full potential. What employees have for them lately will give credit to employees who are seeking opportunities outside and for their career progress. Corporate need to act and develop HRD for the culture of success.

Research Methodology:

Sampling Design: Convenience sampling method is used

Sample Size: A total of 30 respondents were chosen from the consulting firm

Data collection tools and techniques-

Both primary and secondary sources were used to collect data. To collect primary data through field survey, a structured questionnaire was designed. The questionnaire was administered to consultants working in HR Consulting firms.

Objectives of the Study:

- To assess the existing Organization culture and to find its relation to employees satisfaction.
- To study the leadership style and Team work of the Employees

Literature Review:

1. **Muhammad Arif Khattak, Nadeem Iqbal and Ansir Ali Rajut (2013)**, in their paper **“Impact of Culture on the Employee Performance”** emphasized that the desire for employees to be given favourable working conditions in order to deliver their best in order to ensure rapid growth and development of the organization. The organization that have adapted to the democratic leadership style gives employees more room to participate in the decision making process and this gives them a chance to advance in their careers.
2. **Dimitrios Belias and Athanasios Koustelios (2014)**, have done a study on **“Organizational Culture and Job Satisfaction”**. The purpose of the study was to provide a critical review of the relation between organizational culture and the levels of job satisfaction experienced by employees. The review shows that contemporary job-related phenomena like job satisfaction are related to their perceptions of their working environment, relations with colleagues, institution aims and strategies and success criteria. In addition, the employees’ preference of organizational culture is likely to be affected by demographic characteristics, especially gender. It can be supported, therefore, that measuring and analyzing an institution’s organizational culture in combination with its employees’ demographic and individual characteristics may lead to valuable conclusions, so that job satisfaction is promoted.
3. **Sonja Treven, Matjaž Mulej and Monty Lynn (2008)**, in their study **“The Impact of Culture on Organizational Behavior”** focused on two approaches to the scrutiny of the culture - Hofstede's dimensions of cultural values and Hall's approach to high- and low-context cultures. In the second

part, they devote their attention to the interaction of culture and organizational behaviour. They also describe how culture affects the ethics and motivation of employees in companies, the way of communicating, success of conflict solving and organizational change. The authors also analyze the ethics of interdependence.

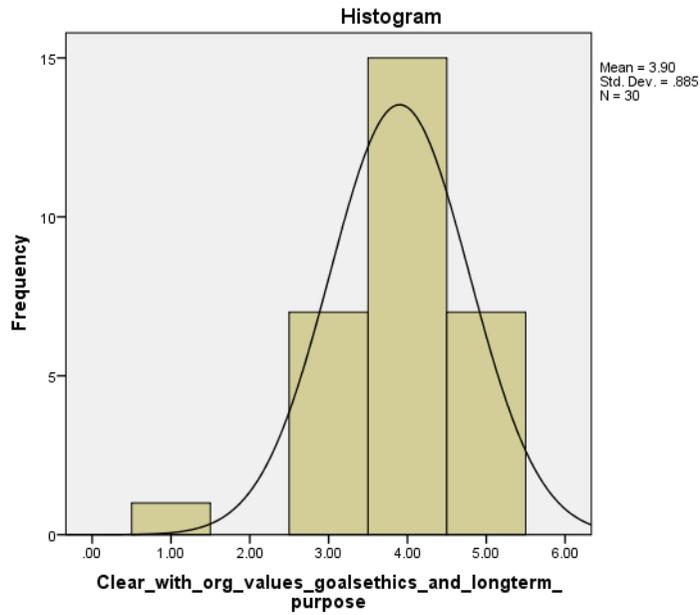
4. **Muya James Nganga and Wesonga Justus Nyongesa (2012)**, in their study “**The Impact of Organisational Culture on Performance**” emphasised that every organization has a culture-good or bad. In order to aid long-term performance, there are three main criteria needed to develop a suitable culture: It must be strategically relevant; it needs to be strong in order that people care about what is important; and the culture must have an intrinsic ability to adapt to changing circumstances. Culture is clearly an important ingredient of effective institutional performance. There is a close relationship between an organization’s culture and its performance.
5. **Syed Munir Ahmed Shah, Mohammad Salih Memon and Dr. Minhon Khan Laghari (2011)**, in their paper “**The Impact of Organizational Culture on the Employees’ Job Satisfaction**” examined that organizational culture affects the employee’s job satisfaction and told that they are the most significant determinants and primary components to drive performance in the organization
6. **Fakhar Shahzad, Rana Adeel Luqman, Ayesha Rashid Khan and Lalarukh Shabbir (2012)**, in their paper “**Impact of Organizational Culture on Organizational Performance**”. In their Research they showed that if employee are committed and having the same norms and value as per organizations have, can increase the performance toward achieving the overall organization goals. Balance Scorecard is suggested tool to measure the performance in the performance management system.
7. **HamidAzad andish, Mojtaba Yousefipour, Hamidreza Shahsavaripour and Abdolreza Ghorbanipour (2013)**, “**Organizational Culture and its Impact in Organizations**”. Culture of an organization is often comes from what is already established in the organization and is useful for the organization. Organizational culture has always been very important for organizations, managers and leaders each organization has its own way of achieving success, arrangement and runs. Every culture has such profound weakness and a strength that varies depending on the organization. Activities of any organization is largely associated with the corporate culture and any kind of current activities and decisions within the context of its culture, so outside of the range, they will have less functionality.
8. **Yafang Tsai (2011)**, “**Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction**”. Organizational culture refers to the beliefs and values that have existed in an organization for a long-time, and to the beliefs of the staff and the foreseen value of their work that will influence their attitudes and behavior. Administrators usually adjust their leadership behavior to accomplish the mission of the organization, and this could influence the employees’ job satisfaction. It is therefore essential to understand the relationship between organizational cultures, leadership behavior and job satisfaction of employees.

Data Analysis & Interpretation

FREQUENCY ANALYSIS

1. I am clear with the organizations goals, values, ethics and long-term purpose.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	3.3	3.3	3.3
Neutral	7	23.3	23.3	26.7
Valid Agree	15	50.0	50.0	76.7
Strongly agree	7	23.3	23.3	100.0
Total	30	100.0	100.0	

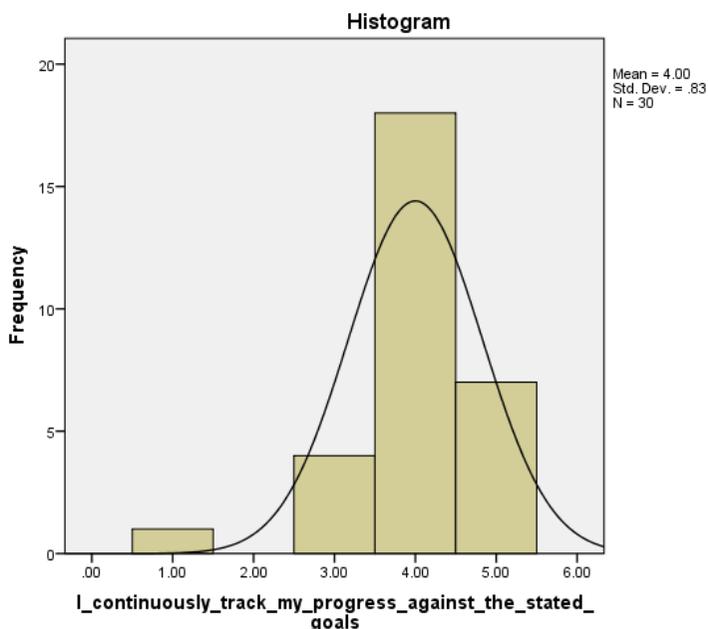


INTERPRETATION:

It is seen that the frequency column reports that 15 of the respondents have agree to the given statement. This is equivalent to 50% of the total respondents'. In the given histogram shows the distribution of the total respondents.

2. I continuously track my progress against the stated goals

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	3.3	3.3	3.3
Neutral	4	13.3	13.3	16.7
Valid Agree	18	60.0	60.0	76.7
Strongly agree	7	23.3	23.3	100.0
Total	30	100.0	100.0	

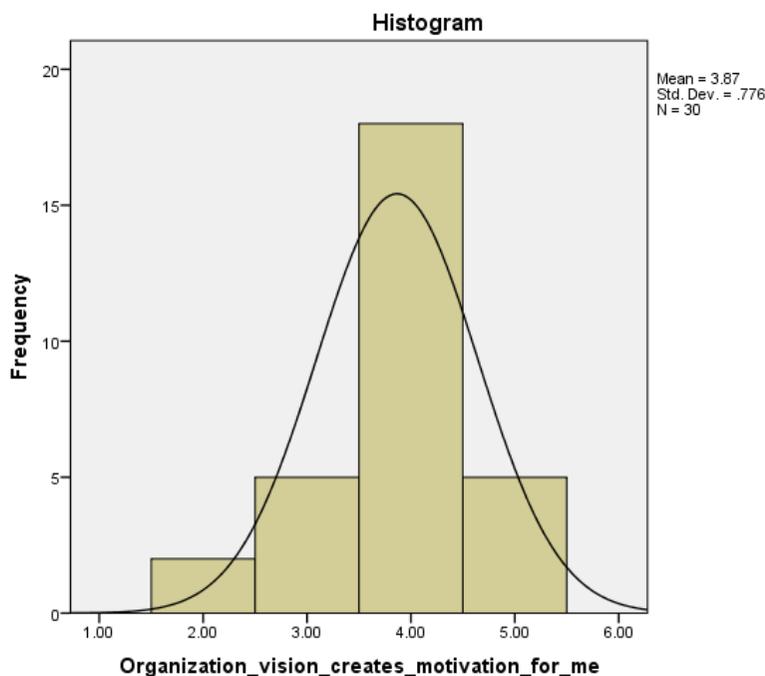


INTERPRETATION:

It is seen that the frequency column reports that 18 of the respondents have agree to the given statement. This is equivalent to 60% of the total respondents'. In the given histogram shows the distribution of the total respondents.

3. Organization_vision_creates_motivation_for_me

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	6.7	6.7	6.7
Neutral	5	16.7	16.7	23.3
Valid Agree	18	60.0	60.0	83.3
Strongly agree	5	16.7	16.7	100.0
Total	30	100.0	100.0	

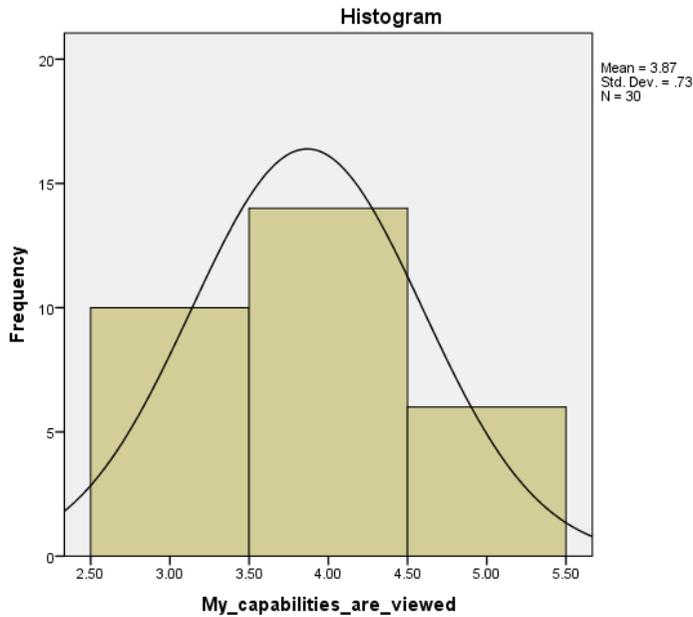


INTERPRETATION:

It is seen that the frequency column reports that 18 of the respondents have agree to the given statement and 2 of the respondents have disagreed to the given statement. This is equivalent to 60% of the total respondents' agree and 6.7% of the total respondents' disagree.. In the given histogram shows the distribution of the total respondents.

4. My_capabilities_are_viewed

	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral	10	33.3	33.3	33.3
Valid Agree	14	46.7	46.7	80.0
Strongly agree	6	20.0	20.0	100.0
Total	30	100.0	100.0	

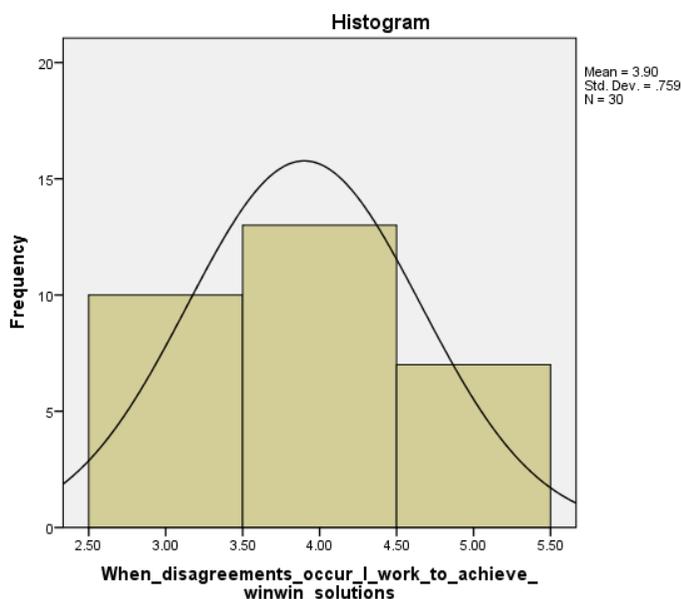


INTERPRETATION

It is seen that the frequency column reports that 14 of the respondents have agree to the given statement and 10 respondents are neutral on it. This is equivalent to 46.7% of the total respondents' agree and 33.3% are neutral on the given statement. In the given histogram shows the distribution of the total respondents.

5. When disagreements occur I work to achieve winwin solutions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	10	33.3	33.3
	Agree	13	43.3	76.7
	Strongly agree	7	23.3	100.0
	Total	30	100.0	100.0

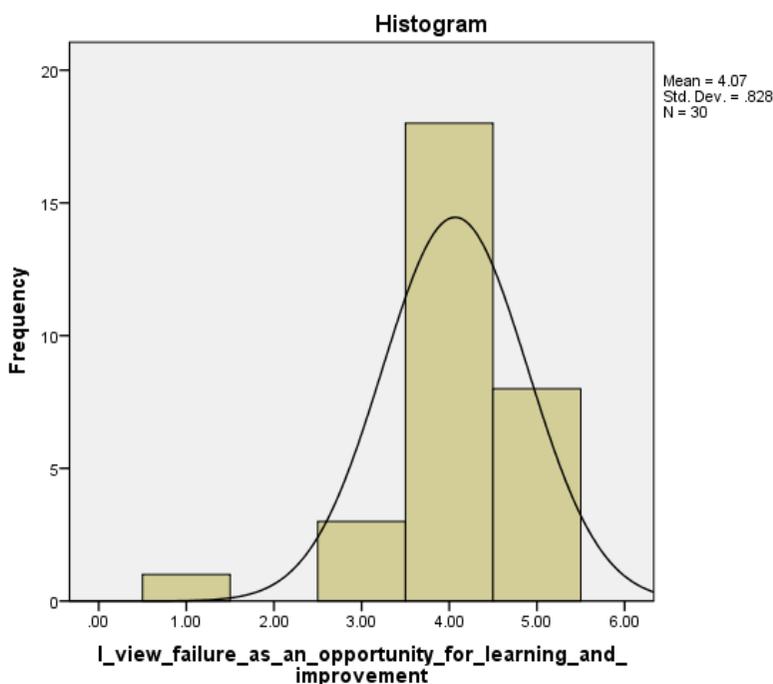


INTERPRETATION:

It is seen that the frequency column reports that 13 of the respondents have agree to the given statement, 10 respondents are neutral on it and 7 respondents strongly agree on the statement. This is equivalent to 43.3% of the total respondents' agree, 33.3% are neutral and 23.3% of them strongly agree on the given statement. In the given histogram shows the distribution of the total respondents in achieving the win-win situation.

6. I_view_failure_as_an_opportunity_for_learning_and_improvement

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	3.3	3.3	3.3
Neutral	3	10.0	10.0	13.3
Valid Agree	18	60.0	60.0	73.3
Strongly agree	8	26.7	26.7	100.0
Total	30	100.0	100.0	



INTERPRETATION:

It is seen that the frequency column reports that 18 of the respondents have agree to the given statement and 1 of the respondents have disagreed to the given statement. This is equivalent to 60% of the total respondents' agree and 3.3% of the total respondents' disagree.. In the given histogram shows the distribution of the total respondents.

PERCENTAGE ANALYSIS:

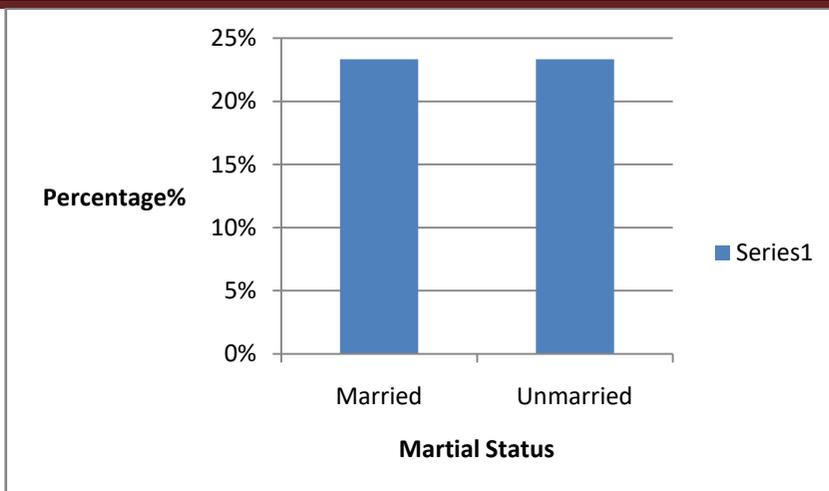
MARTIAL STATUS

Marital Status	No of the Respondents	Percentage (%)
Married	7	23%
Unmarried	23	77%
Total	30	100

Interpretation:

From the above table it is found that out of 30 respondents, 7(23%) of the respondents are married, 23(77%) of the respondents are Unmarried.

Maximum 23(77%) of the respondents are unmarried.



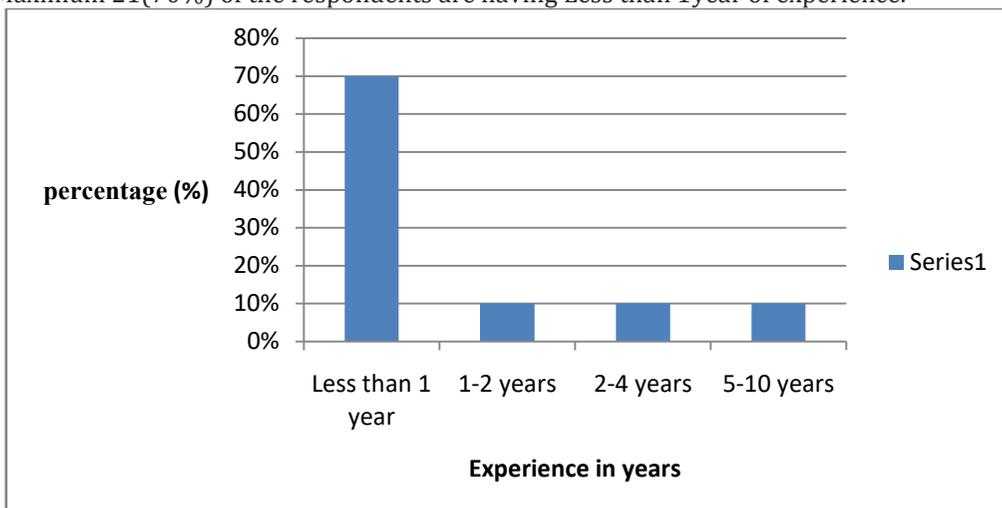
EXPERIENCE

Experience	No of the Respondents	Percentage (%)
Less than 1 year	21	70%
01-2 years	3	10%
2-4 years	3	10%
5-10 years	3	10%
Total	30	100

Interpretation:

From the above table it is found that out of 30 respondents, 21(70%) of the respondents are, Less than 1 year, 3(10%) of the respondents are having experience 1-2years, 3(10%) of the respondents are having 2-4 years experience and remaining 3(10%) of the respondents are having above 5-10 years experience.

Maximum 21(70%) of the respondents are having Less than 1 year of experience.

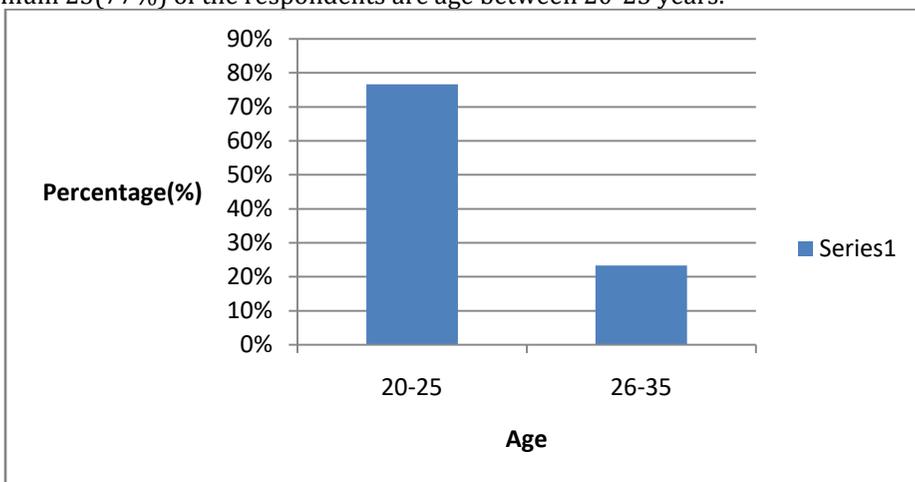


AGE

AGE	No of the Respondents	Percentage (%)
220-25	23	77%
326-35	7	23%
Total	30	100

From the above table it is found that out of 30 respondents, 23(77%) of the respondents are age between 20-25 years, and remaining 7(23%) of the respondents are age between 26-35 years..

Maximum 23(77%) of the respondents are age between 20-25 years.



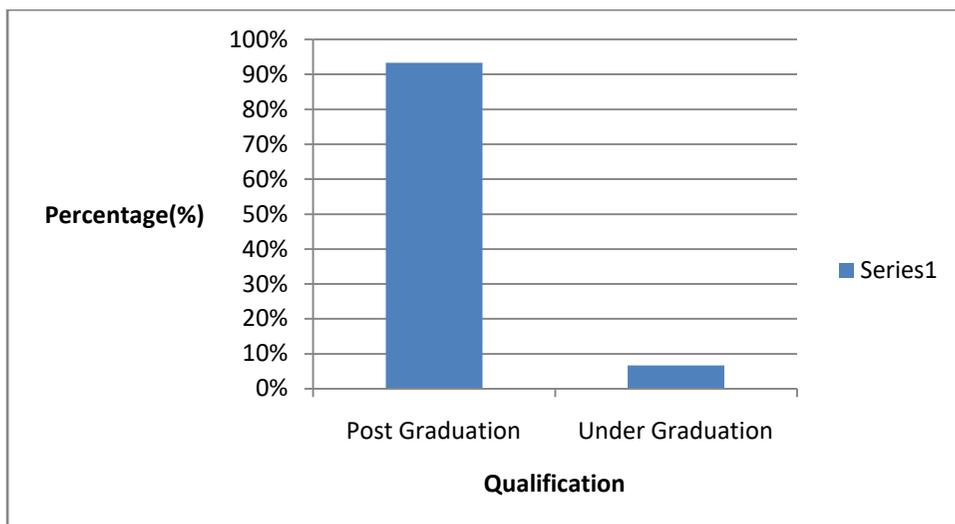
QUALIFICATION

Qualification	No of respondents	Percentage(%)
Post Graduation	28	93%
Under graduation	2	7%
Total	30	100%

Interpretation:

From the above table it is found that out of 30 respondents, 28(93%) of the respondents having educational qualification up to post graduation, and remaining 2(7%) of the respondents educational qualification is under graduation.

Maximum 28(93%) of the respondents are belong to educational qualification as Post Graduation.



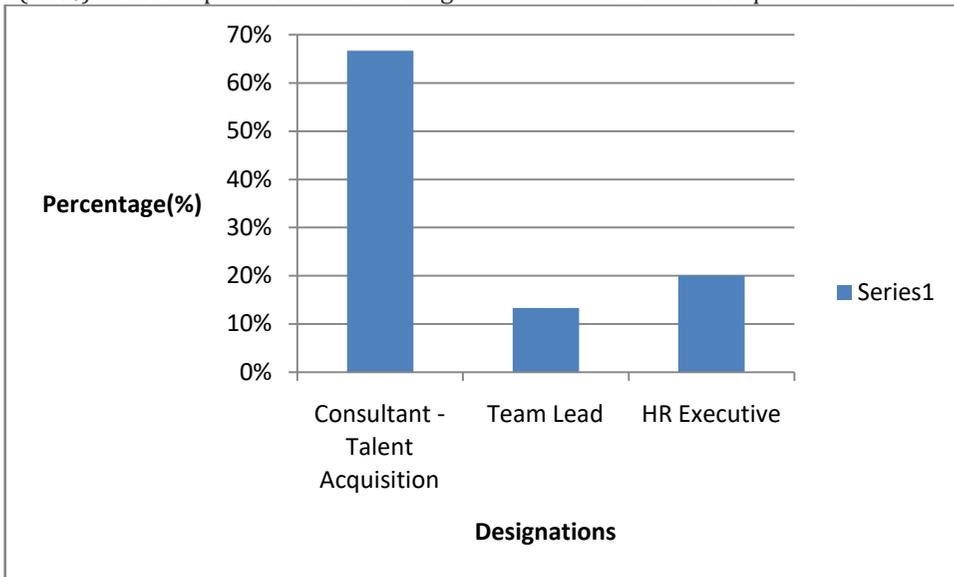
DESIGNATIONS

Designation	No of respondents	Percentage (%)
Consultant – Talent Acquisition	20	67%
Team Lead	4	13%
HR Executive	6	20%
Total	30	100

Interpretation:

From the above table it is found that out of 30 respondents, 20(67%) of the respondents are working as consultant – talent aquisition, 4(13%) of the respondents are Team leads and remaining 6(20%) of the respondents are working as HR Executive in the organization.

Maximum 20(67%) of the respondents are working as Consultant – Talent Acquisition.



FINDINGS:

Percentage Analysis:

- Maximum 23(77%) of the respondents are unmarried.
- Maximum 21(70%) of the respondents are having Less than 1year of experience.
- Maximum 23(77%) of the respondents are age between 20-25 years.
- Maximum 28(93%) of the respondents are belong to educational qualification as Post Graduation.
- Maximum 20(67%) of the respondents are working as Consultant – Talent Acquisition.

Frequency Analysis:

- It is found that 50% of the respondents agree with the organizational clarity on goals, ethics and longturm purposes of the organization.
- It is found that 60% of the respondents agree with the tracking their progress against the stated goals of the organization, ethics and long-term purposes of the organization.
- It is found that 60% of the total respondents agree that the organization vision creates motivation to work and 6.7% of the total respondents disagree on the given statement.
- It is found that 46.7% of the total respondents agree and 33.3% of the respondents are neutral on the given statement, i.e 50% of the total responses are not clear on capabilities monitored by the organization.
- It is found that about 56.6% of the total responses strive to achieve the win- win situation on disagreements whereas 33.3% of the respondents are neutral in such situations.

SUGGESTIONS

- The overall work of the employees in the organization shall be improved by motivating the employees and clearly defining the company goals.
- The shared vision on organization’s future shall be made aware to all the employees in the organization by encouraging team work.
- The employees shall view failure as an oppportunity for learning and improvement and the organization should pay way for such opportunities.
- During the occurrence of disagreements the employees shall work hard to achieve “win-win” solutions in the organization.

- In training programmers practical sessions must receive greater emphasize.
- Now, only the employees who belong to committees can participate in decision-making. The management may encourage all the employees to participate in decision-making process.
- The clear and consistent sets of values in the organization are recommended to be maintained.
- The management may enhance the frequency of employee's feedback on their performance.
- The employees should have a clear idea about the company's goal and it's the responsibility of the organization to make the employees aware of organization's goals.

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A STUDY ON THE FACTORS AFFECTING FINANCIAL LITERACY

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ABSTRACT: *This paper gives an insight of the factors contributing to the individual's Financial Literacy. There are many factors which influences the financial literacy of Individuals. Some of the important factors which researchers have identified were Information, Education, Personal Finance and Policy. This paper acknowledges the importance of the above factors and their contribution in improving the Financial Literacy level of an individual.*

Introduction

Financial Literacy took prominence after the subprime crisis. The reason for this is that Financial Literacy played a major role in the economy stability of a nation. Following this event there was lot of scope for research in financial literacy during late 2000's. It was during this tenure Financial literacy historical aspects was thoroughly studied and various concepts were redefined to understand in detail the true importance of financial literacy and in the later part financial security was said to be the definition of financial literacy. A country's overall financial condition and its future fiscal deficit outlook is an indispensable part of Financial Literacy. Based on personal finance and the saving behavior of an individual, the contribution towards the nation was huge. Based on this crisis Scholars suggested the need for research in the area of Financial Literacy and consumer protection while dealing with the financial instruments. Major question which arised during this research was: How to educate a consumer and help them realize their Financial Goals? A clear definition was required to define how exactly an individual can be educated be it homemaker, or a retirement plan, reducing an individual's debt, increasing human capital through education or to start a new venture or a business. The Cooperative System Society off USA has answered this question by stating that Financial Literacy goal is Financial Security of a consumer or individual. Assuming Financial Security as a Goal if a nation wants to concentrate on Financial Literacy then there are various macro factors which have to be closely examined and the effectiveness of these factors has to be studied. This paper gives an explanation about the impact of the macro components and its effect after integration on Financial Literacy. The components defined in this paper are Role Of Information, Role Of Education, Personal Finance and The Role of Policy.

Role of Information

Information has to be designed in such a manner that it should help the consumer in opting for financial decisions. To elaborate this nutrition panel of USA provides complete information thorough “Labels” which are attached with the packaging foods supplied to the consumer. These labels providewhether the food quality has the complete nutrition or is not nutritious. These findings were done based on the study conducted by (Burton, Biswas and Netemeyer 1994; Ford et al 1996; Kozup, Creyer and Burton 2003; Levy, Fein and Schucker 1996). Similarly, while relating this to the financial products available in the market in USA the labels are in the form of brochures and documents related to the financial products. Brochure provides information of a financial product and provides compliance information of regulation. Now the question is, will the brochure suffice the information which is required by a consumer?

Majority of the times consumers refer to the brochure and are either distracted or confused, reason being the information included in a brochure usually has a lot of information which leads to distraction or confusion among the consumers (Nisbet, Zukier and Lemley 1981). Consumers usually prefer heuristic approach when it is about financial products it might be risk aversion or the returns part of it (Benartzi and Thaller 1999; Foxall and Pallister 1998; Martenson 2005). As to which Heuristic approach is best suited is the area which requires further Research. Consumers sometimes prefer to have additional information on the financial products referred to them seeing this requirement US Federal Reserve's developed an internet-based support in 2007 for credit card consumers to provide additional and detailed information. Research and policy actions seem to support the presentation of financial products to reduce decision making burdens. These are again related to the nutritional “LABELS” used in package of the foods, no matter how good or bad the nutrition is the labels provide the detailed information to the consumers. When the information is related to the financial products it is not possible to provide the complete information

because various financial products have different risk aversion for example if the credit card brochure is compared to savings account brochure it is completely different various other financial products like debt instruments or mortgages or mutual funds. Financial products brochures information differs from instrument to instrument so it is not possible to design a universal brochure for the consumers.

However, to see a common element for all these financial instruments and to design a brochure it is risk of interest rates, principal amount and the future value. The main problem however is savings, investment and annuity products have different risk when compared to credit products. These credits are again differentiated to open end credits like credit cards and line of credits. Other type are known as closed end credits which includes mortgages, vehicle loans and installment loans, these type of products are imposed with adjustable rates when compared to fixed rates. Due to these differences recent research has shown avenues and explorations are required. The complexity involved in these instruments has made companies to use aggregate attributes to describe products and services (Chernev 2005). Other approach is to use "Fact Box" for financial products which include "risk", "benefits" and "expenses", this approach will assist consumers, government, private firms and educators in improving financial literacy by providing a consistent context.

Role of Education

Labels or brochures are key in providing information but that is not the only factor to motivate consumer for investment. There are basic questions which consumer needs to know like what is the key information a consumer needs, based on an individual's taste, preference and situation which is the product to be preferred, Use the output to make decisions about what financial product to purchase. Education is the factor which assists the consumer to make a concrete decision as to which financial product to purchase and what are the advantages. The concept of financial education is not new; programs have existed since early twentieth century. Various organizations have preferred financial education for consumers, financial institutions, community group, schools and colleges and employers have made a mandate for financial education even after this there is inconsistency in the results.

Even after so many financial educational programs why there is high rate of delinquencies, charge off and foreclosure? Are there too many organizations and programs so that the impact is diminished? Or due to abundance amount of financial education it makes consumer difficult in finding trustworthy source for the investment? Keeping all these barriers in mind when a financial education is designed or developed a key question comes into picture as to what is the key core concept of financial literacy. It is actually a numerical ability or manipulating numbers on the perspective of a consumer. It is also set of critical thinking skills of an individual to weigh pros and cons when making a financial decision based on one's personal needs, values and goals. For this to happen there should be motivational factors and these factors might be the marketplace or met cognition and persuasive knowledge (Brown and Krishna 2004; Friestad and Wright 1994) and the motivation to act in one's self interest. Another factor which influences a consumer is awareness and understanding of micro economics factor of an economy.

Personal Finance

In a present complex market, a great amount of motivation, ability and opportunity is required by an individual to sort out the relevant and irrelevant data necessary for an investment to be done. Once the data is available and in case if it is relevant consumer faces high amount of pressure of time and limited financial resources and in other cases it is simply the consumer does not intend to make an optimal decision of his financial constraints. Sometimes even after the optimal decision is done the chances of implementing the same will be a major problem.

The role of third party therefore becomes a crucial component of personal finance (Hogarth 2006) proposed a medical model for financial products in which a procedure was explained on financial health self-analysis and treatment. According to this model basic diagnosis like opening a savings account, but according to Servon and Kaestner elaborated saying that even though basic knowledge of savings account and its operation is basic diagnosis of a consumer a thorough training for the consumer is required. As a second step for this medical model it states that in some cases when a consumer cannot self diagnose his financial product he is supposed to take assist of a third party or a financial advisor who can advise on insurance, annuities, mortgages etc.

Role of Policy

Financial markets are complex in nature and disclosures, education and personal advisors are not the only

optimal solution, because all the components go hand in hand including policy. One of the policies which has recently been developed is employers making a policy where it is mandate to save the part of the income. Some companies go a step further and increase the percentage of savings year on year.

Another policy model would be to adopt a driver license model in which a consumer has to demonstrate some level of financial literacy and their understanding of financial products like mortgages, credit card, stock, bond, mutual fund or annuity. Alternatively, governments should come up with policies in which the consumers have to be counseled and advised on repayment of mortgages and annuities. Although all these policies have been defined priory a detailed research on the policy framework and its success rate is required.

Integration will be Evident for Success?

Although many financial educational programs define successful outcomes as obtaining a bank account, buying a home, building a saving habit but the measuring financial security is more elusive. Most of the research concludes that integrating these factors will lead to success of an individual but the true success is measured when it is concluded that a consumer is able to meet his goals financially. Various models defines that money is included and also is one of the factor to measure success but the question arises whether only money is the term to be measured in terms of a financial literacy success, Net worth increase is the only factor which will be measured in terms of success but in reality this does not hold good because to measure financial literacy success even happiness, satisfaction and a sense of financial security are to be attained.

Various models were developed based on the convenience of the researchers for the better understanding of financial literacy, it started with disclosures or “Labels” for financial products developed to assist consumers but the outcome was negative in nature although it had all the information of the financial product but while making a decision consumer always tend to have confusion or distraction due to lot of information included in the brochures. The concept of “Fed Boxes” for mortgage loans and “Schumer box” was developed for credit cards, even these models failed to live up to the expectations of the consumers due to poor standards of these models. A Common model was developed in which researchers planned to develop a common brochure for all the financial products but it was not successful because of the complex nature of various financial instruments which has different characteristics and working when compared to each other. In the later stages “Fact Box” was developed which included benefits, risk and expenses of all the financial products although it seemed to be successful to certain extent but complete implementation was a failure because of the administrative costs.

Conclusion

To design a successful financial literacy program using the major components stated in this paper it is very much important that the consumer takes more responsibility in future. It is very much necessary on the parts of agencies and government it regulates the expenses and the programs which are designed are mandated to consumers who are actively participating in the financial instruments. There is more research required when it comes to providing current and future policy solutions. So it is very important to include Policy, Education, Personal Finance and information all the components as tools to consumers for a better financial decision no single component is important. These components play a vital role in providing financial literacy, financial security and consumer self protection.

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AGGREGATORS OF SERVICES – THE NEW ECONOMY DIGITAL PLATFORM DRIVING ENTREPRENEURSHIP

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ABSTRACT: *The decade has seen a plethora of initiatives by technology savvy start-ups leveraging on new business models like marketplace/aggregator business model on one side and investors are increasingly showing their fancy for funding on these on the other side. This has been a disruptive innovation in this decade for the marketers and consumers alike. But its unprecedented contribution to the employment generation problem of our country is overlooked upon. This paper unravels the opportunity for these new age disruptive technologies as a catalyst for economic and entrepreneurial growth in our country.*

Keywords: *Aggregator Business Model, Market Place Business model, E- Commerce*

INTRODUCTION

The market place today is dominated by new economy business platforms like Ola, Techmeme, Feedly, Airbnb, Makemytrip, Uber, Zomato, Pharmeasy, Oyo and similar other new business models. It is interesting to see that the erstwhile unmatched demand is connected to its supply side through better products with enhanced value and far quicker delivery of service. A study by CB Insights, 2017 highlighted that more than 30 private marketplace firms are currently valued at more than a billion dollars. A similar trend prevails in the aggregator business models too. This has indeed seen the mushrooming of Airbnb and Uber lookalike ranging from ‘Airbnb for food with strangers’ (*BonAppetour*), ‘Airbnb for 3D printing’ (*3D Hubs*) to ‘Airbnb for toilets’ (*Airpnp*) to Airbnb for long term vacay homes (*Tripping.com*), ‘Airbnb for Europe’ (*Housetrip*). These analogies in many case remains ambiguous. As the end users are being spoilt for choice, we see the birth of innovative services aggregated through this new business model increasingly delighting the consumers at large and making billionaires out of start-ups. In India, this model is being utilized by many new and existing businesses, and is being adopted by various start-ups from multifarious industries, especially those in the transportation and logistics space.

Theoretical Foundation

Definition of Aggregator Business Model: Aggregator Business Model is a network model where the firm collects the information about particular good/service providers, make the providers their partners, and sell their services under its own brand. Since the aggregator is a brand, it has to provide services which have a uniform quality and price. This is done by signing up a contract with the partners. The good/service providers never become aggregator’s employees and continue to be the owners of the good/service provided. Aggregator just helps them in marketing in a unique win-win way.

There are other business models like the marketplace business model where the firm only acts as a mediator and doesn’t own the products or services provided. Hence, the prices are determined by the sellers themselves. Marketplace only charges a commission as they are providing sellers with a platform (with a huge network) to sell. Examples of online marketplace are Amazon.com, Flipkart.com, Hotels.com, etc.

It is a well known fact that E-commerce fosters the aggregation of existing products and services through an online platform to drive better utilization of these assets for their owners and amplify their reach to customers. While few categories like fashion, transport and food already have their respective category leaders, others such as grocery, home services and logistics are rapidly getting disrupted by some amazing technology innovations. Täuscher, K., &Laudien, S. M. (2018) have identified 6 differentiable taxonomic clusters on which marketplace models work upon: (1) ‘efficient product transactions’, (2) ‘digital product community’, (3) ‘product aficionados’, (4) ‘on-demand offline services’, (5) online services’ and (6) ‘peer-to-peer offline services’. The taxonomy can serve entrepreneurs and managers in designing, implementing, or evaluating these types of organizations.

As technology savvy start-ups are leveraging on this new business model on one side investors are increasingly showing their fancy for funding on market place/aggregator models. The decade has seen a plethora of such initiatives: IIT Delhi alumni Samar Singla launched Chandigarh-based online autorickshaw aggregator Jugnoo in November 2014 to help auto-rickshaw drivers reduce their unused

inventory (auto-rickshaws) hours as around 65 per cent of their time is spent waiting for passengers. Helping auto-rickshaw drivers monetize their waiting time through technology, Jugnoo has grown at breakneck speed, faster than other similar players. In around 10 months, the start-up has already raised Series A funding of \$5 million from e-tailer Paytm and venture capital firm Snow Leopard Ventures, acquired three companies: Mumbai-based cab hailing service BookMyCab, restaurant discovery app Bistro Offers and mobile-only services start-up Yelo.

No wonder this market place model has been a disruptive innovation in this decade for the marketers and consumers alike. But its unprecedented contribution to the employment generation problem of our country is overlooked upon. A KPMG, 2016 study reveals; for every job that is created by the e-commerce industry, further 3-4 jobs can get created in downstream industries, E-tail and allied ecosystem is expected to create 1.45 million employment opportunities by 2021, led primarily by more than 1 million jobs projected to be created by logistics and warehousing sector, Online seller base is projected to grow to 1.3 million by 2020 and is expected to add more than 10 million net new jobs, Internet penetration projected to increase from current 32% in 2015 to 59% in 2020, Online shoppers (as a % of internet users) to grow from 12% in 2015 to 40% in 2020, Online spending per online shopper set to increase from USD 239 in 2014 to USD 299 in 2018. Apart from the direct employment contribution that has been made by the e-tail players, what is noteworthy is the indirect/adjacent employment generated in the allied industries like logistics, warehousing, IT/ ITeS, sellers and SMEs, and other support industries (like payment solutions, marketers, and advertisers). The study also states that two of the leading e-tail players have increased their combined workforce from less than 10 to 40,000+ employees, within 6-9 years of inception. Global e-commerce players entering the Indian market have also expanded their workforce to make the most out of the industry growth.

India's e-commerce journey has always elicited comparison with China's e-commerce industry growth. If the same parallel has to be drawn in terms of the employment opportunities created by the e-commerce industry in China, the statistics look very promising for India's e-commerce story. As per a recent survey conducted by the China Association for Employment Promotion, CEAP (part of the Ministry of Human Resources and Social Security): >10 million people are directly employed by the e-commerce industry in China with e-tail as the largest contributor²⁴ and >90 % of the retail e-commerce shops are owned by individuals, employing about 6 million people, making the industry a big catalyst for small-scale entrepreneurs. As various data published by major industry research agencies show an interesting future for this new economy model of digital platforms, the model now needs to be explored as to how it can be used as a catalyst for entrepreneurship and employment generation.

Study Objectives

The objective of this paper is to explore some new areas of digital platforms and see the possibility of leveraging along the value chain for entrepreneurship ideation and understand the employment opportunities being created in this sector. It also tries to identify up skilling initiatives needed in this sector for employment generation and progression.

Design of the Study

The paper is based on a case study approach. Aggregator business models will be examined and implications prescribed for adoption and adherence.

Discussion and Implications

Case Study 1: Health Care Aggregator Model

The health care sector in our country does not grow in tandem to the GDP of our country. Indian Medical Health Association has found that our spending on health care is very dismal about 1.2 % of our GDP. It is 17% in US and 5.5 % in China. Presently, India has just 0.7 doctors and 1.1 beds for every 1,000 of its citizens. The government aims to increase the healthcare spending to 2.5 percent of the GDP by the end of its 12th five year plan, and to 3 percent by 2022. Much of this will be done through public private partnerships and using tech to increase the reach and multitude of healthcare services. Healthcare market in India is poised to grow from \$100 billion in 2016 to \$280 billion in 2020, creating huge opportunity for healthcare and healthtech companies and start-ups.

Some of the popular digital platforms for health care services are

LiveHealth- (making medical reports smarter): From collecting samples, managing patient records, diagnosing them and generating reports, to billing and inventory; LiveHealth intervenes at each step,

making the process smarter and more efficient. Using AI to process millions of medical records and ERP transactions, LiveHealth soon plans to help doctors and patients make informed decisions.

Lybrate – (providing instant support from doctors using phone):

The Delhi-based startup helps patients find doctors near their location, and connect with them instantly. Founded by Saurabh Arora and Rahul Narang in 2013, Lybrate helps patients communicate with a network of doctors, while keeping their anonymity intact.

Practo – (building a one-stop healthcare platform)

What started in 2007 as a SaaS platform for doctors has, over the past 10 years, evolved into a one-stop destination for appointments, consultations, health records, insurance, and ordering medicines online. With a team of over 1,500 people, the Bengaluru-based health-tech company is today active in 38 Indian cities, and in Singapore, Indonesia, the Philippines, and Brazil. With over 1,00,000 doctors supporting the massive scale of operations, Practo currently caters to 25 million patients every year.

Portea – (bringing doctors and medical professionals at the patient’s doorstep):

The Bengaluru-based startup offers home visits from doctors, nurses, physiotherapists, and technicians for patients. Using remote diagnostics, point-of-care devices, and remote monitoring equipments; doctors and medical professionals can monitor patients who can't travel to hospitals. The patient data is uploaded using smartphones to an EMR platform, which uses predictive analytics to understand health trends in the patient. Started in 2013, Portea currently operates across 21 cities in India.

AddressHealth – (making pediatrics affordable and holistic) :

The Bengaluru-based startup provides primary paediatric healthcare service to schoolchildren. Taking a holistic approach, children are screened for hearing, vision, dental health, anthropometry, alongside a complete medical examination. With four standalone clinics across the city and numerous school-based clinics, AddressHealth makes use of tech at each step to make healthcare holistic and affordable for children. The startup has also designed curriculums for students to instill healthy behaviours, both mental and physical, in their formative years.

Implications:

These healthcare aggregators have evolved themselves from simply assisting patients and providing diagnostic services within the country to paving way for medical tourists flying from abroad. They have now become a great asset, as well as a major player in the industry. These conglomerates are supporting medical tourism by offering state-of-the-art services to the patients from abroad.

Case study 2: Data Aggregator Models

Data aggregation across industry verticals helps companies assess their competition, understand their target market and improve customer satisfaction. Today, there are companies focused on data aggregation as a speciality, which means ready to use data is accessible to everyone who wants to use it for a multitude of use cases. What you can do with the data is only limited by your imagination. Here are some great business ideas based on data aggregation that one can consider.

Fashion trends analysis and forecasting

The fashion industry is extremely dynamic in nature. Retailers often find it intimidating to predict the frequent changes in trends and demands. This creates a huge opportunity for a new business – Fashion trend analysis and forecasting. A robust solution that can accurately predict the upcoming trends and changes can help the fashion retailers optimise their production, stock volumes and get ready to utilise the changes.

Global search engine for discount sites

Finding great deals around a place one recently visited can be difficult. Sites similar to Groupon could be available in different geographies and they could be offering great discounts and deals too. Creating a search engine for such sites could solve this problem once and forever. The site details and deals can be aggregated and displayed on your search engine using web crawling and other scraping techniques. This makes it easy for users to find deals and discounts no matter where they are in the world by hitting this website. The only challenge here would be site data aggregation which can be solved by relying on a web scraping service.

Educational video aggregator

Today, it's possible to find online courses on anything you want to learn in the form of videos, eBooks or blog posts. It is easy to get overwhelmed by all this content on the web which varies in quality and difficulty level when it comes to learning something new. This is where an aggregator website that can collect courses from all over the web and categorise them becomes relevant. This categorization will help the users by giving them ideas and pointers on where and how to start their online course. These resources can be

arranged on the basis of their difficulty level, quality, type, length and many other similar aspects.

Predictive analytics solution for hiring

Hiring is a huge challenge for big and small companies alike. Hiring the right candidate is a tricky task and can go wrong many a times. The blame for a bad recruit usually goes to the HR. Creating a HR solution that works on big data and predictive analytics can solve this problem to a great extent and help companies save costs associated with bad hiring. The portal should extract all the available data about the candidate from the web and the predictive analytics system can assess candidate's skill set against a given organization/job profile and provide the organization with valuable inputs on how good the hire would be. This can help companies improve the quality of their hires and thus move towards higher efficiency.

Media aggregator platform

Finding relevant news is only a few clicks away, thanks to the search engines like Google. Google, will suffice the needs of a common user, it's is not very convenient when you take productivity into account. Academic researchers and journalists or anyone who wants to keep up with the industry news in real time could use the help of a platform that can aggregate the news data in a predefined format to improve the ease of consumption. Monitoring the media for critical keywords can be made possible with this solution. Such a solution will also help the users save data historically and build their reports within a short period of time.

Implications:

As the amount of data available on the web keeps increasing by several folds each day, new use cases and business ideas based on data aggregation will also come into picture. These are some of the practical and in-demand use cases with which you could start a business. Since aggregating data from the web has been made easier by the web crawling companies, you wouldn't run out of data for your business, ever.

Conclusion and Future Research

The aggregator model is a real boon to its various stakeholders and it is also not without its limitations. Before selecting any aggregator, one must do a comparative analysis with other options available. For eg: Keep in mind that the aggregator is supposed to propose multiple hospitals and associated doctors. If they fail to do that and recommend only one hospital, there is a possibility that they may be doing business for just one hospital. This is a red flag and one has to discontinue availing the services of such agencies. One has to keep in mind that if the handler boasts of 100 percent guaranteed success rates, they don't necessarily extend that guarantee to life-threatening ailments. It can be evinced that new aggregators of services are welcomed in this age of Artificial Intelligence, Data Mining, Cloud Computing and Deep Learning etc. The future studies can focus on the financial sustainability of these models.

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AN EFFECT OF GRIEVANCE HANDLING MECHANISM ON EMPLOYEE PERFORMANCE

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ABSTRACT: Human resource is one of the peculiar resources no organization runs without this resource so it is very necessary to keep them motivated and satisfied for that purpose, grievance handling mechanism is very necessary. This research is about how grievance handling mechanism in organization effect on employee performance, Grievance is any kind of dissatisfaction or discontent towards employee and employment relationship. The process involved in solving problems of employees is called grievance handling mechanism. This study mainly focuses on how the problems are solved in organization, individual employee perception towards grievance handling committee and procedure, the survey is mainly conducted through primary data that is collecting information through questionnaire. This study shows that grievance handling mechanism is satisfactory in the organization but the few development in infrastructure and few changes in higher authority behavior will leads to even more better position of the company as their will be a increase in employee performance.

Keywords: Human resource, grievance, employee, performance.

INTRODUCTION

Grievance is any kind of dissatisfaction discontent or problem that arises in between employee and employment relation. If the employee has a any complaint in working environment it is the duty of the organization to handle those grievances and redress them, in case if those grievances left without redressed the employees felt injustice and dissatisfaction and that further reflects on the performance of employees, so the grievances need to be handled timely and fair justice should be given to each and everyone.

The grievance handling mechanism plays very important role in maintaining healthy working environment in organization. Grievance handling mechanism is a procedure through which the company redresses the problems or grievances of his employees. For the effective working of organization, it is very necessary to timely redressal of grievance.

There may be a various reason for cause of grievances, among them the main causes are management style, working conditions, practices of supervisor, social distance, personal issues etc., and there is also a different form of grievance they are factual, imaginary and disguised. factual means there is a real problem raised in between a employee and employment relationship, for example if the management promises to give something to their employees after some time but the management fails to keep its promise at that point of time there is felling of dissatisfaction and injustice arises and that leads to grievance. The next form is imaginary this kind of grievance rises because of the false perception of the employees, in fact there is no problem and as such but because of the wrong information, negative attitude of employees made them to feel there is problem these are called as imaginary grievances, and the other form is disguised this is a form in which the employees doesn't know the reason for their grievances these kind of grievances is based on employees psychological need and perceptions.

There is also a various method to find out this grievances like through direct observations, keeping gripe boxes in organization premises to receive complaints, following exit interview method in which the organization may interview their outgoing employees to find out the reasons for grievances, and some other methods are open door policy, opinion survey etc.,

If the grievance of the employees not solved then that leads to harmful situations like the productivity of employees may became less, quality of work is not accountable that leads to increased production cost, increases in labor turnover rate, increases in absenteeism, employee morale may come down, collectively we can say that the neglecting the employees grievances results in adverse effect of the organization productivity, so it is very necessary to listen to the employees problem and to handle them in time.

STEPS IN GRIEVANCE HANDLING PROCEDURE

- Informal action.
- Investigation.

- Grievance meeting.
- Decision.
- Appeal.

Informal action: if the issues of grievance are relatively minor, in the preliminary stage the employer's should discuss with their employees and made attempt to solve the grievance informally. If the grievance matter is serious and not able to resolve through informal meetings such cases need special attention. In case of these kind of grievance the employee need to write a written complaint to concerned authority about their grievance, and this is called has formal grievance handling procedure.

Investigation: once the complaint is received from the employees it is the responsibility of the higher authority to study the problem and to find out the root cause of the grievance. A clear investigation should be carried on problem before taking any major decisions.

Grievance meeting: once the grievance investigation is done then the employer should conduct grievance meeting in order to provide an opportunity to employees to explain their grievance

Decision: with considerable evidence the employer will need to decide whether to uphold to reject the grievance. The decision must be communicated to employees in formal way.

Appeal: If the grievance issues are rejected the employee should be ready for an appeal.

TYPES OF GRIEVANCES

Mainly there are three types of grievance

- **Individual grievance:** These kinds of grievances are filed by individuals. Such cases deal with problems regarding collective bargaining, discipline and human rights.
- **Group grievances:** These kinds of grievances are filed by an union members. In these cases, the employee's same department facing same problem will file a case through union members.
- **Policy grievance:** The policy grievances can be filed by both the employees; these kinds of grievances are filed when there is a violation in agreements which affect the employees.

LITERATURE REVIEW

Dr S Gomathi (2014)¹published in Mediterian journals of social science they says that the problems of the organization depends on attitude of higher authority and their attitude and a roach in handling the employee grievance, so they suggest that the higher authority must be very careful about their attitude and approach towards employees grievance.

Dr V MohanaSundaram, N.Sarayana (2013)²in their article named "employee grievance" they says that an organization is made up of people and it is run on the functions of people along with money and machineries so without these factors the organization cannot exist, so for the effective use of these factors for attainment of common goal of the organization it very necessary to address the grievance of people.

OBJECTIVES OF THE STUDY

- To know the grievance handling mechanism of an organization.
- To understand the effect of grievance redressal on employee performance
- To analyze the main causes for grievance.

SCOPE OF THE STUDY

The scope of the study is extended to the employees of Nandini high tech product plant, channarayapatna; Hassan District., this study is applicable to a set of employees of the same nature. This study has significant importance in the present as well as in future. The topic selected for the study is an important key to make the employees satisfied and motivated to work for the organization whereby the employees will also look at their career positively.

RESEARCH METHODOLOGY

Data Collected

- **Primary data:** Primary data is collected through direct interaction with employees and through questionnaire.

- **Secondary data:** Secondary data is collected through company reports and websites like www.kmfhandini.com
- **Research plan:** The research is carried out through structured questionnaire method including closed ended, likert scale questions.
- **Sampling technique:** Random sampling method has been used.

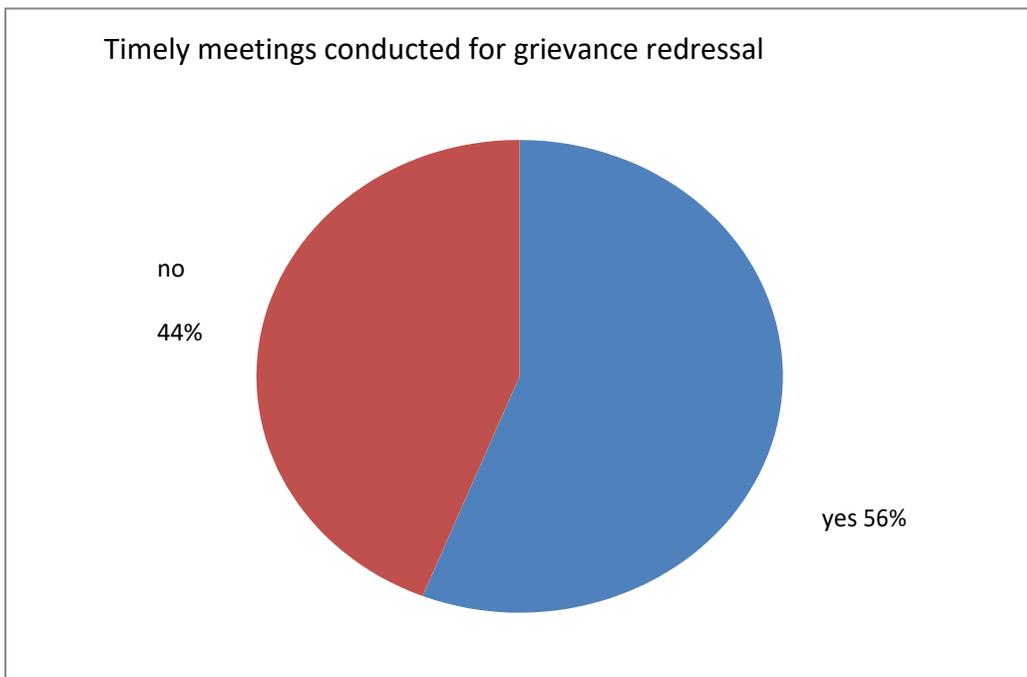
Sample Size

- A sample size of 50 respondents is taken into consideration for the purpose of collecting data.

ANALYSIS AND INTERPRETATION

➤ Responses regarding timely meetings are conducted for grievanceredressal

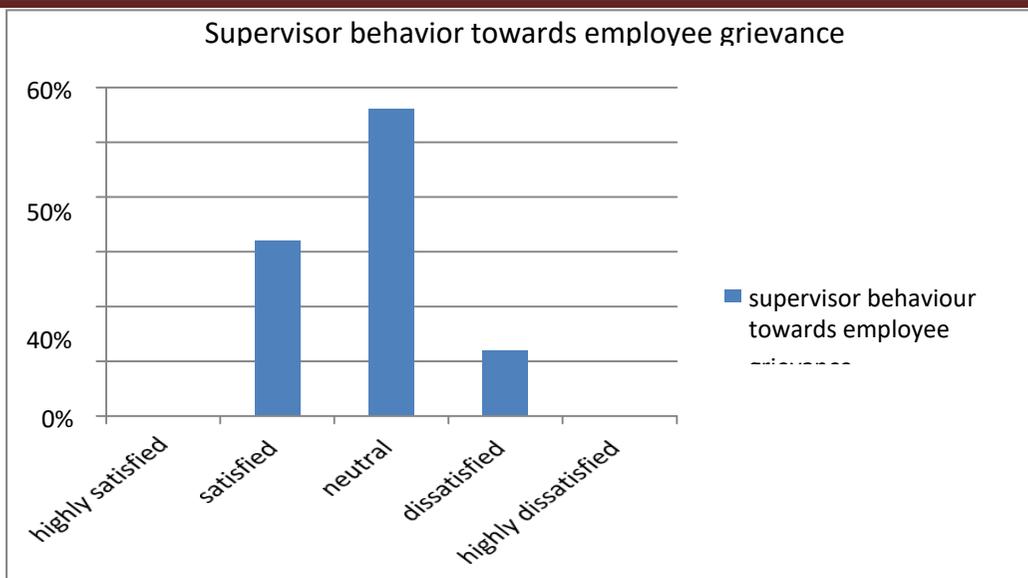
Sl No	Particulars	Response	%
01	Yes	28	56%
02	No	22	44%
03	Total	50	100%



Interpretation: 56% of the people said that there will be timely meetings conducted for Grievance redressal and 44% says no to the above statement.

➤ Responses regarding Behavior of supervisors towards employee grievance

Sl no	Particulars	Response	%
1	Highly satisfied	0	0%
2	Satisfied	16	32%
3	Neither satisfied nor dissatisfied	28	56%
4	Dissatisfied	6	12%
5	Highly dissatisfied	0	0%
6	Total	50	100%



Interpretation: regarding supervisor behavior 56% of the employees stand by neutral they are neither satisfied nor dissatisfied, 32% of the employees are satisfied, 12% of the employees are dissatisfied.

Chi square test and Hypothesis test Assumptions:

H0= There is no significance between supervisor's behavior toward employee grievance

Employees performance.

H1= There is a significance between supervisors' behavior towards employee grievance and employee performance.

Particulars	O	E	(O-E)	(O-E) ²	(O-E) ² /E
Highly satisfied	0	10	-10	100	10
Satisfied	16	10	6	36	3.6
Neutral	28	10	18	324	32.4
Dissatisfies	6	10	4	16	1.6
Highly dissatisfied	0	10	10	100	10
Total	50				57.6

Degree of freedom=n-1, 5-1=4

Therefore the 4 value in chi square table at 0.05 significance is 9.488

E=50/10 =10

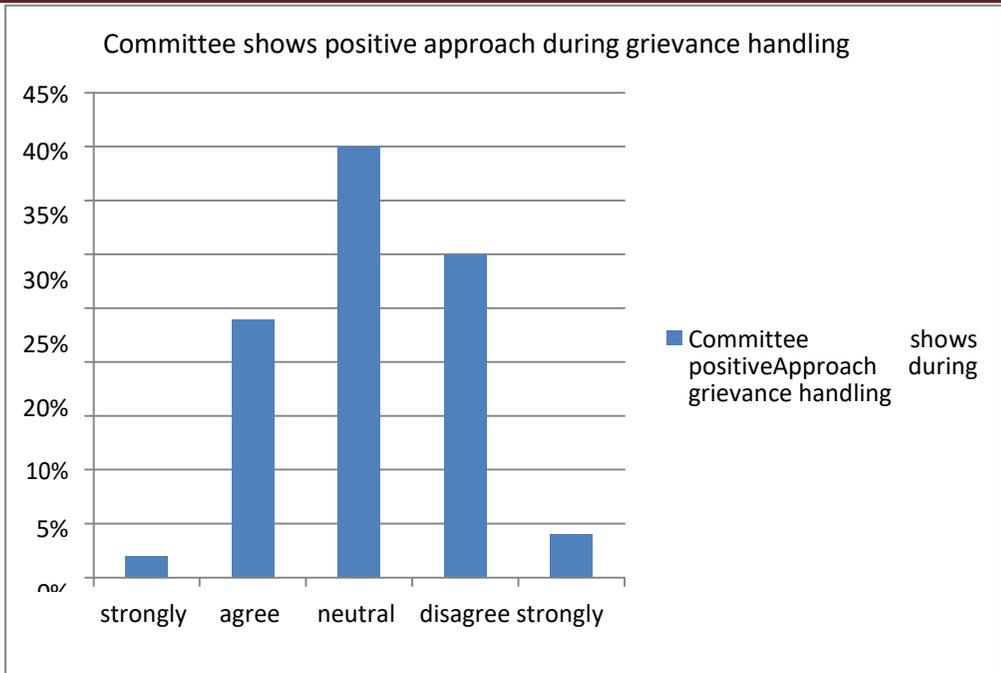
Chi square= $\sum (O-E)^2/E$
 =57.6

Calculated value= 57.6 Table value=9.488

Interpretation: since the calculated value is higher than table value reject the Null hypothesis and accept the Alternative hypothesis that is employees are satisfied by supervisor's behavior towards employee grievance.

➤ Responses regarding Is committee shows positive approach during grievance handling

Sl no	Particulars	Response	%
1	Strongly agree	1	2%
2	Agree	12	24%
3	Neither agree nor disagree	20	40%
4	Disagree	15	30%
5	Strongly disagree	2	4%
6	Total	50	100%



Interpretation: 40% of the employees stay neutral for the statement and 30 % of the people disagree to the statement that the committee shows positive approach during grievance handling and 24% agree that they show positive approach and 2% of the employees strongly disagree and only 1% strongly agrees.

Chi square and hypothesis test. Assumptions:

H0 = the positive approach of the employers during grievance handling does not affect on employees
 H1 = the positive approach of the employers during grievance handling affect on employees

Particulars	O	E	(O-E)	(O-E) ²	(O-E) ² /E
Strongly agree	1	10	-7	49	4.9
Agree	12	10	-2	4	0.4
Neutral	20	10	-10	100	10
Disagree	15	10	-5	25	2.5
Strongly disagree	2	10	-10	100	10
Total	50				27.8

Degree of freedom = n-1, 5-1=4

Therefore the 4 value in chi square table at 0.05 significance is 9.488

E=50/10 =10

Chi square = $\sum (O-E)^2 \div E$
 =27.8

Calculated value= 27.8

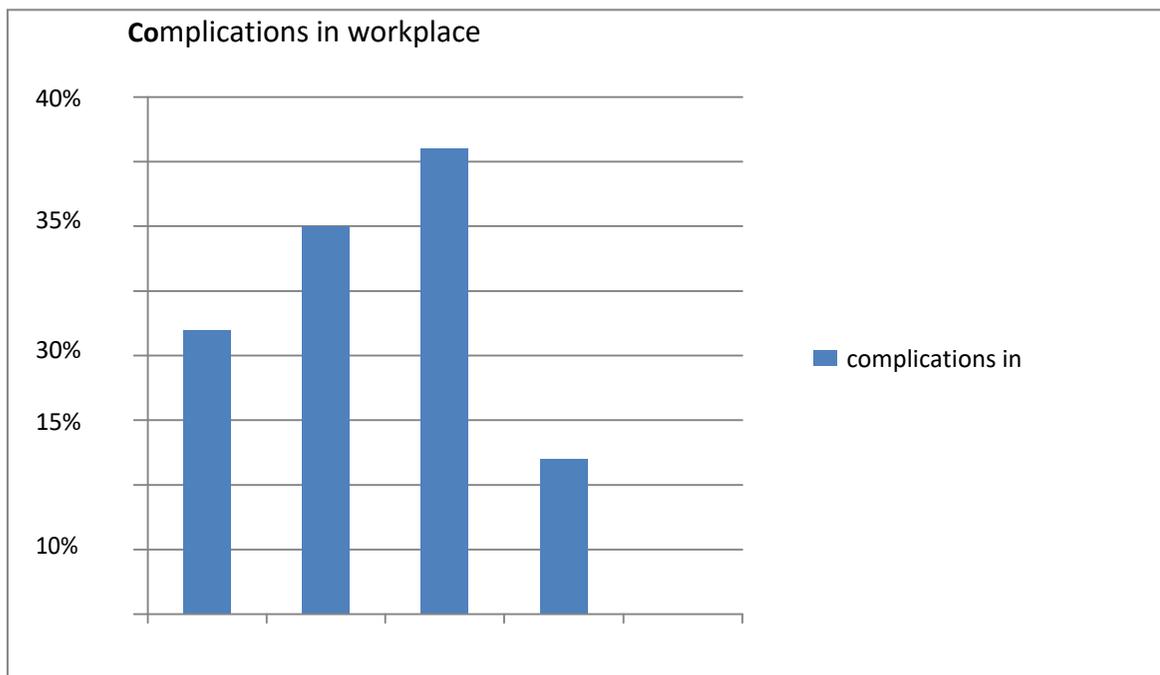
Table value=9.488

Interpretation: since the calculated value is higher than table value reject the Null hypothesis and accept the Alternative hypothesis that the positive approach of the employers during grievance handling affect on employees.

➤ Responses regarding complications in workplace?

Sl no	Particulars	Response	%
1	Strongly agree	11	22%
2	Agree	15	30%

3	Neither agree nor disagree	18	36%
4	Disagree	6	12%
5	Strongly disagree	0	0%
6	Total	50	100%



Interpretation: 36% Of the employees stay neutral for the statement of is there any complications in workplace, 30% agree that there will be a complications in workplace and 22% of the people strongly agree and 12% of the employees disagree.

Chi square and hypothesis test.

Assumptions:

H0 = There is no complications in workplace

H1 = There is a complication in workplace

Particulars	O	E	(O-E)	(O-E) ²	(O-E) ² /E
Strongly agree	11	10	1	1	0.1
Agree	15	10	5	25	2.5
Neutral	18	10	8	64	6.4
Disagree	6	10	-4	16	1.6
Strongly disagree	0	10	-10	100	10
Total	50				26.6

Degree of freedom=n-1, 5-1=4

Therefore the 4 value in chi square table at 0.05 significance is 9.488

E=50/10 =10

Chi square= $\sum (O-E)^2 \div E$
 =26.6

Calculated value= 26.6 Table value=9.488

Interpretation: since the calculated value is higher than table value rejects the Null hypothesis and accepts the Alternative hypothesis that there is a difficulty in workplace.

Correlation:

To know whether there is a correlation between company infrastructure and problems in work place.

Let X be a company infrastructure

Let Y be a complication in workplace

		Complications in workplace		
		Strongly agree	Agree	Total
Company infrastructure	Highly satisfied	4	37	41
	Satisfied	2	7	9
	Total	6	44	50

Values for correlation

$\sum X^2$	$\sum Y^2$	$\sum XY$
722	512	608

$$r = \frac{\sum XY}{\sqrt{(\sum x^2 * \sum y^2)}}$$

By substituting the values in the above equation, we get $r = 1$

Inference: since the value of “r” is 1 both the values are highly correlated. So the company infrastructure and problems in workplace are interrelated and variation in one variable causes variation in another.

CONCLUSION

Along with theoretical knowledge practical exposure is very necessary. Enabled to understand the practical concepts of the organization. The NHPP has helped to fill the gap between theory and practical knowledge. This study shows that the grievance handling mechanism is acceptable. The employees are satisfied towards work environment and compensation and benefits. The employees expect the management and supervisor to be even friendlier so that employees feel much comfortable to work in organization. As the organization is a manufacturing sector employee felt complications in workplace as they need to work with machineries and that risk need to be minimized, so that safety and welfare facilities need to be provided. As human resource is very important in every organization it is necessary to keep them satisfied always, and organization need to be listened to their grievance and need to take suitable remedies for them, that will help to keep employees motivated and that will intern results in efficiency of employee. The organization is identifying the importance of human resource in productivity of organization. So it is very necessary to keep them motivated all the time. In order to keep them motivated the increase in infrastructure, additional benefits and recreational activities need be done.

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ANALYSIS OF THE MUTUAL FUNDS WITH EQUITY EXPOSURE IN VUCA WORLD

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INTRODUCTION

Mutual fund is a financial instrument to channelize money from investors and to invest in different markets and securities, taking into consideration the investment objectives finalized between the mutual fund and the investors. In other words, through investment in a mutual fund, an investor can get access to markets that may otherwise be unavailable to them and avail of the professional fund management services offered by an asset management company.

A mutual fund has different roles for the different constituents that participate in it. The primary function of mutual funds is to assist investors in generating income or increasing the wealth, by actively taking part in the opportunities available in various securities and markets in VUCA World. To face VUCA i.e. Volatility, Uncertainty, Complexity, and Ambiguity, the mutual fund structure, through its large number of schemes, makes it possible to accumulate a large corpus of money from investors with diverse goals/objectives. Therefore, mutual funds offer different kinds of schemes to cater to the need of diverse investors. The money that is raised from investors, ultimately benefits governments, companies and other entities, directly or indirectly, to raise money for investing in various projects or paying for various expenses. The projects that are facilitated through such financing, offer employment to people; the income they earn helps the employees buy goods and services offered by other companies, thus supporting projects of these goods and services companies. Thus, overall economic development is promoted. The mutual fund industry itself, offers livelihood to a large number of employees of mutual funds, distributors, registrars and various other service providers. Mutual funds can also act as a market stabilizer, in countering large inflows or outflows from foreign investors. Mutual funds are therefore viewed as a key participant in the capital market of any economy in VUCA World.

In this report equity model analysis was done taking example of large cap mutual fund. Equity model is a matrix where various risk measures parameters are taken for each fund for analyzing and predicting its future performance.

There are around 2000 mutual fund schemes available in mutual fund universe analyzing each fund one by one is not feasible. Hence some parameters are selected to filter best mutual funds out of the universe of mutual funds. Equity Model is a group of various risk measures and parameters which helps in searching best schemes for the investors in order to face challenges in VUCA World.

REVIEW OF LITERATURE

Bill Stone, Chen He and Paul White (2016) Opinion that, active share is a useful for active management evaluations. It gives investor a different approach to compare portfolios against benchmarks. It is found that high active share and patient investing portfolios tend to outperform over the long term on average. In their view an appropriate level of active share is necessary but not sufficient condition to choose fund manager. For better usage of active share, an investor should confirm an appropriate benchmarks and holdings are defined on the level of immediate issuers. Overall an active share captures only one aspect of active management and has limitations. Harry Mamaysky, Matthew Spiegel, Hong Zhang, (2008), Mutual fund managers usually selects securities in the hope to generate superior returns. This type of trading naturally generates time-varying factor loadings. However, the standard multifactor ordinary least squares (OLS) is not build to deal such time variation or to detect whether fund managers have the ability to time the market by appropriate change of their fund's beta. Plausible answers for this issue are the TM and HM models, which incorporates a market-timing parameter and furthermore the standard elements. Utilizing these models, Bollen and Busse (BB) find that there is no evidence that fund managers possess market-timing ability in the monthly data but they are able to detect it in the daily data. Anirudha Naha, (2017) the year

(2015), onwards has been very positive for the Indian corporate sector as a whole. Sales and profitability has increased even as debt levels have remained stable and leverage, measured as Debt/Equity has come down. PAT/ Total Assets have also trended up since 2015, clearly indicating the setting in of operating leverage. Higher utilizations and profitability has led to higher ROEs and more importantly, as the ROE- 10yr yield differential increases, one will probably see the hunger for capital expenditure come back to the private sector, albeit over the next couple of years.

Lower Debt/equity, higher capacity utilizations and better cash flow generations is a potent combination for growth to come back. We expect earnings trajectory to remain strong into FY19 and FY20, as ROEs trend back towards the 20% and incremental ROEs over the 10 year spread to move back towards double digits. Mr. Ashok Bantwa, Mr. Krunal Bhuvra, December (2012), This study has been carried out to evaluate the performance equity diversified schemes. An attempt has been made to evaluate the fund's performance, level of diversification and manager's ability to pick the undervalued stocks. Supporting the established relationship of high risk - high return, better performing schemes are exposed to higher risk. Better performing funds were less afflicted by systematic risk and highly afflicted by total risk in terms of standard deviation of portfolio return. The hypothesis of risk return relationship was also justified by the benchmark markets also. The findings also revealed that majority of the schemes were adequately diversified. Negative correlation between level of diversification, measured by R2 and unique risk proved that, fund managers remained successful in reducing unique risk through better diversification. The study also revealed that the funds were able to beat the market with help of better stock selection skill of fund managers. High positive degree of correlation coefficient between Jensen's measure and portfolio return and Fama's measure and portfolio returns also validated the fact that, fund returns can be enhanced through better stock selection skill of fund managers. Christopher P. Clifford, Bradford D. Jordan, Steve R., Jon A. Fulkerson. The phrase "past performance is not indicative of future results" is ubiquitous in the finance industry, but equity mutual fund investors don't believe it. Instead, they chase past raw returns to an extraordinary degree. Because of the way fund managers are compensated, their incentive is to take whatever action leads to the greatest possible growth in assets under management. Their evidence shows that higher raw return leads to greater fund flows, while riskiness does not affect investors' decisions. Further, net flows to funds are typically close to zero on average, so most of the growth in assets under management comes from the raw returns generated by the fund manager, thereby providing a second strong incentive to pursue maximum returns. Skilled fund managers are those who grow assets under management, not necessarily those who produce alpha. To date, however, whether this aspect of fund manager skill exists and/or persists is unexplored territory. Ms.M.V.Subha, Ms.S.Jaya Bharathi, This research give us idea about the Sharpe ratio, Treynor Ratio, Jensen differential return measure. It shows that if the ratio value is positive and higher than the fund would give good returns in future. Sunil Dhawan, May (2016), Reviewing of the equity mutual fund portfolio doesn't merely help us recognizing schemes in terms of performance but may also throw up surprises.

We may be holding a too little or too much-diversified portfolio. Even the expense ratio of some of the schemes that we could be holding may be high compared to others within the same category. Most importantly, the review helps us validate if the investments are aligned to your goals. Yi Fang and Haiping Wang, September (2014), Fund manager characteristics affect comprehensive performance mainly through their impact on managers' picking ability, which in turn affect excess return and, ultimately, comprehensive performance. Findings demonstrate that gender and major are essential characteristics for considering risk preferences. Howard W. H. Chan, Robert W. Faff, David R. Gallagher, Adrian Looi, February (2005), This study show that fund's size negatively impacts on fund's performance. We find that purchasing during periods of high inflow lead to sub-optimal purchasing, which in turn reduces fund performance. We find that large managers reduce market risk costs by having more stocks in their portfolio, thereby reducing the average overweight position in each stock. Large managers are also more likely to invest heavily in large liquid stocks, further reducing their aggregate market impact costs. Research shows that when large managers trade, they face higher costs than small managers. Furthermore, the decision to alter portfolio configuration in an attempt to reduce market impact costs is itself costly since we show that the fund size effect is partially explained by these portfolio configuration preferences. Goel Sweta, Mani Mukta, June (2016), In this research both parametric and non-parametric techniques has been done in order to predict future performance of mutual funds. Techniques like regression analysis, Brown and Goetzmann's odds ratio (OR), contingency tables are used in order to predict future performance of mutual funds. This study might be helpful for investors in taking investment decisions in mutual funds. It will allow mutual fund managers to track the investment strategies that might yield higher returns.

Asger Lunde, Allan Timmermann, David Blake, June (1999) In the research it was found that mutual fund

schemes are generally not closed down early on after their inception date. It is also persistent with the finding that a fund's performance over the previous three years matters more for its closure possibility than its performance over the previous year. They found that the standard deviation of individual funds' abnormal performance over years did not affect the hazard rate, the coefficient on the standard deviation of lagged sectoral return, was found to be highly statistically significant. Hazard rates thus found to decline during volatile markets. Bilal Ahmad Pandow, Khurshid Ahmad Butt, March (2017), Superior financial performance of fund managers has been the single most important factor that has the bearing on investors' interest and growth of mutual fund industry. Therefore, the ultimate goal of fund managers is to deliver superior value to the fund investors in the form of returns at minimum risk. The performance of mutual funds is generally defined in terms of returns, risk adjusted returns or benchmark comparisons. These findings reinforce the fact that lesser, the risk lesser the return and if excess risk is taken beyond the accepted level, there is a likelihood of more loss of return. It also becomes clear from the above discussion that if the risk is kept within the tolerable limits, there are greater chances of earning a normal return. Roberto Casarian, Marco Lazzarin, Lorian Pelizzon, domenico Sartore. December (2013), First, there was an existence of a very high rank correlation between performance measures based on absolute benchmarks and customized benchmarks; on the wayward there is only a weak relation between these measures and the information ratio. Second, the performance measure based on contenders (Morningstar Risk-Adjusted measure) is progressively predictable in both the examinations. Third, in the event that we consider as winning Criterion the returns that exceeded the 75th percentiles even the performance measures based on absolute benchmarks show great consistency. The information ratio shows clashing behavior. The after effects of this paper lead to two clear essentialness. First, the ranking of the funds, and so the constancy level, are related to the performance indicator chosen. Second, performance measures based on peer group benchmarks allow to differentiate funds that perform constantly better than contenders.

Tarak Paul, May (2017), the study confirmed the role of perceived experience on the mental accounting of retail mutual fund investors. The study showed significant association between retail investors' degree of perceived experience and state of mental accounting in respect of customer communication. In other words, retail mutual fund investors' perceived experience have an impact on their mental accounting. Therefore, the mental categorization process of the mutual fund retail investors' depends on their perceived experience in respect to customer communication. Inderpal Singh, kanika Khera, January (2015), in this study risk measures ratios such as Sharpe, Treynor, Jensen's alpha, standard deviation, beta, alpha is used to evaluate the performance of mutual funds. It was found that a scheme with high values of Sharpe, Treynor, and Jensen's alpha outperformed the market and benchmark. It was also found that the schemes with low value of beta and high value of alpha generally gives good returns. Charu Banga and Amitabh Gupta, November, (2015), In the study it was found that expansion of marketing and management capabilities, expansion of asset size, and benefits of diversification are the three most important motives behind mergers and takeovers of mutual fund schemes in India. These results also indicate that the mergers and takeovers of the mutual fund schemes in India are carried out to capture the benefits of well-spread distribution networks of the acquired schemes. This would help the mutual funds to save on their marketing costs and increase their asset base that in turn would help in achieving economies of scale. Rajesh Chakrabarti, Sarat Malik, Sudhakar Khairnar, Aadhaar Verma, March, (2016), In this study it was found that mutual fund major sales is in Mumbai and its surrounding districts as major AMC headquarters are situated in Mumbai. It was also found that major sales are in top 15 cities in India. In other cities people are less aware about the mutual fund schemes and it's a difficult job to find right talent to spread awareness about mutual funds among people. So government as well as local bodies such as mutual fund agents is providing literacy among people. Government of India launching various programmes to open bank account. So that common people can use various services and can invest in financial instruments. George O. Aragon and Wayne E. Ferson, March (2017), In this investigation traditional risk measures of mutual funds and its inadequacies are called attention to. It was found out that investment performance can be classified in two categories. A fund or manager has investment ability if it generates returns that can be expected to exceed that of an otherwise equivalent benchmark, before costs and fees. A fund that outperforms the otherwise equivalent benchmark on an after-cost basis is said to add value for investors. The other one is fixed income performance in which various measures are taken into account to evaluate the returns of the scheme. Tobias J. Moskowitz, August (2000), In the examination it was discovered that Active mutual fund managers may add value by restricting capital gains exposure through their trades, or they may reduce substantial value by charging large tax consequences on clients from their trades. It was likewise discovered that the net fund returns are much less volatile compared to gross returns because the net returns have a smaller exposure to equities than the

hypothetical portfolios. Therefore, although the average net performance varies from gross performance, their Sharpe ratios might be indistinguishable. Nicolas P. B. Bollen, Jeffrey A. Busse, November (2017), In this study the issue of consistence in mutual fund performance calling attention to short estimation periods. Funds was ranked every quarter by their risk-adjusted return measured over a three-month period using stock selection, market timing, and mixed strategy models. The risk-adjusted return of deciles of funds over the following three-month time frame was estimated It was discovered that the top decile of funds gives a factually noteworthy strange return in the post-ranking quarter of 25–39 basis points across the performance models. Russ Wermers, March 1997, In the study it was found out that an investor choosing last-year's best decile of funds would have achieved a pre-expense return three percent per year higher than an investor choosing last-year's average fund. However, the difference in returns disappears after controlling for the momentum effect in stock returns. The strategy of buying last year's best funds works well except for years when stocks with high past returns underperform stocks with low past returns. It was evidence that the performance persistence is, to a large extent, driven by the persistent use of active momentum investment strategies. Prof. M.N.Dave, Dr. Hitesh. J. Shukla, May 2014, In the study it was found out that the investor's usage perceive a product as per the way it has been promoted to them. Investors usually consider various factors like professional advice, low transaction costs, etc. as the reasons for investment in MF's. Investors are having the perception of the specific product due to the way they visualize the product and understand the product. A.B.M. Munibur Rahman, March 2014, It is discovered that the a large portion of the common store plans have performed better as per Jenson and Treynor measures yet not up to the benchmark based on Sharpe ratio. However, very few mutual funds are well diversified and have decreased its unique risk. The growth oriented funds have underperformed in terms of total risk and the funds are not offering advantages of diversification and professionalism to the investors. So, mutual funds cannot perform always better with their expertise and cannot beat the market. Anthony L. Lovesick, W. John Jordan, August 2000, in the study it was found that the some portfolios tend to outperform the S&P 500. However it was concluded that the evidence is not strong enough to recommend the stock selection strategy to the individual investor.

OBJECTIVES OF THE STUDY

1. To analyze the mutual funds with equity exposure in **VUCA World**.
2. Analyzing the fund performance considering various ratios.
3. Selecting best and top performing mutual fund and checking consistency and overall performance of the fund during the year 2018.

RESEARCH METHODOLOGY

In this study, we will get to know how to analyze mutual funds in the universe of around 2000 funds. We will also come to know about different risk measures ratios and parameters to analyze funds' performance and consistency over the years. This study will provide better understanding of mutual funds schemes and its selection criteria for investment. The tools used to analyze funds for this study are FE Analytics. Descriptive Analysis was done to gather information from various websites such as Morningstar, Value research, NSE, BSE websites.

The Equity Model consist of various parameters and risk measures ratio such as

1. Portfolio Turnover Ratio
2. Total Expense ratio
3. R squared
4. Upside Ratio
5. Downside Ratio
6. Alpha
7. Beta
8. Sharpe Ratio
9. Sortino Ratio
10. Information Ratio
11. Rolling Returns
12. Assets under Management
13. Fund Manager Performance

These parameters and risk measures ratios help us to analyze the fund performance over the years and the consistency of the scheme. This analysis helps us to predict the future performance of the particular scheme.

DATA ANALYSIS

Analysis and Interpretation of Equity Model

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Top 5 Large Cap Funds	Portfolio Turnover Ratio Date	Portfolio Turnover Ratio	TER	Start of Data Cumulative Downside Capture to Last Month End	Start of Data Cumulative Upside Capture to Last Month End	Start of Data Cumulative r2 to Last Month End	Start of Data Cumulative Beta to Last Month End	Start of Data Cumulative Alpha to Last Month End	Start of Data Cumulative Sharpe to Last Month End	Start of Data Cumulative Treynor to Last Month End	Start of Data Cumulative Tracking Error to Last Month End	Start of Data Cumulative Info Ratio Rel. to Last Month End	Start of Data Cumulative Volatility to Last Month End
1														
2	Axis Bluechip Gth	30/06/2018	181.00	2.10	90.96	89.96	0.91	0.88	2.94	0.48	7.94	4.57	0.36	14.53
3	Edelweiss Large Cap Regular Gth	30/06/2018	363.00	1.38	91.01	90.05	0.90	0.86	3.63	0.53	9.12	5.07	0.41	14.68
4	ICICI Prudential Bluechip Gth	30/06/2018	113.00	2.12	91.59	84.73	0.96	0.83	5.39	0.46	10.40	5.71	0.68	18.78
5	Reliance Large Cap Ret Gth	30/06/2018	94.00	2.32	98.73	94.45	0.96	0.94	1.45	0.23	5.62	4.70	0.19	22.55
6	Tata Large Cap Regular Gth	30/06/2018	5.14	2.54	99.48	82.94	0.73	0.93	3.80	0.40	10.97	12.92	0.16	25.55

	O	P	Q	R	S
	Scheme Benchmark	Scheme Manager	Scheme Assets(m)	Sector	
	Nifty 50 Total Return	Mr. Shreyash Devalker	22335.00	Ind VR Equity - LargeCap	
	Nifty 50 Total Return	Mr. Bharat Lahoti	1334.40	Ind VR Equity - LargeCap	
	Nifty 100 Total Return Index	Mr. Rajat Chandak, Mr. Sankaran Naren	174961.60	Ind VR Equity - LargeCap	
	S&P BSE 100 Total Return Index	Mr. Sailesh Raj Bhan	101261.40	Ind VR Equity - LargeCap	
	S&P BSE Sensex Total Return Index	Ennetee Fernandes, Mr. Rupesh Patel	7640.60	Ind VR Equity - LargeCap	

Figure 1

Interpretation-

This is the Equity Model in which analysis of top 5 large cap fund is done. Here various risk measures are taken into consideration to evaluate the performance of the fund.

How to analyze Axis Bluechip Fund

1. Comparison of axis mutual fund with benchmark and category return

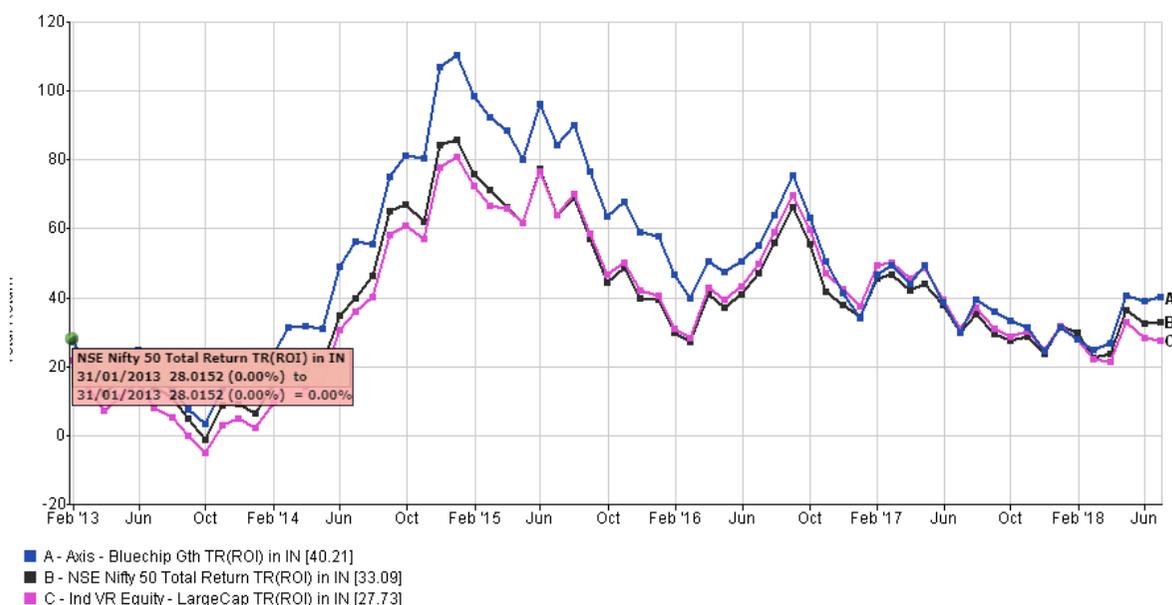


Figure 2

Interpretation-

In the above graph start of data Rolling returns of Axis Bluechip are compared with its benchmark and category return. In the above graph Axis Bluechip performance is above the benchmark and category return.

2. Axis Mutual Fund Excess Return Over Benchmark

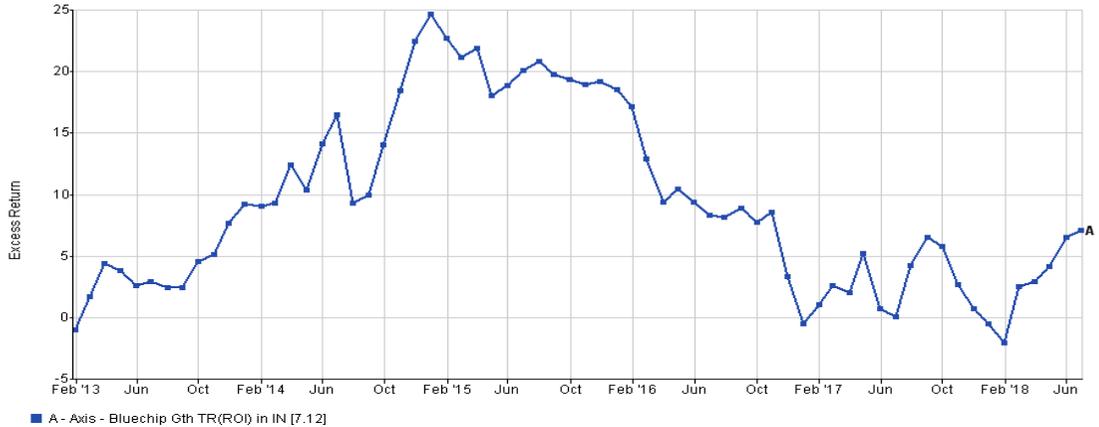


Figure 3

Interpretation-

In the above graph Excess return of Axis Bluechip is above the zero (0) value for the most of the period since inception.

3. Performance of AUM

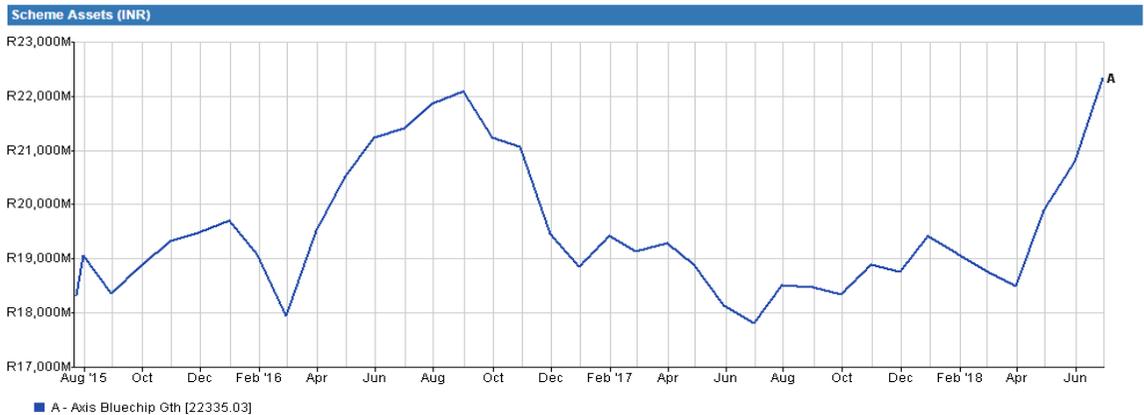


Figure 4

Interpretation-

The assets under management of fund shows that the fund assets has been in increasing trend since April 2018 and total AUM is above 2200 crores.

4. Axis Mutual Fund Calendar Performance and Quartile Movement

Performance by Calendar Year in (INR)					
	YTD	2017	2016	2015	2014
Schemes	12.26%	38.03%	-3.62%	-1.24%	40.85%
Sector	1.81%	29.61%	4.10%	-2.23%	35.24%
Relative to Sector	10.26%	6.49%	-7.42%	1.00%	4.15%
Rank in Sector	3 / 45	3 / 36	35 / 36	23 / 32	13 / 27
Scheme Quartile	1	1	4	3	2

Figure 5

Interpretation-

In the above table Calender performance and quartile movement is observed. The fund which shows stable and highest quartile in the consequent years are found to be good fund.

5. Fund Manager Performance In Terms Of Excess Return

Rolling 3 month excess return chart for Axis Bluechip vs. peer group composite

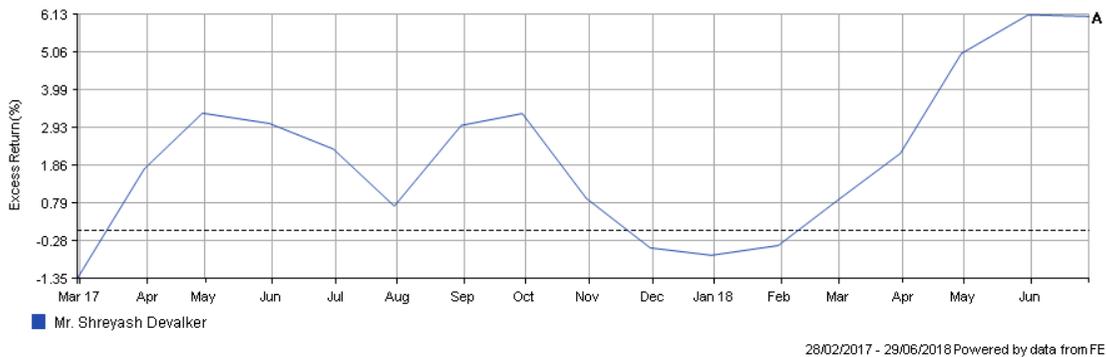


Figure 6

Interpretation-

In the above graph fund manager performance in terms of excess return is above the peer group for most of the time during 3 months rolling excess return periods.

CONCLUSION

Findings

In this study it was found that risk measures are important to interpret the risk return characteristics of a mutual fund. The various others information were used to understand about the performance of the mutual fund in future such as comparing fund with benchmark and category return, performance of AUM , performance by Calender year, fund manager performance in terms of excess return etc.

This study gives the comprehensive information to analyze the particular mutual fund in **VUCA World**. Here we have taken Axis Bluechip Fund to analyze the various parameters in order to predict the future performance of the fund. Though the equity model analysis it was concluded that **Axis Bluechip Gth, Edelweiss Large Cap Regular Gth and ICICI Prudential Bluechip Gth, Reliance large cap Ret Gth and Tata Large cap Regular Gth** are best mutual funds to invest for good returns with minimum risk. On analysis it was found that these funds have comparatively low downside capture ratio, averagely high upside ratio, strongly correlated funds having R squared value equal to/greater than 0.90 value, relatively low beta value less than 1.0, high alpha value greater than 1, relatively high Sharpe and Treynor ratio, comparatively low tracking error. The above funds are top 5 performing mutual funds in the large cap category mutual funds as per July 2018 data.

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AUTOMATIC VEHICLE LICENSE PLATE DETECTION USING IMAGE PROCESSING TECHNIQUES

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ABSTRACT: *The proposed work is on extraction of vehicle license plate information automatically from an image or a sequence of images. The extracted information can be used with or without a database in many applications, such as electronic payment systems (toll payment, parking fee payment), and freeway and arterial monitoring systems for traffic surveillance. The quality of the acquired images is a major factor in the success of the ALPR. ALPR as a real life application has to quickly and successfully process license plates under different environmental conditions, such as indoors, outdoors, day or night time. These plates usually contain different colors, are written in different languages, and use different fonts; some plates may have a single color background and others have background images. The license plates can be partially occluded by dirt, lighting, and towing accessories on the car, so it is good to extract license plate information.*

Keywords: *Automatic License Plate Detection, Optical Character Recognition, Template Matching, MATLAB, Kiel V4, Flash Magic, ARM7, GSM,GPS, LCD, Buzzer*

Introduction

Nowadays every country is spending huge economy in the case of traffic automation and vehicle theft controlling; this is because of the enormous increase in the vehicles on roads. Vehicle checking way has some faults such as leak checking, false checking, so in order to avoid such situation the intelligent system for the traffic surveillance is required and this system is built to meet this kind of requirement and replace the traditional way of finding the theft vehicle or any black listed vehicle in its own way. This system builds a new Intelligent Mobile Vehicle Checking System based on ARM CORTEX, image processing for vehicle number plate recognition, GSM wireless mobile telecommunication to send SMS to the mobile and check the vehicles which owe the charge. The location of the vehicle is also obtained.

Problem Definition

Considering the present situation of traffic auditing department in most of the places in India, this is following traditional way of finding the theft vehicle or any black listed vehicle in its own way, which in most of the cases as mentioned leads to corruption. Every time a vehicle found in the traffic terminal, its photo will be captured and analyzed in the traffic department and the police in the nearest location will be informed manually. This may leads to loss of information of the vehicle traced and if traced it requires a lot of intermediate procedures which consumes more time to intimate regarding the vehicle traced.

Proposed Work

The ALPR recognizes a vehicle's license plate number from an image or images taken and a notice is issued through SMS to the concerned owner of the vehicle and also to the nearest traffic departments. The location where the image of vehicle is taken can be obtained from the GSM which helps in tracing the vehicle by the police nearby.

Working Principle

An image of number plate is captured from the camera and the image is given for the embedded environment for the further processing in order to extract the numbers from the number plate. After the processing of data, the details are sent to the GSM module if the license plate data matches the blacklisted license plate and a notice is issued through SMS to the concerned owner of the vehicle or the nearest control room. The images are captured and fed into the system. The MATLAB program takes these images and extracts the license plate information from the image, i.e. the license plate number. The extracted number is

compared to the database created in MATLAB. If the extracted number has a match in the database, the number, the vehicle owner name, his contact number and time and date information is sent serially to the controller. If there is no match, “no issues thank you” message is sent serially to the controller. When powered on, the controller selects the GPS to gain the location information and then selects the USB to get the system data. Once the data is arrived, it is displayed on the LCD screen. Message is constructed for blacklisted and not blacklisted number based on the arrived data. GSM communication is initiated and SMS is sent to the owner and traffic police personnel if vehicle is blacklisted, if not blacklisted an acknowledgment message is sent to the traffic personnel only. The Kiel Uv4 software is used to dump the program on the controller and flash magic for serial communication. Microsoft paint is used to create character templates.

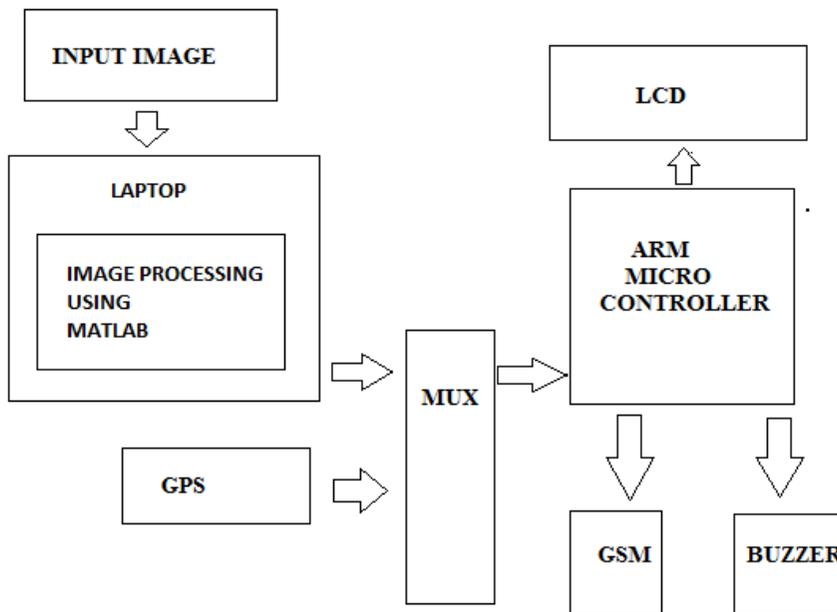


Figure 1. Block Diagram

Proposed Framework

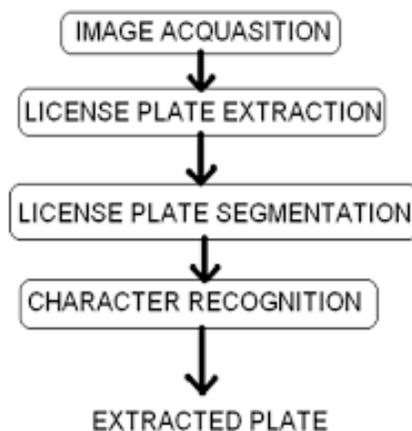


Figure 2. Proposed Flow Diagram



Figure 3.Proposed Framework

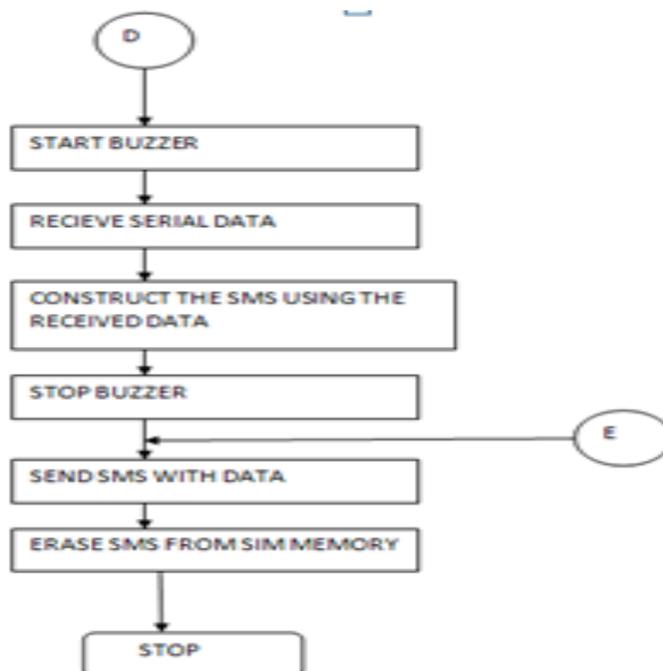


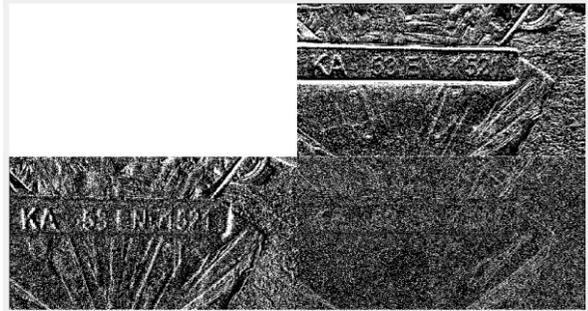
Figure 4.Proposed Framework

RESULTS

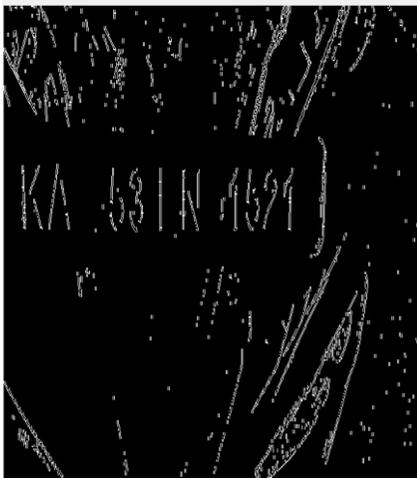
Plate number extraction is done, the extracted number is looked up in the database, the blacklisted number if found, the details from the database are extracted and an SMS is sent to the concerned authority which includes the vehicle owner details along with location information gained from GPS. If the extracted number plate has no record in the database, an SMS saying no issues, thank you is sent back to the concerned authority as an acknowledgment.



Input sample image



DWT applied to the image.



The vertical detail matrix image or the HL after application of Sobel filter



90 degree rotated image



The extracted license plate area.



Gray scale image



Sharpened image



Contrast adjusted image



CLAHE image



Binary image



Dilated image



Eroded image



Subtraction of dilated and eroded image



After application of logical function



After subtraction operation of image from logical function and from morphological opened one.



Holes filled



After removing connected component pixels



Rectangular bounding box created around the characters

Recognized Characters: KA53EN1512

Conclusion

By employing embedded technology, based on ARM along with GSM module design this project uses the detection techniques of image capture of number plate using MATLAB. System finds the position of vehicle and sends its location. Its wireless communication techniques, meets the traffic auditing departments need about mobile vehicle checking. The prototype of the proposed system is designed and implemented with the image capture which can be used for the applications discussed. The entire functionality can be integrated into a single unit to form a real time embedded system, the clock information can be derived from the GPS. The extraction of characters from tilted and highly illuminated pictures needs further processing work. The entire functionality can be converted into an application can work on various platforms.

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“Impact of Promotional Strategies on sales in Supermarkets”

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ABSTRACT: *The study focuses on “Impact of Promotional Strategies on sales in Supermarkets”. This topic gives an idea regarding what are the promotional strategies used in a supermarket for getting good sales in order to gain proper profits. This also gives knowledge regarding different kinds of promotional strategies. These strategies are used in supermarkets such as Big Bazaar, More, Spencer’s, Spar, Star Bazaar, Reliance Fresh, DMart, Nilgiris, Hypermarkets, Metro, etc. The problem statement is to evaluate the effect of various sales promotional strategies in supermarkets such as Coupons, Free samples, free gifts, Lucky draws, Special discounts, Refund & Premium offers, Seasonal Discounts, Price discounts, Product display, Buy-one-get-one free, Product replacement and warranty of the products. The research design of the topic chosen is descriptive. The research methodology used for this Research study is the Questionnaire method which is a standardized questionnaire (Unconcealed formalized questionnaire).*

Keywords: *Promotional Strategy, Super market, Premium, Coupons, Price Discounts, Seasonal Discounts.*

Introduction:

Introduction of Promotional Strategies:

Peattie and Peattie (1994) expressed that “Marketing and promotional events are normally associated with a time frame, place or group of consumers, which empowers them for an immediate reaction by promoting certain benefits and offering additional payback or welfare.” One of the benefits of Promotions is that they stimulate the consumers to compare different brands and evaluate the purchase possibilities in such cases. Therefore, retailers and marketers utilize different promotional strategies according to the preference of the consumers to boost their sales. Promotion is fundamentally a tool to spread the information about the merchandises and services available to them. Earlier the main goal of promotion used to be longer product awareness. Price reductions or discount coupons provided by retailers and other tools such as samples, bonus and buy one and get one free provided by retailers to interest more purchasers to obtain merchandises (Gilbertt, 1999). Currently the celebrity endorsements were added as a part of promotional strategies in supermarkets.

Introduction to Supermarket: an overview

Supermarkets are the self-service shops which offer a wide variety of food and household products, organized into sections and shelves. It is larger and has a wider selection than earlier grocery stores, but is smaller and more limited in the range of merchandise than a hypermarket or big-box markets. The supermarket typically has aisles for meat, fresh produce, and dairy and baked goods. Shelf space is also reserved for canned and packaged goods and for various non-food items such as kitchenware, household cleaners, pharmacy products and pet supplies. Supermarkets typically are chain stores, supplied by the distribution centers of their parent companies thus increasing opportunities for economies of scale. Supermarkets usually offer products at relatively low prices by using their buying power to buy goods from manufacturers at lower prices than smaller stores can. They also minimize the financing cost by paying for goods at least 30 days after receipt and some extract credit terms of 90 days or more from vendors.

Statement of the problem:

The objective of this research paper is to evaluate the effect of various sales promotional strategies in supermarkets such as Coupons, Free samples, free gifts, Lucky draws, Special discounts, Refund & Premium offers, Seasonal Discounts, Price discounts, Product display, Buy-one-get-one free, Product replacement and warranty of the products.

Research Questions:

1. Do the sales promotion techniques have significant impact on consumer buying behavior?
2. What is the impact of promotional strategies on sales in the supermarkets?

3. What are the uses of promotional strategies in supermarkets?
4. Who are the targeted audience?
5. How are the promotional strategies helpful in making consumers buy the products in the supermarket?

Research Objectives:

- To understand the customer's choice regarding buying the products from supermarkets during the offers or discounts period;
- To examine the most effective sales promotion techniques which influence the customer's impulse buying decisions;
- To understand customer opinion on offers and discounts while purchasing in a supermarket.

Review of Literature:

(Khan & Sharma, 2015) found out that Delhi consumers are purchasing from both organized and unorganized retail outlets and the demographic attributes like Age, Gender, Education status, Income and the choice of retail format were independent to each other. Regarding the frequency of purchase of grocery items, monthly purchase was most preferred by the respondents followed by twice a month with the exceptional daily products bought on daily basis. It was also found that the respondents have agreed that location and offers are the most important criteria to choose an outlet irrespective to any retail format and the wide range of product attributes, fast billing process, customer service, parking facility, systematic display, attracts the consumers to buy from organized retail outlet while on the other hand, choice of size, price lesser than MRP and goodwill were most common criteria which influenced the consumers to buy from unorganized retail outlets.

(M.G.S. & A.K, 2016) Found out that the retailers and sales promotions techniques are most important to attract customers and through the process they can increase profit of the companies. According to Pearson's correlation, the following has a significant impact on consumer's Impulse Buyer's Behavior (IBB): Price Discount, Free Samples, Buy-one-get-one free and the Loyalty Programs.

(Alimpic, 2014) Found that according to consumer's discounts, bonus packs and premiums are the most effective methods in creating the majority of responses in consumer behavior. This is because these methods of sales promotion are relatively easy to understand and based on them consumers can clearly assess the benefits, which they get by purchasing. On the other hand, other methods of sales promotion were perceived to be less effective or ineffective in creating responses in consumer behavior. By looking separately, demonstrations and product trails are useful for promoting new products or brands, as well as to encourage customers to product trial. From the consumer perspective, this study reveals consumer attitudes to sales promotion and thereby raises consumer awareness about their behavior, which is influenced by different sales promotion tools. Finally, it should be noted that this work will be of benefit also for other researchers, because it will provide them with adequate guidelines and recommendations for further research on the same topic.

(Chen & Fan, 2010) In this paper explained about the promotional activities which he experiments to know the impact of the promotion on thee of the product.

(Gauri, Ratchford, Pancras, & Talukdar, 2017) Found out how the promotional measures such as discounts and its characteristics matter in the supermarket sales on various occasions. The study was conducted over the period of 55 weeks and in many supermarkets. This study gave the credential to the popularity of such promotions.

(Boltan, 2009) Successful retailers are developing customized pricing practices, that are neither chain nor store-wide, and in which promotion intensity depends on store size and clientele. There is evidence that some retail chains, indeed, tailor their dealing activities to outlet selling surface.

The empirical results support the pass-through, strategy to cover the market and the try to satisfy the customers who come to a supermarket to buy products. **(Miguel I. Gómez T. J., 2013)** According to this theory, when retail prices are dispersion, heavy price advertisement, or free high consumers feeds are all means of minimizing consumer expect them to fall.

The fundamental objective of manufacturers is to maximize profits (or sales) of their brands. In contrast, the basic objective of retailers is to maximize category profits (or category sales) or sometimes simply profits (or sales) of the entire total store/company.

Research Methodology:

The Nature of data collection is mainly of Primary data through collecting data via Questionnaire survey in order to know the customer’s response towards the promotional strategies used in the supermarkets. Questionnaire method is a standardized questionnaire which is a Unconcealed formalized questionnaire type. And the secondary data will also be taken for the research and the secondary data will be from magazines, papers and books.

Research Design:

The research methodology used in this project is the descriptive method. The primary data is used in this research paper.

Sample size:

The sample size for this Research project is 100 responses for the questionnaire.

Sample Frame:

The sample frame for this Research project is South India as the data is collected through Online Questionnaire form as well as the physical questionnaire through going to the Supermarkets such as Big Bazaar, Spar, Star Bazaar, More, etc. and collecting the data from the individuals personally. Here the main concentrated location or area will be “Bangalore”.

Table 7.20: Total Variance

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.694	44.892	44.892	2.694	44.892	44.892	2.082	34.693	34.693
2	1.201	20.025	64.917	1.201	20.025	64.917	1.813	30.225	64.917
3	.798	13.292	78.209						
4	.623	10.380	88.589						
5	.435	7.244	95.833						
6	.250	4.167	100.000						

Source: Primary Data

Based on the above table value & factor covering 66.92% the variance is explained by the first two factor. Remaining is explained by other factors namely (3, 4, 5 & 6).

Table 7.21: Rotated Component Matrix

Sl. No	Factor		Component	
			1	2
1	ACCEPTANCE	I feel embarrassed to buy the products that are on sales or with money-off deals on products	.734	
		Do you search for the product/buy that have some offers (like buy 1 get 1 free)	.734	
		Do you find the special offers provided in sales attractive? Do you buy more compared to your shopping bills on normal days?	.710	
		I doubt on the quality of products on sale	.684	
2	DISCOUNTS	“Discounts being one of the most attractive sales promotional strategies”. Does it stimulate you to purchase more		.903
		After availing certain offers or discounts do you recommend your friends or family?		.826
		Total	2.082	1.813
		% of Variance	34.693	30.225
		Cumulative %	34.693	64.917

Source: Primary Data

Respondent options regarding promotional activities and their influence are made 15 statements and these statements are factorized into 6 factors with the respective factor loading (.734, .734, .710, .684, .903, .826). These factors are further classified into two factors namely, ("Acceptance" factor & "Discount" factor)

Table 7.22: Mean of attractiveness of promotional activities

		Mean
Report	Extra offers	3.78
	1+1 offers	3.73
	Advertisements	3.66
	Discounts	3.43

Source: Primary Data

Table 7.23: Ranking of attractiveness of promotional activities

Ranking of the Promotional activities	
Extra offers	1
1+1 offers	2
Advertisements	3
Discounts	4

Source: Primary Data

The most sought promotional activities which have attracted the customer is Extra Offers followed by 1+1 offers, Advertisement, & Discounts.

Table 7.24: Mean of reasons for visiting supermarkets

		Mean
Report	Location of the store	3.66
	Range of items	3.55
	Discount offers	3.44
	Promotional Strategies	3.18

Source: Primary Data

Table 7.25: Ranking of reasons for visiting supermarket

Ranking of reasons for visiting supermarket	
Location of the store	1
Range of items	2
Discount offers	3
Promotional Strategies	4

Source: Primary Data

From the above table it can be referred that the Main reasons for customer visiting the supermarket is Location of the store followed by the Range of the items present in the supermarket, Discount offers and the least factor which affect the visiting of the customer to supermarket is Promotional Strategies.

Hypothesis:

For this research study, there are 2 hypotheses-

1. **Null Hypothesis (H0):** There is no relation between the promotional strategies and the sales in the supermarkets.
- Alternate Hypothesis (Ha):** There is a relation between the promotional strategies and the sales in the supermarkets.

2. **Null Hypothesis (H₀):** There will be no relation between sales promotion techniques and customer's impulse buying decisions.

Alternate Hypothesis (H_a): The relation between promotion techniques and customer's impulse purchase decisions.

Limitations:

- While this paper provides important insights into sales promotions tools and its impact on consumer behavior in Supermarkets, it also has some limitations. This study concentrated on Supermarkets looking into previous studies because time restrictions, for further future studies recommended to expand to test other sectors and fields in order to get new results and analysis, in addition to that findings can be based on empirical study built on questionnaires and surveys to get better reliable data.
- Time constraint which lead to insufficient data.
- Reluctance of the respondent to response the question as they don't take them earnestly.
- Sample size is limited and it may not represent the total population.
- Respondents were resisting filling the questionnaire.

Outcome of the study:

This study is aimed at examining the impact of different sales promotional strategies in supermarkets. The supermarkets are actively engaging customers by utilizing deals advancement tools which they are assuming as a vital part to invigorate their clients towards purchasing any merchandise, and that will build both merchants and retailers benefit and piece of the pie. In this review it is demonstrated that shoppers' conduct can be decidedly actuated by utilizing various sales promotional tools, for example, buy one and get one free is widely accepted proposition among hypermarket shoppers. Thus if Supermarkets want to allure more and more customers they have to use sales promotional techniques to influence customer's buying behavior and sales promotional techniques to make Supermarkets actually works.

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Comparative Study of Pre- and Post-Merger Financial Performances of Selected Telecom Companies In India

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ABSTRACT: This paper analyses the M&A of selected Telecom Companies in India since the 90s to 2017. There are three main reasons companies choose to perform a Merger & Acquisition: 1) To reduce their investment risk by diversifying its portfolio, increasing its market share; 2) To improve financial performance, and 3) To develop cheap technology in emerging markets. The first goal is accomplished in most cases, but the second, only in some cases can be achieved, as the overall performance from financial terms, depends on how the company grows, how it can deal with other markets and their own particular challenges, and how they deal with other global competitors. The findings confirm that M&A tend to reduce risk investment in general, while not affecting positively the performance of the companies that endeavor in the M&A.

INTRODUCTION

The regulatory authority of India (TRAI) has implemented reforms in the Telecom sector, along with the Department of Telecommunication (DoT), which has come guided by the liberalization trends in all markets around the world. The telecom sector is an important one as it has emerged steady fast economically speaking, and has grown in an important measure. The results, financially speaking, of the Merger and Acquisitions (M&A) are mixed, so there have been positive and negative outcomes from this decisions that have taken place since 2000 (Ghosh & Dutta, 2014).

Sil (2015) highlights the internal and external growth companies in India have been experiencing since 1991, when the liberalization of markets allowed the entrance of companies from other countries to India, and found in his investigation, that M&A are not so effective to improve financial performance in selected pharmaceutical companies. At the same time, Indian companies have been looking forward to establish in foreign markets. The biggest fish eats the little one, and competition gets so hard, that the little companies begin to be non-seen while the big grow and grow. The internal grow is about retaining profits from their home country, as well as customers confidence, while the external growth is gotten through the M&A.

Mantravadi & Reddy (2008) states that M&A are being chosen by companies all over the world, to expand markets, improve competitiveness by the increase of market share, a broader portfolio of products, so as to minimize risk investment, enter new markets, and acquire capitalization in economies of scale.

M&As make companies increase their capital assets in general, which implies higher fixed costs for the overall company. The M&A is not necessarily meant to improve financial performance in the short term, as sometimes, it decreases with an starting M&A, but has the company with a more solid background, that makes it last longer in time. If the company invests in a foreign country, which has better political stability than its home country, then the risk country of the overall company is reduced, as the most politically stable one makes the company to balance the high risk of the other. Also, companies want to increase their market share, which make them more solid ones, as much more people consume from it, their brand increases its value, and it also gives stability and makes the company long lasting.

A globalized world forces companies to make this kind of moves. Being bigger, gives a decisive advantage to companies, as being little, is becoming disadvantageous, depending on the sector under analysis, but in general, all massive consumption products are trending to be ruled by M&A multinational companies, because those products can be produced in a serial industrialized procedure that is easily standardized. In this group, companies from sectors like food, communications, banking, textiles, etc., are included but not limited to them.

Leepsa & Sekhar (2018) states that there is no evidence that allows to conclude that corporate performance is improved by M&A. This statement has all logic, as corporate performance is complex to measure, it has to do with how the organization is doing, how it is run, and its performance is measured by qualitative indicators, that are not easily standardized for comparison, as long as one single company does this standardization well to measure organizational performance, and compare it from one country to another.

Managers choose then to look at financial indicators, so as to decide whether to keep its headquarters

abroad or not. Akhtar (2014) performed a study in which, by means of linear regression of financial ratios, that have in mind profitability and long term financial position, and the trend analysis of their performance in the pre and post merge stages. Two results were found in this study, made from 2003 to 2009 over the PTLC company:

1. The company has increased its bankruptcy score after the M&A.
2. The financial performance has decreased after the M&A took place.

About the Indian financial sector, Sinha & Gupta (2011) states that from march 1993 to February 2010, the M&A in this sector has improved in their PAT and PBITDA, while their available liquid assets have decreased. This is an interesting case, that shows how a company incurs in new expenditures when growing via M&A, while its equity increases because of having more property in its home country, plus in other countries.

Literature review

About the cross border deal evolution and rationale, Whitaker (2016, p. 3) states that the M&A transactions are meant to engage in a deal, and that it is linked to a big set of outer factors that have internal and external implications, which have been studied with great detail over the 20th century. When analysts and investors base on economics and measurable economic factors, also accurate statistical trends, then they all, as decision makers, will have a clearer overview of things, and the consequences of such decision. Establishing which of these factors are determinant for the M&A decision, helps ensure the future success of the deal.

The strategic motives are differentiated from the external factors like the regulatory (legal), economics, politics. It is important, for the decision makers, to have clear their strategic motives and vision, because it affects mostly the overall success of the M&A project in itself, more than even the external factors in most cases.

About strategy and planning, Whitaker (2016, p. 45) states that there must be a process that has to be the most objective possible. The decision makers criteria have to be associated with a plan, so there is a link between the vision and the plan of the M&A, then it becomes in itself an investment project. The plan includes, how to deal with the new environment, culture, law, political situation, and how to make the most out of the circumstances that can be beneficial to the company.

Whitaker (2016, p. 65) analyses in more detail the political, legal and financial challenges of the M&A deals. Three items in the causal triangle are detailed:

1. Legal, financial, political and social factors.
2. M&A deal and transactions.
3. Cross-border integration.

The first item is the one that after analyzed, on how the company is going to take the most out of those conditions, and how to tackle the possible risks associated, causes the second, it is, the deal itself, and the very -M&A, and it, then, causes the third, the cross-border integration.

Whitaker (2016, p. 87-89) describes the post global crisis, as a one that has forced companies to be restructured and management lean, while focusing on core corporate activities, which lead to outsource most of the non-core activities, in the quest for efficiency. Banks were moving on by big governments aids. Companies have to align their corporate strategy into the M&A work plan. The M&A life cycle includes 5 steps:

1. Start negotiating.
2. Signing.
3. Closing
4. Tracking.

M&A, besides the factors mentioned before, it is, risk and financial performance, as the motivators to engage into the deal of becoming a global company, involve also another reason that is not widely known or not mentioned in most documents, and it is, the development of cheap high quality software in emerging countries. It is no more only the use of emerging countries as sales channels, but as platforms of software development, as more and more engineers are graduating there, and they charge cheaper while giving great talent to companies. (Whitaker, 2016, p. 99)

And financial risk is associated with time, among other things. If the time frame for a M&A to give better financial performance would be long enough to crack a company, then M&A would not be sustainable. Relatedness of businesses is other factor that has been questioned, as does Lubatkin (1987), who has found by examining 439 acquiring firms and 1031 large mergers, that the popular belief of relatedness does not fit the reality.

The impacts of a M&A is visible after the fourth year of the starting of the operation as such for the companies that are involved (Walsh, 1989). Meanwhile, Barney (1988) found that relatedness is not a sufficient condition for M&A to be successful. This facts have been found long ago, and keep being true this time.

The drivers of globalization are important to take into account, as they are related to the drivers of M&A. They have been taken place in waves since the 1980s, and those waves have been driven by economic booms and recessions, technological changes, liberalization and privatization policies and industry characteristics (growth prospect, market structure and competition), which in turn, have made smaller companies make also strategic alliances and other mergers as a protective measure(OECD, 2001, p. 38). There are circumstances that stop M&A and strategic partnerships, like in cases where there are legal monopolies or strategic oligopolistic industries.

Ripple effects can be accounted with the M&A trends that goes on. In the oil, telecom and airline sectors, for instance, when there is an M&A, it unchains another M&A from competitors that do so to react before the first M&A. So, this behavior has increased the strategic alliances that develop into M&A steady fast, as companies aim to be also more competitive in their respective industries. But this ripple effects do not stop there, because the acquisition of assets and the competition for them, gets harsher than before, and companies want to ensure the provision of basic resources like oil, mining, sugar, as their production will increase to cover a broader market.

The driving factors that are highlighted by OECD (2001, p. 39-44) as the motivators of the M&A deals are: 1) Economic factors, refer to macroeconomics, which are related to supply and demand of the M&A project; 2) Technological factors, which refer to the formation of both, strategic alliances and M&As themselves, and they involve the cheap development of technology, markets where it is possible; and 3) Government factors, which refer specifically to the liberalization of markets, their openness to a global structure.

The fact that aspects like the liberalization of markets and the possibility of making cheaper technology, are coincident in what is established in the books cited in this literature review, is highlighted. Government factors are studied as well in the both of them, but it is more detailed explained by Whitaker.

M&As keep being a trend in the world, because companies are seeing that staying their home country is getting more and more risky, and that the need to open to markets abroad, is a more real thing than ever before, in a competitive world. Industries are no longer oligopolistic as they used to be in the past, things are changing and the trends lead to the fact, that more and more M&As will take place over the next years. The good question is whether it is true or not, that they reduce risk of financial bankruptcy, because this is something that is put as a general consequence of M&As, but it is true that more has to be seen, to make concrete conclusions about this fact. It is sure, that companies and investors look forward making this happen, more than achieving better financial performance in the short term, as investors are getting used to expect the better financial performance take place in the long term.

The process that undergoes an M&A has multiple faces, and it depends on the kind of companies that merge with one another, and how they do it. The so-called horizontal mergers, tend to happen when to companies that are in the same industry merge. For example, when a health company buys another company that works in the same industry, health. In the other hand, vertical merges happen when purchases are made by commercial suppliers, an example of that is a health company that buys an ambulance service company. Another type of merge is the one in which large corporations are acquired. The main purpose of vertical M&A is to reduce overhead costs and economies of scale.(Morresi & Pezzi, 2014)

Research methodology

This paper will go through the revision of different M&A cases of the Indian telecom industry during the last 15 years. The telecom Indian industry is put in numbers according to the most recent sources, then some M&A cases in the Indian telecom industry that are properly documented, are presented to show how they have done, according to the findings of the different authors.

Telecom Sector M&As in India

To influence the development of society, modernize the economy, politics and society itself, and put people closer than ever to interact with one another, communication is essential. It is an important part of national infrastructure, without it, our current society would be unthinkable. In all countries, telecommunications is one of the industries that grows faster. Particularly, India has experienced in the last 10 years, a grow in its telecom industry that has been never seen before.(Grajek, Gugler, Kretschmer, & Miscisin, 2017)

After a series of political reforms, the telecom Indian industry has been going through changes that are

significant. Reforms and regulations have been introduced with time, so that both, providers and buyers can be satisfied and therefore, have the rules of the game clear for both. It is a highly competitive sector, and within the last 15 years, the entrance of new companies from abroad, have changed and even revolutionized the industry for good.(Borah, 2014)

The volume of business that the Indian telecom market offers is attractive, even though there is little or no room for price bargaining that may favor companies even more, as Indian customers push more and more for better prices and a high-quality service. After a new player is inserted in the industry, it changes within, companies offer new services, cut prices up to 40% so that they can keep their customers, and the rivalry goes higher and higher with time.(Ghosh & Dutta, 2014)

Satyanarayana, Rao, & Naidu (2017) reports that the three major players in India telecom industry are: Airtel India with 263.09 subscribers, Vodafone India with 209.90 million subscribers, and Idea Cellular with 190.52 million subscribers. The same author tries to go deep in the telecommunications market of Indian after the R-Jio entrance, by using the Michael Porter industry analysis. The bargaining power of the buyer is high, pushing companies to give the best quality service at a reasonable price, because customers are highly price sensitive. The bargaining power of the supplier is almost inexistent before and after R-Jio entrance. There is no threat of substitutes. Internal rivalry increases as the companies already established are threatened to lose their customers, because the new firm could only get some else's customer, because the Indian telecommunications market is saturated, and almost every household has a mobile phone. There is no threat for a new entrant after R-Jio did in 2017, for the moment.

The above proves, that the telecom Indian sector has been one of the most dynamic in its national economy, and according to Ghosh & Dutta (2014), it has been so for the last four years, because of the lower tariffs and the less regulatory environment for both, subscribers and companies.

Gopika (2014), reports that the number of subscribers to the telephone Indian system went from 1051 million in February 2016 to 1058 million in March 2016, which represents a 0.66% growth. Within the same time frame, the wireless subscribers base went from 1026 million to 1033 million, meaning a 0.68% increase, having 90.60% of these subscribers as active ones. Till March 2016, the tele density was 83.36% of all India. It is projected that for 2020, the base of subscribers will be of 1546.11 million.

In the work of Reddy, Xie, & Huang (2016), two major M&A cases in the Indian telecom industry are analyzed:

- 1) Vodafone and Hutchison, for US\$11.2 billion, which took place in 2007, a case that was a matter of litigation because of capital gain taxes in connection with the host country. This is the second company by number of subscribers so far.
- 2) Bharti Airtel and South African MTN Group, for US\$23 billion in 2008-2009, it is an abandoned M&A.

The author states that the failure of the second M&A, is due to the political set of regulations that was not meant to benefit the negotiations, and thus, the Indian people, but that were erratic, which in turn, had effects that affected negatively the second M&A, and even put in trouble the first. This unfavorable political situation to M&A, prevented the industry from growing further and slowed down at the time other M&A in the Indian telecom industry.

Analysis of M&A In the Telecom sector of India

According to , the reason why some M&A have failed is because there is no ex ante analysis of the companies that will be involved in the cross border transaction, and that there are some beliefs that practical analysis prove wrong. The author states that the best way to know if an M&A will create value for the shareholders, is to examine the capacity of creating value of the firm that is going to be acquired. His findings point to the fact that low residual earnings mean low capacity of value creation, and also the contrary is true, that high residual earnings will contribute to high value for the shareholders, and also it was found that the Return Over Assets is increased in the latter case. This investigation found also that, before the M&A takes place, the firm that used to have low residual earnings, continues to perform poorly after the M&A and drags down the acquiring company that has even performed well in the past. The contrary is also true, the acquired companies that performed well about their residual earnings before the M&A transaction, tend to aggregate value to the acquiring firm after the M&A. Firms have not been rationale when performing M&A in the telecom Indian sector, and they should see first if acquired firms are capable of creating value, before the M&A takes place.(Patel, 2014; Verma & Sharma, 2017; Yen & André, 2018)

Conclusion

It is important to notice, based on the investigations about the M&A in the Indian telecom system, that

mergers have limitations, even though they can be promising in their expansion of market share, like differences in corporate culture, market conditions and government regulations. The latter have been the ones that have put the most obstacles for the success of M&A. Some of the lessons in this regard have been learned by policy makers.

Market itself limits the M&A, because of the players that are already there, and by the fact that today, the telecom Indian sector is saturated, so there is almost no room for a new player, even though, if a new one gets to enter, the internal rivalry, that is forceful

between companies, gets increased, as customers are highly price sensitive in India, and companies are forced to deliver a high quality service at a reasonable price.

India is privileged with good amounts of workers and natural resources. The optimization of the use of these resources is what could be done better. Mobile operators can also move to catch up with the rural population of India, which is estimated to be 70%, a considerable portion. The next years are promising in the telecom sector, as India has more than one billion people, all of them potential customers of telecommunication services. This situation, increases the internal rivalry between the companies that are already established, and makes almost no room for new entrants, because the high capital investments required and the low prices that the market already offers, makes it difficult for new companies to co-exist with the current ones, save the case of R-Jio, which entered in 2017 and had it all to stay in the market so far. There is an important growth in the telecom sector seen during the last 10 years, after the opening of the economy of India and the little or no regulatory system for the sector, which allowed big multinational players to enter the market. In consequence, tariffs have been lowered, the quality of service increased significantly, and the fierce of competition also increased dramatically, like it has not been seen before. Airtel and Vodafone, have proved to resist the changing conditions in the Indian telecom market. Vodafone has proved being right in its M&A transaction made in 2007, as it as a risky decision, the tempting factor was with no doubt, the chance to increase its market share, and it did increase. Another motivation for Vodafone to do its M&A and being successful, though it was troublesome in the first years, is the fact that cheap software of its property could be developed in India rather than in England or elsewhere.

The Indian telecom sector is expected, then, to be more competitive and the rivalry and aggressiveness between provider companies will also increase, and the Indian user will see more services, technology, tempting offers, so it is going to be interesting seeing how the current companies will adapt to these conditions, and how a new player, if any gets to enter, would do to get customers and keep them.

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A COMPARATIVE STUDY ON CUSTOMER SATISFACTION IN POSTAL AND BANKING SERVICES

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ABSTRACT: Service diligence forms a backbone of social and economic development of a region. It has emerged as the largest and fastest rising sector in the world economy. The service sector consists of the soft parts of the economy such as insurance, tourism, banking, education, retail and social services. Among these divisions, post office and bank sectors stood at the top level. In the recent business environment, both Bank and Post Offices aims to achieve a new competitive service, both in price and quality. There are many similarities can be found in both the sectors. Further there is a differentiation in the customer satisfaction level. The present paper includes diverse areas of the excellence of postal and banking services from the viewpoint of their users. The preset study was undertaken to compare the customer satisfaction of postal and baking services. However, data for the present study have been collected through both primary and secondary sources by meeting forty respondents.

Keywords: postal service, banking sector, customer satisfaction, comparative statement etc.

INTRODUCTION

Service Industry acts as a backbone of social and economic development of a region. It has emerged as the largest and fastest growing sectors in the world economy, making elevated contributions to the global output and employment. Its growth rate is higher than that of agriculture sector and manufacturing sector. The service sector consists of the soft parts of the economy such as insurance, tourism, banking, education, retail and social services. Among these divisions, post Office and Bank sectors stood at the top level. Indian Post Office is the back bone of Indian Communication. It also plays a vital role in the socio-economic development. It reaches the Indian citizen in many ways delivering mails accepting mails, accepting deposit under small saving scheme.

In a recent business environment, both bank and post offices aims to achieve a new competitive service, both in price and quality. There are many similarities can be found in both the sectors. Further there is a differentiation in the customer satisfaction level. Based on the existing literature and questionnaires in the form of custom sequel model, this paper includes different areas of the Quality of Postal and Banking Services from the perspective of their users. The present study majorly deals with comparing the customer satisfaction in Postal and Baking Services.

REVIEW OF LITERATURE

- MilijankaRatkovic, Marko Pavlovic, MajaAndelkovic conducted a study on “Comparative Analysis of Customer Satisfaction in Postal and Banking Services”. The present study was undertaken to analyze the opinion on postal and banking services on the basis of perceived quality in order to evaluate the quality of service and the impact of prospect on the level of perceived quality. Through existing literature, the conclusions were drawn on the level of quality of postal and banking services.
- Aladdin D Rillo, Senior Economist, ADBI, Jeffrey, Miyamoto, Associate, ADBI conducted a study on “Innovating Financial Inclusion: Postal Savings System Revisited”. The postal savings system in Asia has gone aextensivemode from being a traditional vehicle for mobilizing savings for becoming a potent new tool for financial inclusion as a great deal to offer its success as it depends much on best practices and sustainable models of postal finance. To enhance the benefits of postal finance, key challenges on regulations, technological innovations, implementation capacity, and cooperation need to be effectively addressed.
- U.S. Postal Service Office of Inspector General conducted a study on”Providing Non-Bank Financial Services for the Underserved”. This paper aims to elucidate how the Postal Service could enlarge its offerings to include a broader suite of non-bank financial services and products. These new offerings could not only bring economicconstancy and flexibility to the underserved, but also could yield broad reimbursement to the U.S. economy, the financial services industry, and the Postal

Service itself.

- Mr. Y. Shaffe, Mr. J. Prabakaran (2014): In their study entitled “A Study on “ATM Services Offered India Post” observed that ATM provides money to the customer whenever necessary? ATM provides money exclusive of much record work by the bank as well as customer. Confidentiality of operations is available in ATM transaction. ATM provides any time banking facility to the users. It put aside the golden time of the users. It is reviewed that Indian Postal ATM Services needs technological, social, cultural & economic change. With a little bit of revolutionize, it can create a domination in the market.

OBJECTIVES

01. To study the present scenario in Post office and Banks.
02. To analyze the gap between service offered by Post Office and Banks.
03. To understand the customer satisfaction in Post Office and Banks.

RESEARCH METHODOLOGY

The data for the present study is based on both primary and secondary sources. The primary data was collected through structured questionnaire by meeting forty respondents having accounts in Banks and Post office. The secondary data sources comprises of newspapers, magazines, company reports and internet sources. The geographical area selected for the study is limited to Kadurतालuk only.

SCOPE OF THE STUDY:

The study is exclusively conducted to gather information about customer satisfaction of postal and banking services. The study area is confined to Kadurतालuk only. Data for the present study have been gathered by meeting forty respondents only.

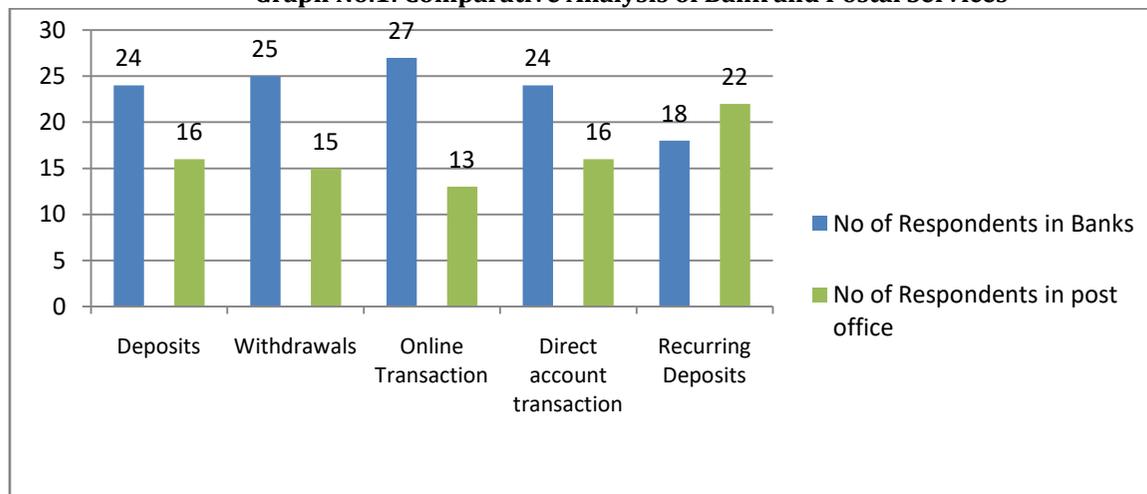
RESULTS AND DISCUSSION

Table No.1: Comparative Analysis of Bank and Postal Services

Particulars	No of Respondents in Banks	Percentage (%)	No of Respondents in post office	Percentage (%)	Total
Deposits	24	60	16	40	40
Withdrawals	25	62.5	15	37.5	40
Online Transaction	27	60	13	32.5	40
Direct account transaction	24	60	16	40	40
Recurring Deposits	18	45	22	55	40

(Source: Field Survey)

Graph No.1: Comparative Analysis of Bank and Postal Services



From the above analysis it can be interpreted that out of 40 respondents, majority of the respondents i.e 24 individuals choose banks for deposits purpose and 16 individuals prefer postal service for deposits, while considering withdrawal activities, 25 customers prefer banking transactions because of ATM availability and 15 individuals prefer postal services, very high percentage of individuals i.e 27 individuals prefer bank for online transactions and 13 individuals prefer postal services for online transactions, for the purpose of direct account transactions 24 respondents prefer bank and 16 individuals prefer postal services and for the sake of recurring deposits 18 individuals prefer banking service and 22 individuals prefer postal services.

Table No.2: Customer Satisfaction towards postal and banking services

Particulars	No of Respondents	Percentage (%)
Bank	28	70
Post office	12	30
Total	40	100

(Source: Field Survey)

Above table represents customer satisfaction in case of banking and postal services, out of 40 respondents, 72.5% are satisfied with banking services and 27.5% respondents are satisfied with postal services. This was possible because of excess convenience in banking services compared to post office through easy availability of cash in fraction of seconds.

Table No.3: Preference of Account

Account in	No of Respondents	Percentage (%)
Only Bank	13	32.5
Only Post office	05	12.5
Bank and Post office	22	55
Total	40	100

(Source: Field Survey)

From the above analysis it can be interpreted that 32.5 % respondents prefer only banking services, 12.5% respondents prefer only postal services and 55% respondents prefer both banking and postal services. This was possible because of adoption of traditional way of transactions in post office compared to banks.

Table No.4: Reasons for Customer Gloominess towards Post Office

Particulars	Respondents	Percentage (%)
Speed post is expensive	10	25
Location is not easily accessible	08	20
There is lack of service efficiency in post office	08	20
The services offered by post office are traditional	06	15
Lack of Awareness	08	20
Total	40	100

(Source: Field Survey)

From the above analysis it can be interpreted that while considering customers' gloominess towards post office 25% feel that speed post is expensive, 20% feel Location is not easily accessible, there is lack of service efficiency in post office and lack of awareness, and 15% said that customers gloominess towards post office is due to lack of awareness.

FINDINGS:

Following are the findings drawn based on the study.

- It was found that 70% of the customers were satisfied with banking services compared to postal services.

- It was found that 55% of the respondents have accounts in both post office and bank.
- The respondents adapt bank services due to easy accessible for loans in Banks.
- Majority of the respondents said that Banks is the best in updated services like mobile banking and internet banking compared to Post Office.
- Majority of respondents agree with the response to customer complaints is fast in case of Banks.
- The majority of the respondents agree with fewer complexities associated with opening a deposit account in Banks.
- Majority of the respondents are satisfied with varieties of deposit schemes available in banks.
- The majority of respondents conveyed that banks have convenient timing comparing to post office.

SUGGESTION:

From the study it is clear that the services offered by banks are good while compared to post office. Hence, some of the suggestions are provided to the post office for improving their services and thereby enhancing their customer satisfaction.

- Post office need to update its services for the changing requirements of the present business conditions.
- The online services should be made available in its all services.
- Post office should expand its Credit Card facilities throughout its network.
- The Government should take measures to improve the quality of services in post office.
- Post Office should tie-up with the educational Institutions for opening up of zero balance accounts and hence increases the number of accounts. These accounts can be turned into performing accounts once the students are employed. The post office should take follow up measures to keep the accounts active.
- Post Office should create awareness regarding the new services offered by it.
- Post Office should expand their promotional strategies regarding services which are updated compared to Bank.
- Post office services should get advanced for providing 24*7 accesses for the customers whenever necessary.

CONCLUSION:

The present study revealed that, Banks are providing higher rate of services when compare to Post Offices. However in recent days Post offices also implementing many major services when compare to Banks. But as study shows that Post Offices also make best promotion strategies to create awareness among the customer. Banks are providing updated services to the customer and it reaches the customer quickly. At present post office lagging behind in its services. There is a need of up gradation of services in post office. Hence it is advisable to post office to follow certain measures in order to enhance its service quality and customer satisfaction.

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COMPLEXITIES AND UNCERTAINTIES IN THE INDIAN AVIATION SECTOR: A SPECIAL CASE OF JET AIRWAYS AND INDI GO AIRLINES

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ABSTRACT: *The study is a bird's eye view on various challenges currently faced by the Indian Aviation sector starting from the period of 2018. The most common problems in this sector are increasing air Turbine Fuel Charges, customer/passenger complaints, predatory pricing strategies adopted by dominant players. The information required for the study was collected from the media reports, sectoral reports published by rating agencies namely ICRA and CRISIL and performance reports published by DGCA. In the first section of the paper, overall aviation industry has been analysed in terms of market share, passenger complaints and the trend in Air Turbine Fuel prices. The second part analyses about the cost and revenue structure of selected private airlines namely Jet Airways Ltd and IndiGo Airlines. The major positive side for the Indian aviation sector includes the increase in Air traffic growth in the fiscal 2019 is predicted to be more than 15%, construction of new airports by the Government and scope for enhancing customer satisfaction by means of formulating uniform polices for ticket cancellation, baggage charges that may help the airline industry to retain more customers. On the other hand, the serious issues comprises increasing trend in air turbine fuel prices, volatile/weakening Indian rupee which led to increase in costs and foreign exchange losses. The Jet Airways and IndiGo airlines though they have increase in revenue in the year 2018-19 compared to 2017-18, the net profit is negative because of increasing fuel prices, finance costs, lease rentals and employee benefit expenses.*

Keywords: *Jet Airways, IndiGo Airlines, Air Turbine Fuel, Passenger complaints, weakening Indian rupee.*

INTRODUCTION

The Indian aviation sector is currently facing turbulent times because of numerous reasons such as rising turbine fuel prices, increased competition, and sluggishness in capacity expansion. It has been predicted by the credit rating agency ICRA that the Indian Aviation Sector is likely to incur an aggregate loss of Rs 3600 crore in the financial year 2018-19 compared to Rs 2500 crore in 2017-18. Majority of the firms in the aviation sector are currently suffering (2017-18& 2018-19) from poor financial health because of increased cost structure. Though there is increase in the top line (sales revenue), the bottom line (expenses) move beyond it a faster rate thus leading to losses.

The ICRA report on aviation sector also reveals the average growth rate in passenger traffic is found to be 15% yearly, positive macro environment, favorable regulatory support, construction of new airports.

Against this backdrop, this research paper is focused on studying about the overview of issues faced by the airline industry in India especially with reference to the two major airlines namely Jet Airways and Indigo.

LITERATURE REVIEW

CRISIL Report (2018) on Airline sector revealed that the passenger traffic in the aviation sector would be expected to stay flatter between 15% and 17% in the fiscal year 2019 and may slow down between 11 and 13% in the fiscal year 2020. The CRISIL also predicted that the Compounded Annual Growth Rate – CAGR of domestic passenger traffic will range from 12% to 14% between the financial years 2018 and 2023, the growth being driven by GDP, airport infrastructure and improvement in the overall economy. Manu Kaushik (Nov 2018, para.1) stated that the airline carriers have been strongly affected by two major factors namely ATF Costs (Air Turbine Fuel) and the currency fluctuations. The dominant players in the aviation sector have also taken aircrafts on lease from foreign lessors for whom they have to pay the maintenance and lease rentals in terms of dollars. The rupee has been depreciating right from April 2018, which in turn led to foreign exchange losses to those airlines. Manu Kaushik (Jan 2018, para.1) discussed about the report (December 2018 report) given by 41-member standing committee on transport, tourism and culture. The report was discussing about the problems related to customer satisfaction in airlines industry. The

committee has made some recommendations to improve the performance of the airline firms. They are listed below

1. The airfare for different airline services has to be regulated to discourage pricing which is predatory in nature by Aviation authorities and regulators.
2. The excessive luggage/baggage charges should not be a means to airline to increase the revenues. Those charges should be kept at a reasonable level.
3. The panel stated that the number of check-in counters and personnel should be balanced according to the number of flights operated by the airlines. It has also asked ministry of civil aviation to take necessary steps in controlling unfair practices in private airlines such as delaying check-ins and artificial overbooking of flights. Further it has also asked the ministry to lay down the guidelines to improve leg space to the passengers so as to enhance the convenience of passengers.
4. The report has also indicated that the cancellation charges are not uniformly set by the private airlines and is decided arbitrarily. Sometimes the offers are veiled in such a way the customers lose the entire when the tickets are canceled. The committee strictly suggested not to charge over 50% amount of base fare as cancellation charges.
5. The panel has asked the concerned ministry to ensure proper and timely handling of customer grievances by the airlines and take necessary actions in case of the airlines do not address the customer grievances within the stipulated time.

OBJECTIVES OF THE STUDY

1. To study about the performance of the Indian aviation sector
2. To analyse the cost and revenue structure of Jet Airways Ltd. and IndiGo
3. To discuss about the recent status of financial crisis with reference to Jet Airways Ltd

RESEARCH METHODOLOGY

The research design used for the study is basically descriptive in nature as it attempts to understand the various aspects such as the nature of the aviation sector in terms of pricing, competition, cost structure and challenges. The data for the study has been obtained from the annual reports of Jet Airways and IndiGo from their respective websites. For the purpose of collecting data about the aviation sector, the performance reports have been accessed from the DGCA (Directorate General of Civil Aviation) website. In addition to the above sources, the information/data have been collected from the prominent newspapers to get the current insight about the airline industry.

Limitations

1. The data/information has been collected from the published sources relating to Aviation sector
2. The study attempted to review the cost and revenue structure of only the two major passenger airline companies namely Jet Airways and IndiGo.
3. There is a lack of published research work in the form of journal articles with reference to aviation sector
4. The study period covers mainly covers the recent two financial years namely 2017-2018 and 2018-2019

DATA ANALYSIS

1. INDIAN AVIATION INDUSTRY AT A GLANCE

1.1 Market Share

Market Share– Q2 FY2019

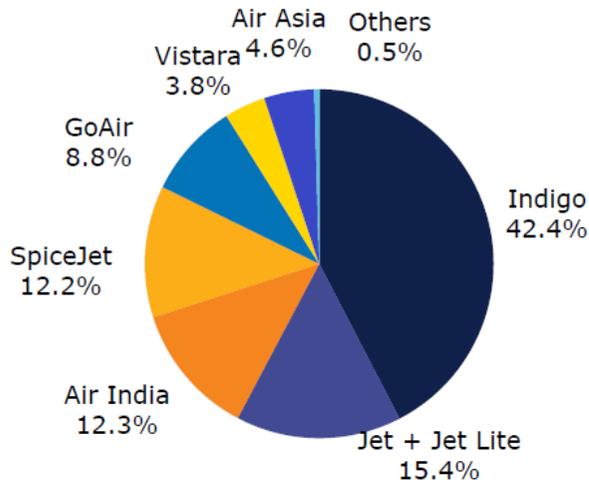


Figure 1 Market Share of different Airlines as on quarter ended September 2018

Source: Jet Airways Annual report presentation –Quarter ended Sep 2018

The above figure 1 shows the market share of different airlines offering domestic services as on quarter ended September 2018. It is clearly evident from the figure that only a very few airlines dominate the market in the aviation sector. The two major airlines having prominent market share are Indigo and Jet Airways, constituting more than 60% domestic market share.

1.2 Passenger Growth

Passengers carried by domestic airlines during Jan-Nov 2018 were 1262.83 lakhs whereas it increased to 1059.34 lakhs during the previous year Jan-Nov 2017 . This means that there is a positive growth rate of 19.21% in terms of number of domestic passengers. The growth is exhibited in the figure 2 shown below.

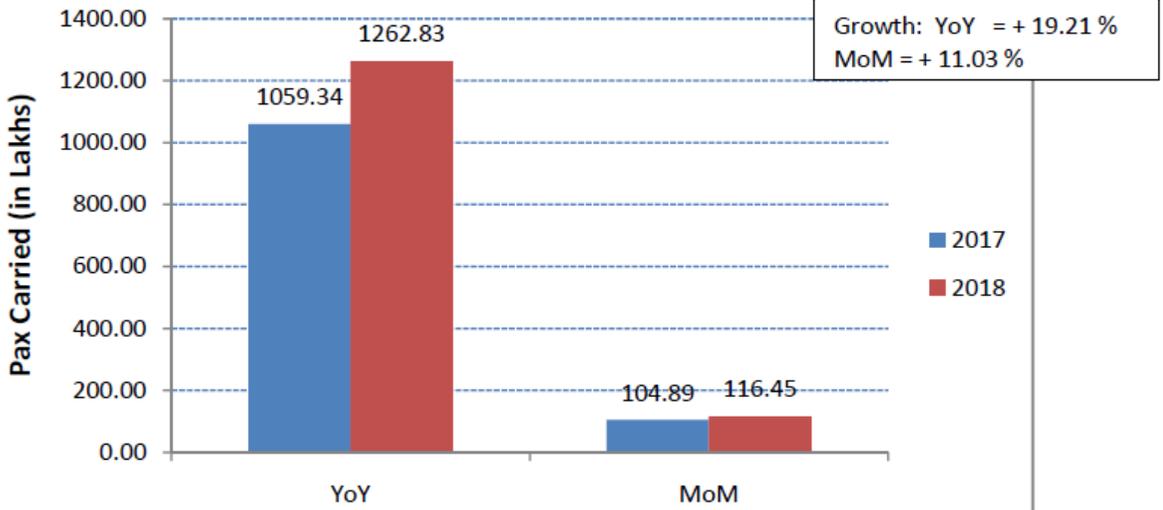


Figure 2 showing growth rate in domestic passengers in the Indian Aviation Sector

Source: DGCA Statistics –Traffic data November 2018.

1.3 Passenger Complaints during the month of November 2018

In the month of Nov 2018, a total of 786 passenger related complaints had been received by the scheduled domestic airlines. The number of complaints on the whole of airlines per 10,000 passengers carried for the month of Nov 2018 has been around 0.67. The airline-wise details are as follows:

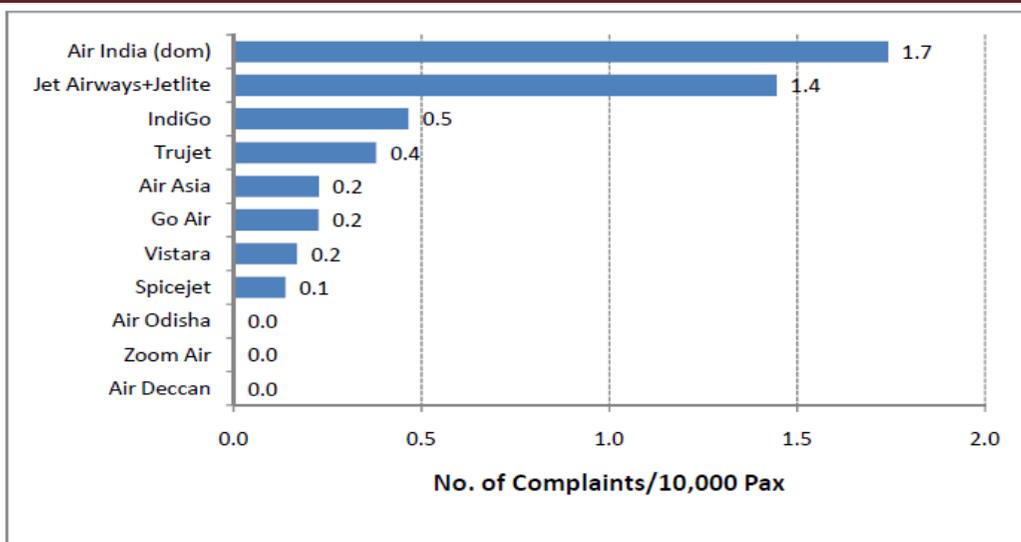


Figure 3 showing no. of complaints per 10000 per passengers during the month of Nov 2018
 Source: DGCA Statistics –Traffic data November 2018.

The above figure 3 shows the number of complaints received per 10,000 passengers for different airlines. It clearly indicates Air India has recorded the highest number of complaints followed Jet Airways and Indigo because the number of passengers are relatively more in these airlines. The various reasons for complaints by the passenger are depicted in the figure. It can be found that the majority of the complaints arise due to flight problems, customer service and baggage related issues. More than 30% of the passenger complaints are received due to customer service related issues. Around 32% of the passenger complaints are received due to flight related issues. Around 24% of the passenger complaints are received due to baggage related issues. The distribution of complaints is represented in the figure 4 in the form of pie chart.

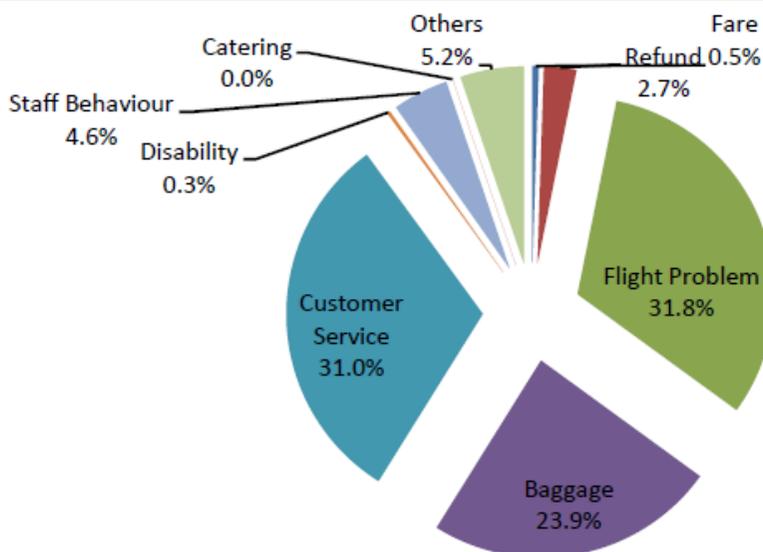


Figure 4 showing various reasons for passenger complaints during the month of Nov 2018

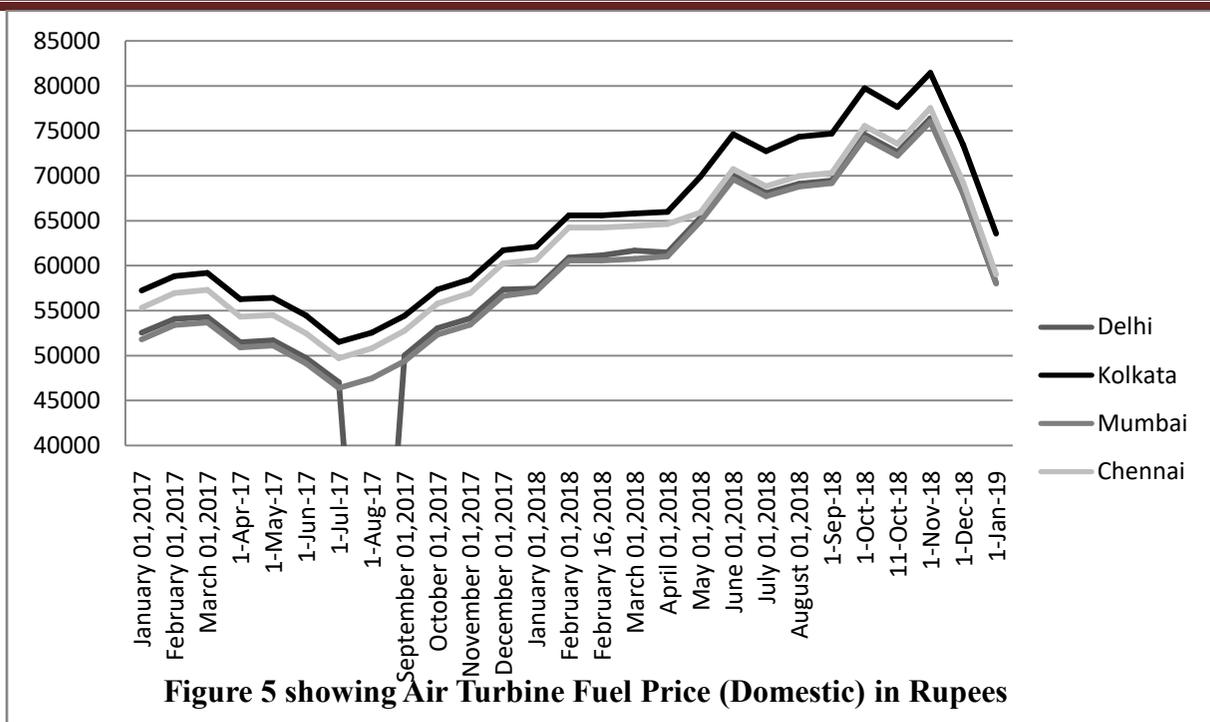
1.4 Increasing Fuel Prices

Table 1 showing Air Turbine Fuel Price (Domestic) Rupees per Kilolitre from Jan 2017 to Dec 2019

Month	Delhi	Kolkata	Mumbai	Chennai
January 01, 2019	58,060.97	63,556.18	58,017.33	59,021.48
December 01, 2018	68,050.97	73,393.55	67,979.58	69,216.61
November 01, 2018	76,378.80	81,441.06	76,013.20	77,521.63
October 11, 2018	72,605.00	77,638.00	72,225.00	73,534.00
October 01, 2018	74,567.00	79,736.00	74,177.00	75,521.00
September 01, 2018	69,461.00	74,677.00	69,161.00	70,316.00
August 01,2018	69,090.00	74,335.00	68,791.00	69,948.00
July 01,2018	68,086.00	72,718.00	67,722.00	68,810.00
June 01,2018	70,028.00	74,599.00	69,603.00	70,751.00
May 01,2018	65,340.00	69,897.00	64,901.00	65,898.00
April 01,2018	61,450.00	65,985.00	61,025.00	64,615.00
March 01,2018	61,681.00	65,803.00	60,738.00	64,427.00
February 16,2018	61,139.00	65,583.00	60,581.00	64,236.00
February 01,2018	60,894.00	65,583.00	60,581.00	64,236.00
January 01,2018	57,460.00	62,083.00	57,133.00	60,640.00
December 01,2017	57,349.00	61,699.00	56,636.00	60,258.00
November 01,2017	54,143.00	58,478.00	53,430.00	56,934.00
October 01,2017	53,045.00	57,337.00	52,318.00	55,770.00
September 01,2017	50,020.00	54,416.00	49,383.00	52,740.00
August 01, 2017	48,110 .00	52,535.00	47,459.00	50,784.00
July 01, 2017	47,013.00	51,491.00	46,376.00	49,705.00
June 01, 2017	49,730.00	54,463.00	49,115.00	52,461.00
May 01, 2017	51,696.00	56,430.00	51,110.00	54,505.00
April 01, 2017	51,482.00	56,268.00	50,896.00	54,324.00
March 01,2017	54,293.38	59,178.78	53,663.58	57,283.86
February 01,2017	54,079.63	58,822.53	53,407.08	56,960.33
January 01, 2017	52,540.63	57,215.61	51,776.88	55,322.55

Source: www.iocl.com

The above table 1 shows the fuel prices (Air Turbine Fuel Price) per kiloliter for a period from January 2017 to December 2018. This table clearly indicates that the fuel price was in the range of Rs 47000 to Rs 57000 plus in the year 2017(Delhi). Then in the year 2018, the fuel price started to increase above Rs 60,000 and started to exhibit increasing trend till the month of November 2018(Delhi). From the month of December 2018, the fuel price started to decrease. This trend can be observed in all the metro cities in India. The overall trend in Air Turbine fuel price has been increasing. The trend in the price of Air Turbine fuel has been exhibited in the figure 5.



The jet airways has been facing lot of problems right from the start of year 2018, such as huge losses, loan repayment, increase in fuel prices, employee lay off as a part of cost-cutting measures, weak rupee, heavy price competition. As per the audited financial statements of Jet Airways Ltd as on March 2018, it has total borrowings of Rs. 508556 lakhs which comprises of Non-Convertible Debentures, term loans from banks and also foreign currency loans.

2. COST AND REVENUE ANALYSIS OF JET AIRWAYS AND INDIGO - INTERGLOBE AVIATION LTD

This section discusses the cost and revenue part of two airline services market leaders namely Jet Airways and Indigo for the past two years 2017-18 and 2018-19. The various parts of the cost to the airlines such fuel costs, foreign exchange losses, lease rentals and salary. More recently, in the year 2018-19, airline companies faced with the problem of increasing fuel prices which in turn led to the foreign exchange losses because US dollar should be used to buy Air Turbine Fuel.

2.1 Revenue and Cost Analysis of InDigo

Table 2 Revenue breakup for the quarter ended September (IndiGo)

Particulars(inINRmillion)	Quarter Ended		
	Sep'18	Sep'17	Change%
Revenue from operations	61,853	52,910	16.9%
Other income	3,289	2,146	53.3%
Total income	65,142	55,056	18.3%

Source: Annual report of IndiGo

The above table 2 shows the revenue break up of IndiGo for the quarter ended September 2017 and 2018. The primary business operations of this airline is passenger services. It is also into offering other products and services, such as cargo and tours services. There is an increase of 16.9% in revenue from operations Sep 17 and Sep 18 where it has recorded 53.3% increase in other income. The increase in revenue from other operations is more than 3 times the revenue from operations.

Table 3 Cost breakup for the quarter ended September 2017 and September 2018 (IndiGo)

Particulars (in INR million)	Quarter Ended		
	Sep'18	Sep'17	Change%
Aircraft fuel expenses	30,355	16,473	84.30%
Aircraft and engine rentals	11,161	8,193	36.20%
Purchase of stock in trade	335	294	13.80%
Changes in inventories of stock in trade	-6	14	-143.80%
Employee benefits	7,729	6,004	28.70%
Finance cost	1,300	857	51.80%
Depreciation and amortization	1,820	1,025	77.50%
Foreign exchange loss (net)	3,354	460	628.40%
Other expenses	18,976	14,090	34.70%
ExchangeRate(US\$/INR)	72.58	65.28	11.2%
FuelPrice(INR/Litre)	70.26	50.00	40.5%

Source: Annual report of IndiGo

The above table 3 shows the cost breakup of IndiGo Airlines between quarter ended Sep 2017 and Sep 2018. The aircraft fuel expenses has increased by 84.30% compared to the previous quarter because of increase in air turbine fuel which is evident from the table 1. The company has also faced increase in lease rentals by 36.20% compared to the previous year. The finance cost which includes interest on various loans has increased by more than 50% compared to the previous year. Overall, it can be found that lease rental and fuel costs form the major part of the expenses in the Profit & Loss Account.

2.2 Revenue and Cost Analysis of Jet Airways Ltd.

Table 4 Consolidated Income Statement (unaudited) of Jet Airways Ltd.

Figures in ₹Crores	Q2FY19	Q2FY18	YOY% Change
Income			
OperatingRevenues	6,363	5,952	6.9%
NonOperatingRevenues	73	193	(61.9%)
TotalRevenues	6,436	6,144	4.7%
Expenditure			
AircraftFuelExpenses	2,529	1,633	54.9%
EmployeeBenefits	849	812	4.6%
Selling&DistributionExpenses	638	656	(2.8%)
AircraftMaintenance	555	571	(2.9%)
OtherOperatingExpenses	2,064	1,447	42.7%
LeaseRentals	718	610	17.7%
Depreciation	111	154	(28.0%)
Interest	233	190	22.8%
TotalExpenditure	7,697	6,073	26.7%
NetProfit/Loss	(1,261)	71	

Source: Annual report of Jet Airways

The above table 4 shows the revenue break up of Jet Airways for the quarter ended September 2017 and 2018. The primary business operations of this airline is passenger services. It is also into offering other products and services, such as cargo and tours services. There is an increase of 16.9% in revenue from operations Sep 17 and Sep 18 where it has recorded 61.9% decrease in other income. The aircraft fuel expenses has increased by 54.9% compared to the previous quarter because of increase in air turbine fuel

which is evident from the table 1. The company has also faced increase in lease rentals by 17.7% compared to the previous year. The finance cost which includes interest on various loans has increased by 22.8% compared to the previous year. Overall, it can be found that lease rental and fuel costs and other operating expenses form the major part of the expenses in the Profit & Loss Account.

3. STATUS OF JET AIRWAYS

Debt-laden Jet Airways

(Deborshi Chaki, 2019, para.3) - Jet Airways has a debt of Rs. 8052 Cr as on September 30, 2018. The Company currently suffers from liquidity problems which makes it difficult to pay out the obligations to its creditors. It requires a minimum of \$250-300 dollars to repay the creditors.

Intense price competition

(PTI, October 2018) - Jet Airways had offered to an extent of up to 30% discount on both domestic and international flight tickets only for one way as a part of Diwali between 30th October 2018 and November 5, 2018. This offer was introduced in order to face competition from other airlines. Other offers such as zero cancellation fee for bookings that were made between these time period, via app or website. As there are a few dominant players in the airline sector, pricing cannot be done independently by the airline. They should react to the discounts/offers made by the rival companies.

Default on lease rental payments

(Manoj Sharma, 2018, para.1) As per the news on October 2018, Jet Airways defaulted in making lease rental payments to its lessors for leased aircraft because of liquidity problems due to stiff competition, hike in fuel prices and the weakening rupee. It becomes very difficult as the company cannot give the aircraft back to the lessors before the lease contract ends. Moreover, it depends on the discretion of the lessor whether to take aircrafts back or not. The weakening rupee generally affected the aviation sector because the Aviation companies have to buy Air Turbine Fuels by paying US dollars only. Also it has taken 87% of its fleet of aircraft are taken on lease (108 out of 124 nos). The Jet Airways badly needed 1 billion USD as on October 2018. Besides, the Naresh Goyal-led airline is trying to sell its stake but all talks have failed so far. The airline had made an approach to sell more than 25% stake sale to Tata Group but it wanted to buy the majority stake including the chairman and his family members' stake completely. Jet Airways Chairman Naresh Goyal and his wife currently own 51% per cent of the stake in the airline whereas UAE-based Etihad Airlines owns a 26% stake in the company.

Default in payment of salary

(PTI, October 2018) The Jet Airways has faced the problem of liquidity which lead to delay in payment of salary to pilots and engineers along with the senior management for the month of August 2018. Later it also defaulted on the payment of September salary to other categories of employees in the managerial cadre as well. The salary was paid in further instalments. The airline was struggling to mop up funds to meet its payment obligations, including salaries to its over 16,000-strong workforce.

SCOPE FOR FUTURE WORK

This research is mainly focused on analysing briefly about the aviation sector by means of using published report which comprised of expert opinions and the reports prepared by the committees. The quantitative data is also analysed based on the financial statements of selected /market dominant private airlines namely Jet Airways and IndiGo. The study can be further extended by including the public sector airlines and studying in-depth about the market structure and pricing strategies to cope up with the increasing costs. Also, the scope for alternative fuels in the airline sector can be analysed so as to reduce fuel cost

CONCLUSION

The focus of the study is to have a broader view of the challenges and performance of the Airline industry. The expert opinions and published reports indicate that the aviation sector has been affected by two major macroeconomic problems namely increasing Air Turbine Fuel prices and the volatile exchange rates. Apart from these two problems, the sector faces competition due to predatory pricing strategies adopted by dominant players. The special case of Jet Airways face deep troubles in terms of liquidity problems which hinders them in paying their creditors, lessors, employees and lenders. Jet Airways has huge borrowed loans which carry an interest rate of 20% per annum as on 2018 and suffers from foreign exchange losses, in addition to the above macroeconomic problem stated above. Of course, the aviation sector gets lot of support from the government in terms of setting up of new airports, UDAN scheme and also increase in air traffic year-on-year. The committee reports reveal that the airline industry can focus

more on enhancing customer experience by means of maintaining uniform cancellation charges, luggage charges and also handling customer grievances within the stipulated time.

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DIGITAL PAYMENT IMPACT ON ONLINE SHOPPING IN RURAL ANDHRA PRADESH

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ABSTRACT: Recent 'Amazon Big Billion' sales recorded historical 1500 crores sales in 3 days and most of the revenue is generated from rural India than metro cities. The figures indicating that, the rural consumer online buying behaviour with the help of digital payment mechanism is progressively good sign for rural economy growth. With the rapid development of science, computer and network technology, electronic-commerce (e-commerce) has become a routine part of human life because it is convenient for customers, particularly in Business to Customer (B2C) commerce. The customer can place orders at home and thus save time. Online payment systems have a very important role in e-commerce and they are used to complete e-commerce transactions. Due to Reliance Jio Internet package impact most of the Rural Andhra Pradesh consumers are very good at operating smart phones and utilizing for browsing and shopping purpose. Rural Andhra Pradesh has significant impact on the economic progress of the country, and with the emerging changes of ICT penetration, and the impact of demonetization, alongside the digital initiatives carried out for rural segments, the need for improving the trends of digital payments model in rural AP is very important. Considering the benefits like transparency in transactions, scope for curtailing parallel economy and improving the ease of business, it is very essential that the transformation towards digital payments, even in the rural economy is empowered. This paper will focus on rural consumer buying behaviour with special reference to online shopping that to digital payment mode transactions and their satisfaction level and focused on digital payment user free improvement techniques.

Keywords: Digital payments, Rural AP, B2C Commerce, Consumer Behaviour

INTRODUCTION

DIGITAL PAYMENTS

In general payments are made using payment instruments, for example; cash and cheques. Digital payment is a way of payment which is made through electronically or digital modes. Both payer and payee use electronic modes to send and receive money. This is also referred as electronic payments. All the transactions regarding digital payments are done through online in an instant and convenient manner in order to keep the consumer in a safe zone.

E-COMMERCE

E-commerce is just the process of buying and selling produce by electronic means such as by mobile applications and the Internet. Ecommerce refers to both online retail as well as electronic transactions. Ecommerce has hugely increased in popularity over the last decades, and in ways, it's replacing traditional brick and mortar stores.

E-commerce (EC), an abbreviation for electronic commerce, is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business.

As of 2019, the largest e-commerce companies in India are Amazon India, flip kart, Wal-Mart, snap deal, Paytm, Jabong, Ebay, Shopclues, Make My Trip, Book My Show and Zomato.

BENEFITS OF ONLINE SHOPPING

1. Ease and convenient to shop from anywhere and at any time of the day.
2. Easy return of items/ flexibility to return items from your door step.
3. Gifting made easy
4. Small retailers to benefit by partnering with big online giants to display their products.
5. Can buy International products as well.
6. Huge discounts on electronic items during festive season.
7. Big markets for small retailers
8. Ease of acceptance of multiple payment options including Cash on Delivery.
9. Advantage of cashbacks for using mobile wallets or debit/credit cards.
10. Advantage of reviewing customer feedback helps to choose best products.

REVIEW OF LITERATURE

Umair Cheema, Rizwan, Faiza & Sohail (2018) analyzed that . Lack of customer acceptance towards new technology remains a big challenge for the marketers. Even though the technology is gaining importance over the years, people takes more time to accept it and adopt in their daily life. Researchers conducted a survey among 150 respondents that includes professionals from various fields and university students was conducted. With the help of regression analysis, the proposed model was assessed. The findings reveal that perceived ease of use and perceived enjoyment are the factors that affect online shopping intention. Surprisingly, the effect of perceived usefulness was not significant on online shopping intentions. This particular results demand to create awareness in the population regarding the benefits of online shopping. This paper also found that perceived ease of use has a significant positive effect on perceived usefulness.

Pritam&kothari (2017) examined how the growing rate of internet users influencing the online shopping behavior of consumers. The major finding of the study is cognition, sensed usefulness, comfort of use; sensed enjoyment and security are the five components which affect consumer perceptions about online purchasing. Researchers pointed that Customers use the Internet not only to purchase the product online, but also to compare prices, product features and after sale service facilities they will receive if the purchase the product from a particular store. Internet has changed the way consumers purchase goods and services at the same time many companies have started using the Internet with the objective of cutting marketing costs, thereby reducing the price of their product and service in order to stay ahead in highly competitive markets.

Jim, Osman, Nizam Salahuddin & Abdullah(2016) analyzed the growing phenomenon of internet shopping. The study mainly concentrated on determine the relationship between subjective norm, perceived usefulness and online shopping behavior while mediated by purchase intention. University students aged between 18 and 34 that currently pursuing their studies in University Malaysia Perlis were selected as the subject of analysis. 662 out of 800 sets of questionnaires distributed were valid for coding, analyzing and testing the hypothesis. The major finding of the study is that there is a positive relation between purchase intention and behavior of consumers. They also recommended that future research can be conducted on working adults and other variables that are related to online shopping.

Suma & Hema Divya (2018) examined the effect of demonetization on digital payments. They noticed a tremendous growth in digital payments. Few initiatives taken by the central government increased the use of internet which means to exponential growth in use of digital payment. The present study focuses on the analysis of the adoption level of these digital payment systems by customers. Primary data was collected from 183 respondents located in Hyderabad. The collected data through the questionnaire were analyzed statistically by using chi-square technique.

Arpita & Rathore (2018) focused on the impact and importance of digital payment in India. According to GoI, the digital payment will increase the employment, reduces risk related to cash like corruption, robbery, and carrying or storage of large amount of cash and made all transactions to be done cashless or digitalized which helps the people to transfer the money with security and safety at high speed. This step of the Indian government even attracted various investors in the country. The impact of this policy is a step towards the modernization and globalization by making the economy cashless. In digital payment, banking sector plays a major role by providing digital instruments like debit cards, mobile banking, mobile wallets etc. slow internet connectivity and additional charges over the digital transactions are the two main drawbacks for the adoption of digital payments in India.

Dorothy Sagayaran highlighted the importance of cashless payments in India to make use of it. The researcher also listed few benefits of using cashless payments; fight against terrorism, corruption, money laundering but one biggest problem in the working of cashless economy in India is cybercrime and illegal access to primary data. Researcher suggested to strengthen the

Vani, Kumar & Mahalakshmi analyzed the moderate level of perception about digital payment and there is significant difference between socio-economic status of consumers and their perception towards digital payment. Digital payment system is an electronic medium that allows consumers to make electronic commerce transactions for their purchase. The rate of adoption of digital payment is positively and significantly affected by perception of consumers. The researchers concluded that half of consumers have moderate level of perception towards digital payment. Significant difference exists between perception of consumers towards digital payment and their socioeconomic status. The superiority, efficiency, safe and secured, convenient, cost and time savings, user friendly, easiness and protection of privacy of digital payment have positive and significant influence on the rate of adoption of digital payment of consumers.

NEED OF THE STUDY:

Due to the emergence of ICT penetration, internet allows the customers to enjoy a wide variety of products and items not only from a specific retailer/store, but from diverse stores with all kinds of items. Even payment modes are very convenient and easy for all buyers to make digital transactions. Few buyers think that sharing their credit/debit cards information in different e-commerce websites is not safe and secure. From the extensive survey of available literature it has been identified that many research works have touched upon online shopping. Moreover it has been observed that few research works are also done on e-commerce and digital payments. Very few studies have been identified on digital payment modes used by rural consumers. Hence an attempt has been made to conduct research on digital payment modes and online shopping in rural areas that are located in Andhra Pradesh. Hence the present study has been undertaken to examine “Digital Payments Impact on Online Shopping in Rural AP”.

SCOPE OF THE STUDY:

The present study focuses on “Digital Payments Impact on Online Shopping in Rural AP”. The study broadly covers about the buying behavior of rural consumers, satisfaction level of consumers towards online shopping and various digital payment modes used by rural consumers. Digital payments have emerged as an advancing financial inclusion to the rural consumers which increases the safety and convenience of their savings.

OBJECTIVES OF THE STUDY:

1. To analyze the online rural consumer buying behavior.
2. To identify the factors influencing rural consumers towards online shopping.
3. To examine digital payment modes used by rural consumers in online shopping.

RESEARCH METHODOLOGY:

METHODOLOGY

The primary data is collected by discussions with the different consumers from different villages near to Anantapur district.

The secondary data is collected from the different studies in newspapers, journals, magazines and from the doctoral works.

SAMPLING METHOD: The sampling method adopted for this study is non-probability sampling method in which convenience sampling method is used. The researcher has chosen the companies as per her convenience and availability of consumers at different rural areas.

Sample: The sample chosen for the study is 100 from different rural areas near to Anantapur.

LIMITATIONS OF THE STUDY

1. The study is limited to the respondents living near to Anantapur district.
2. In spite of the hard efforts made to collect the information from the respondents, few respondents are not very co-operative due to their busy schedules.

DATA ANALYSIS & INTERPRETATION

Respondents Based on Gender:

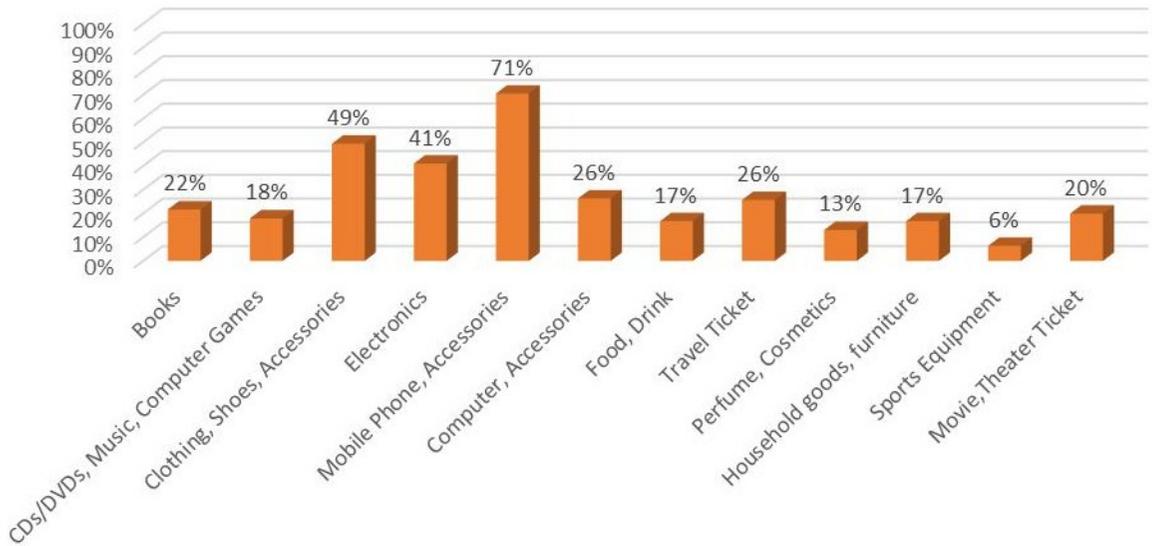
	RESPONDENTS	PERCENTAGE
Female	39	39%
Male	61	61%
Total	100	100%

Source: Primary data

From the above table it is clear that majority of the respondents are male consumers, it means in rural areas female consumers are not showing much interest towards online shopping compared to men. From the few respondents the researcher noticed a issue of internet speed. This issue is resolved after introducing JIO internet package.

MOST OFTEN PURCHASED PRODUCTS AND SERVICES:

Goods and Services Bought Online Percentages



As per the above graph it is clear that majority of the rural respondents are showing interest to buy mobile phones and accessories by using various digital payment modes. Respondents are getting discounts on purchasing mobile phones and accessories. After this, clothes, shoes and accessories occupied second place. Only 6% of the respondents are showing interest to buy sports equipment through online shopping.

FACTORS INFLUENCING RURAL CONSUMERS TOWARDS ONLINE SHOPPING

Factor	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Saves time and money	68	15	0	12	5
New trend	48	29	5	8	10
Shopping at leisure time	46	32	2	12	8
Discounts	53	21	6	9	11
Wide range of products	49	29	7	6	9
Free home delivery	58	31	0	8	2
Convenient digital payment	12	15	10	45	18

Source: Primary Data

Here the researcher used five-point Likert scale to know consumer experience towards online shopping. From the above table it is clear that majority of the respondents are strongly agreeing with positive aspects of online shopping. Highest influencing factor time and money saving. Least influencing factor is convenient digital payment because most of the rural consumers are opting for Cash on Delivery for payment if delivery is available to their respective places. Majority of the respondents are satisfied with the wide variety of products provided by different e-commerce companies.

DIGITAL PAYMENT MODES:

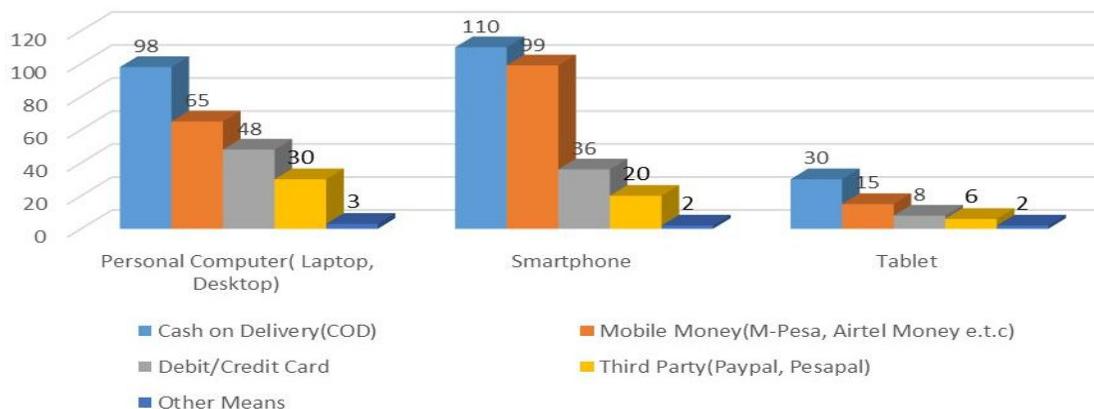
Payment mode	Respondents
Debit/credit cards	38
Online banking	28
Mobile banking	30
Mobile wallets	5
COD	21
Aadhar Enabled Payment System(AEPS)	3

Source: Primary Data

From the above table it is clear that majority of the respondents using debit/credit cards, internet banking and mobile banking for payment. Few respondents are using more than two digital payment modes based on their convenience and availability of services. Very few respondents are aware about AEPS digital Payment mode. Respondents that using of debit/credit cards will avail discounts during festive seasons. Digital record of transaction is the main benefit for the respondents. Smart phone is the leading Driving factor in online shopping. Everything is done in hand within seconds, that’s the magic of technology.

DIGITAL PAYMENT MODES:

Devices used for Online Shopping vs Payment Mode Frequency



Source: Primary Data

From the above graph it is clear that majority of the respondents are using laptops, personal computers and smart phones for making payments in order to maintain their transactions confidential.

CONCLUSION:

from the entire study the researcher wants to conclude that majority of the rural consumers are using Cash on Delivery payment mode in online shopping. The main reason behind choosing this option is security. Online shopping merely has both benefits and limitations. Consumers are unable to touch and feel the products in online shopping. Quality is the important constraint in online shopping. Trust, Habit, Transparency, Pervasiveness and friction are the five major reasons yet to think about digital payments in a big way. Digital payments eliminate the problem of counterfeit money and illegal cash totally. “Go Cashless” is one such Initiative by the Indian Government to eliminate illegal cash in Indian Economy.

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DIGITAL THOUGHT: A STRATEGIC IMPERATIVE FOR BANKS OPERATING IN A VUCA WORLD

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ABSTRACT: Banks competing in the VUCA world base their strategic planning on competition, regulations and macro-economic indicators, in general. Strategic mandates arising out these segments are often implemented using technology initiatives. Beyond the conventional IT efforts, the realm of digital thought requires strategic attention. This is necessitated by the pervasiveness of digital ways of doing business and the flexibility and agility that they offer.

It is no longer a matter of choice but more of an imperative for survival. The work explores the focal points covered by strategic planning process and brings out the dependence on digital paradigm for implementation. Incorporation of Digital Thought in the strategic planning process is proposed as a solution to cover the gap.

Introduction

The advent of the Digital Age has led to a paradigm shift in the manner in which financial services industry engages with the Customers. The Customer in the digital age has expectations which are considerably different. For instance, India has a sizeable population under the younger demographic profile (53.7 % of India's population is under the age of 24 as per the latest Census data), the rate of adoption of Digital Customer Engagement and Service models is expected to be way ahead of the rest of the world.

Financial Services Industry has led the wave of this innovation by means of presenting newer channels of engagement to the prospective customer. In order to optimize Business Processes for Customer service, there has been a strong emphasis on Digital innovations targeted at improving Operations and Service thereby creating sustainable competitive advantage.

The intent of the work is to explore the manner in which digital initiatives have become an imperative and integral aspect of strategic planning for Banking Industry in view of the volatility, uncertainty, complexity and ambiguity in the current business landscape.

The paper will start with drawing a context which emphasizes the introduction of digital initiatives and their importance for Banks to stay relevant in the face of competition and then move on to analyze the strategic challenges posed by a VUCA environment. Finally, a practice driven approach to tackle the challenges by incorporating digital strategy in to the conventional strategic planning effort, will be suggested.

The objective is to present the approaches which Banks can take on the Digital Strategy front to help them stay relevant and further create blue oceans.

Problem Statement

There is considerable thought in the direction of navigating banking businesses well in the dynamic competitive, macro-economic and regulatory context. The key focal of strategic planning has been driven by such needs. But more often than not, the implementation of such strategic mandates requires evaluation of technology driven solutions.

Beyond being a source of solutions, digital technologies also pose another significant challenge. There is evidence of use of digital thought and technology to create disruption to the conventional Business models on which Banks operate. This has brought about a strategic inflection point on the Banking industry.

Moving forward, the large scale Banks operating on conventional business models will have to add a digital paradigm to the strategic planning process. From Customer engagement to service, from product propositions to risk management and regulatory compliance, Banks are faced with dynamics of change and the requirement to respond with agility has become much more pronounced.

The nature of stakeholder's expectations from a Bank have changed drastically over the last couple of

decades. Customers expect an omni-channel presence with conventional push driven sales being replaced by Customer journeys to fulfil needs with holistic solutions. The customer service aspect has become a key tenet of the value proposition. Expectations on the turnaround time have increased and tolerance towards miss-selling has reduced, thereby making customer service more challenging. On the regulatory quadrant, the compliance norms from regulators have become more stringent and adds to the cost of doing business.

The paper intends to explore the digital initiatives as the fourth quadrant to be considered for strategic planning apart from the three existing quadrants of Competitive landscape, Macro-economic environment and Regulations and Compliance.

It must be mentioned that most organizations do consider technology from a implementation and solution perspective but the idea of digital goes beyond technology to encompass creation of new business models, better ways of customer engagement and improved approaches for risk management.

Review of Literature

The review of existing literature focused on, firstly, understanding what VUCA implies for strategic planning and secondly, what are the challenges Banks face on the competitive , macro economic and regulatory fronts?

Understanding implications of VUCA

Nathan Bennet and G. James Lemoine explain the meaning of VUCA in their work published in the Harvard Business Review in the first quarter of 2014. They place Volatility, Uncertainty, Complexity and Ambiguity in four slots within a quadrant with axes being defined based on Knowledge about the situation and ability to predict the outcomes of actions. They explain the characteristics and approach in each situation. They argue against the idea which professes the futility of strategic planning in face of VUCA. On the contrary they present 'Innovation' and 'Flexibility' to be built in to the strategy, from planning to execution.

It is suggested that strategic planning needs more calibrated thought and each of the V, U , C and A need different approaches to deal with, else it leads to poor decision if one approach is adopted for all of them.

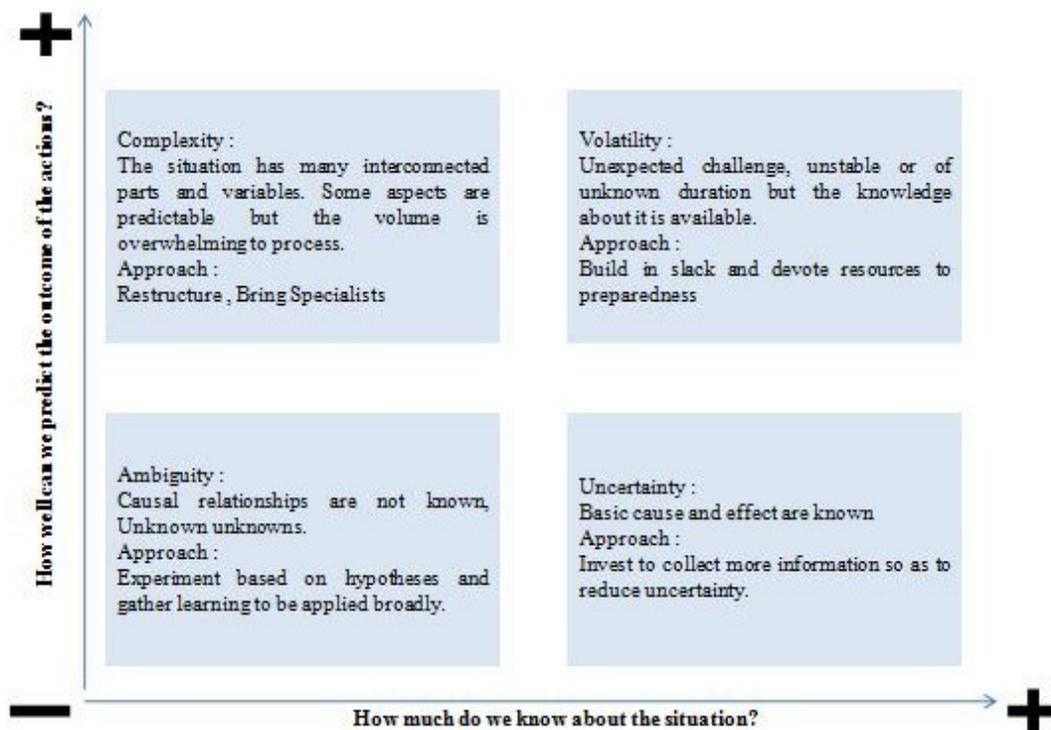


Figure 1: Diagrammatic presentation of VUCA and Suggested Approaches

Challenges Faced by Banks

Literature was reviewed to understand the challenges faced by Banks in competitive , macro- economic and regulatory context. Xavier Vives talks about the impact of competition in the Banking Sector, the impact on

stability and the role of regulatory environment in such context. In his book, 'Competition and Stability in Banking' he talks about the trade offs to assure stability which can be achieved by prudent regulation.

Iryna Aloshyna in her paper 'Competitive Issues in Banking : Theoretical Approaches Overview' argues that the challenge in Banking Sector from a competitive context arises due to intangible nature of services and lack of free entry and exit from the sector. Competition has become more intense due to availability of traditional banking services from non-banking players. Development of Financial Markets, better access of foreign banks to domestic markets and flow of capital between markets add to the complexity in terms to value proposition and performance measurement.

The impact of macro-economic environment is another aspect that gets factored in the strategic planning exercise. Most of the literature reviewed studies the relationships between GDP and bank profitability and inflation and bank profitability. In the paper 'Internal and External Factors Affecting Bank Profitability: Evidence from Albanian Banking Sector', Blerta Bami argues that Real GDP growth was found to have positive impact on Bank profitability. The same is true for anticipated inflation as Banks strategize to adjust rates. The view on these aspects is very varied. Some authors profess that the macro-economic factors have very minimal impact on the bank profitability. Nevertheless, it is understood that macro-economic environment and the related indicators definitely are inputs to strategic planning.

The next key tenet is the regulations and compliance aspect and its incorporation in the strategic planning. The existing literature in this regard is very focused. Alessandra Tanda in her paper titled 'Effects of Bank regulation on Capital and Risk' studies the impact of capital and liquidity requirements set forth by regulators worldwide on Bank's strategy. David Cruikshank in his paper 'Impact of New Banking Regulations on Corporate Relationships' talk about the how banks will start evaluating the impact of a large corporate relationship on the key ratios.

Andy Efstathiou in the paper 'How New Banking Regulations will impact Banks, Customers and Vendors in 2015/16' specially points out the need of increased disclosure towards customers and how this could be challenge for Banks operating on legacy infrastructure.

It is important to mention that technology driven solutions to strategic mandates have been found to be received positively by bank employees and customers as evidenced from the study titled ' Employee's attitude towards adoption of IT based Banking Services' conducted by Krishna Murari and Bindiya Tater.

To conclude, review of existing literature reemphasizes the importance of competition, macro-economic parameters and regulatory environment on the strategic context in which Banks operate. It is worthy to note the role that technology plays an enabler and the all pervading presence of such interventions is very evident.

Analysis and Proposed Approach

The analysis of the given problem again will focus around the aspects which get attention during the strategic planning process. The analytical view for each of the segments is as follows:

1. **Competition:** The idea of competition from a strategic point of view is very broad and encompasses the facets of market strategy, product strategy , pricing strategy and Customer engagement strategy. On the market strategy front, Banks are faced with decisions regarding which markets and segments to compete in since such choices come with tactical implications. On the product front expansion of product lines coupled with pricing decisions require careful thought. It is important to note that all such decisions have to be supported by operational capability to execute.

More importantly, on the customer engagement front, the expectations from customers have changed drastically and is in a state of constant flux. The strategic choices in this aspect should also reflect agility.

The advent of the digital paradigm makes the competitive scenario more complex. Consider the fact that traditional Banks now are facing competition from Click Only/Click and Mortar players who present formidable competition in the niches where they compete. Some of them have been able to create blue oceans for themselves. On the aspects of product and pricing as well, the time to market expectations have shortened. Banks are gradually moving towards value-based pricing of products. The branding efforts also have now moved beyond the conventional mediums towards incorporating digital media. Within the Banking sector, many players are using big data to devise customized value proposition.

It is therefore safe to assume that the competitive scenario mirrors all aspects of a VUCA world where the competitive strategy must be enabled by digital thought.

2. Regulatory Environment: Post the financial crisis in later part of the last decade, the Regulators globally have taken proactive steps towards strengthening the frameworks which are mandated for Banks. Focus BASEL norms present a comprehensive picture. The Regulatory focus has dwelt, apart from other things, on customer protection and reducing the information asymmetry in the transactions between a Bank and its Customer. The Mortgage Credit Directive is a clear example. Data is the next most important asset after customer relations. Recent times have seen the regulatory norms moving towards strictness on this aspect. The implementation of GDPR (General Data Protection Regulation) illustrates the same. There is vast body to global, regional and local regulations which have been brought in force newly or updated to reflect the regulatory concerns. A detailed study of all of them is beyond the scope of the current context. In general, the implementation of such regulations means increased cost of doing business for Banks. Also, the monitoring of Bank's activities has been intensified. The cost of non-compliance has increased. It can be concluded that the implementation of Regulations symbolize and add to the 'C' –complexity of the environment in which Banks operate. More often than not, implementing such solutions for compliance goes beyond operational interventions and involve the use of digital technologies. Reg Tech is a commonly used term for digital interventions dedicated to help Banks stay compliant.

3. Macro-economic Environment: This is one area which Banks monitor in order to derive clues for competitive strategy formulation. It is more of a source of input and a subject of interest for Bankers. However, the importance cannot be understated.

For instance, the lending strategy for various industry sectors can be sharpened based on picture presented in the reports published by the policy makers.

The situation of interest encompasses key figures like GDP growth, Per capita Income, Growth in different sectors of economy, Deficit figures, Key areas of Government spending etc. Banks derive their segmentation, market entry and long term strategic inputs from aforementioned parameters which define the macro economic environment.

Depending on the country, the situation could range from Complex in a best case scenario to Volatile in a worst case scenario. The parameters that Banks look at are derived based on data collection and analysis organized by Governments , Regulators and in-house research teams. On this front again, Digital interventions such as Big Data assure agility and integrity in the effort.

The situation analysed evidently points to the understated perspective in the Strategic Planning process. The implementation of strategic mandates arising from competitive strategy, regulatory environment and macroeconomic context involve the use of technology beyond customization of legacy platforms and existing systems. They are required to be much more flexible, based on design thinking and agile so as to help Banks navigate in a VUCA world.

This is the space where digital thought needs to be incorporated in the strategic planning process. Examples of considerations from the Digital perspective are as follows:

- Choice of platform and cost of regulatory compliance
- New Business models based on digital platforms
- Automation of first level of customer engagement and service
- Channel mix to compete in a market
- Improvement of ServQual levels
- Improved risk management
- Time to market in product launches
- Customer centricity and empowerment

Aforementioned are only indicative examples. A complete list can be drawn based on context. Implementation of strategy presents a strong case for incorporation of digital paradigm beyond technology in to the strategic planning process. It presents an opportunity to create a sustainable model that is flexible, competitive and compliant.



Figure 2 : Incorporation of Digital thought in the Strategic Planning Process

Conclusion

It is imperative for Banks to include Digital Thought in the strategic planning process so that they are equipped to survive and thrive in a VUCA world. It is important to appreciate that the volatility, uncertainty, complexity and ambiguity have been exacerbated by the advent of digital strategy and its implementation. Therefore, strategic thought and approach in this direction is strongly recommended. This goes beyond the attention that IT strategy and planning get as of now. It is important to understand that Information Technology is a hygiene factor whereas Digital initiatives could lead to distinct positioning and sustainable competitive advantage.

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VUCA WORLD IN MANAGEMENT EDUCATION IN INDIA: A REVIEW OF LITERATURE

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ABSTRACT: Purpose – This article has three objectives. The first to synthesize the concept of VUCA world as an important term in modern world. The second is to introduce unemployability of management graduates as one of the VUCA world factor in management education in India. The final one is to discuss review of literature on unemployability in the context of management education in India.

Design/methodology/approach – Existing approaches to manage VUCA world in management education are briefly reviewed through literature review. A new approach to manage VUCA world in management education is introduced as a structured approach to managing unemployability. A comprehensive case of a leading university is discussed to demonstrate the implementation of the suggested approach.

Findings – India has witnessed mushrooming of management institutes during last one decade. The top ranking institutes and universities are able to produce employable management graduates. However, the other low ranking institutes are witnessing a wide gap of skill-sets available in management students and the skill-sets required by potential employers, which has led to introduction of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) factors in job placement and career prospects of management graduates. The accreditation bodies haven't clearly determined employability determinants. SVYASA deemed to be University, has adopted a unique approach to address VUCA world factors in management education.

Research limitations/implications – Although there is a growing literature on VUCA world and employability in management education in India, yet there is a confusion on employability determinants and appropriate strategies and tactics to address the same. Although a case study has been presented in this article, yet additional empirical research should be done to evaluate the usefulness of the suggested approach to address VUCA world factors in management education.

Practical implications – The suggested approach is a practical and novel approach that can be implemented by management institutes in India to tackle VUCA world factors in management education.

Originality/value – The paper identifies the existing approach to manage VUCA world in management education and introduces new approach. In addition, the applicability of the suggested approach, through a case, is demonstrated.

Keywords: VUCA world, Volatility, Uncertainty, Complexity, Ambiguity, Higher Education, Employability gap, MBA India

Paper type - Conceptual paper

I. VUCA WORLD FACTORS

Nathan Bennett, James Lemoine (2014) described VUCA world, which is Volatile, Uncertain, Complex, and Ambiguous. A world wherein routine planning fails during implementation. Kinsinger, P. and Walch, K (2012) assigned origin of VUCA term to the US defense intelligence, which featured rapid reliable response, and rapid decision-making. Johansen, Bob and Euchner, James (2016) warned that an onslaught of VUCA world conditions can threaten existence of a businesses and as a general rule, organization operate under the assumption that operating environment will not change in short run.

Hence, organizations tend to be carefree of any significant disruption. Bartscht(2015) presented a contrary view that in reality VUCA world conditions can disrupt an organization and even have cascading negative ramification in the form of threatening survival of organization. In addition of various undesirable effects of VUCA world condition, Murthy, Vikram and Murthy, Aasha (2014) stated that usually leaders aren't aware of onslaught of forthcoming VUCA condition. Hence they find it difficult to deal with threats posed by VUCA world conditions. Bolman, Lee G and Deal, Terrence (2015) suggested that effective leadership plays an important role in managing undesirable effects of a VUCA world. Therefore, Lawrence (2013) and Murthy, Vikram and Murthy, Aasha (2014) suggested that leaders must be trained and developed to manage VUCA world conditions. Murthy, Vikram and Murthy, Aasha(2014) stated there are multiple ways to manage VUCA world situations.

The first way, as suggested by Kinsinger and Walch (2012), is to use knowledge management. The second way, as suggested by Johansen, Bob and Euchner, James (2013), is to implement proper strategies & tactics.

The third way, according to Cousins, Brad (2018), is to implement design thinking principles to tackling VUCA world. The fourth way, as suggested by Maier, H R et.al. (2016), is to apply modeling approach. The fifth way, as suggested by Kinsinger and Walch (2012), is to be flexible, agile, and having situational awareness. The sixth way, as suggested by Bartscht (2015), is to utilize research to know factors driving of the VUCA world. L. Ackoff, Russell (1998) and Kotter, J. P. (2001) amongst others, discussed that leaders prefer undertaking exploration activities over exploitation activities for managing VUCA world conditions. Such an approach creates imbalance in the process of management of VUCA world conditions. Therefore, Schwandt, D., (2008) amongst others, suggested organizations to maintain proper priority mechanism, wherein exploration activities are undertaken before exploitation activities to manage VUCA world conditions. Explorations activities means activities undertaken to explore key drivers of VUCA world. Hence, explorations activities require undertaking of research to explore key drivers of VUCA world. However, as suggested by Hazy, J. (2008) and Lord, R. (2008), that leaders undertake exploitation activity because exploration because they want quick results. Uhl-Bien et al. (2007) are also of the similar opinion that leaders want to deliver results quickly through exploitation activities.

Kotter, J. P. (2001) explained behavior of leaders in response to VUCA world situations. Leaders engage in exploitation activities before exploration because exploitation provides quick reward while reward on exploration take longer. Rowe (2010) supported this logic by stating that exploitation before exploration would result in rendering organizations unprepared to face VUCA world situations. Ackoff, Russell. (1998) and Kotter, J. P. (2001) mentioned that exploitation before exploration would result in an increase in vulnerability of organizations to threats of VUCA world conditions. Hence, it can be recommended that leaders should pursue exploration of key drivers of VUCA world before pursuing exploitation.

Fishbein, M., & Ajzen, I. (1975) stated that exploitation takes less time than exploration. Since leaders usually have busy schedule, hence they prefer exploitation before exploration. Lichtenstein, B.B. (2006) and Marion R. (2008) suggested that leaders should maintain alignment in organization to VUCA world strategies and therefore should make correct decisions in mature way. Uhl-Bien et al. (2007) analyzed the thinking and behavior of modern leaders. It was found that modern leaders have linear thinking. But linear thinking is not help addressing VUCA world factors. Hence, as suggested by Plowman, D & Duchon D. (2008), modern leaders should use innovative thinking to address VUCA world factors.

II. VUCA WORLD FACTORS IN MANAGEMENT EDUCATION IN INDIA: A REVIEW OF LITERATURE

Yehuda Baruch, (2009) stated objectives of management education. It was mentioned that majority of students pursue management education to earn employment with high compensation package. Working professionals pursue management education is to enhance their promotability. However, G. V. Joshi (2014) revealed that management schools (other than the top ranking) have constraints in the form of improper infrastructure, less competent faculties and redundant curriculum. Consequently, the gap widens between industry expected skill-sets and the actual skill-sets possessed by management students. The gap leads to increase in volatility, uncertainty, complexity and ambiguity in career of management graduates.

A review of literature reveals that there is a consensus among scholars on the fact that there is a widening gap between industry expected skill-sets and the actual skill-sets possessed by management students. S Khan (2019), KB Kumar, S Natarajan (2018), P Anand (2018), A Bhagra, DK Sharma (2018), M Dhingra (2017), R Shankar (2017), G Malik, A Venkatraman (2017), N Bhatnagar, T Agarwala (2017), RM Metilda, PC Neena (2016), S Ambekar (2016), T Selvam, JH Rozario (2016), MM Sulphey (2015), G Gowsalya, M Ashok Kumar (2015), A Singh (2015), S Singh, NO Madichie, P Lewa (2015), D Sinha (2015), R Shah (2014), MS Rao (2014), F Nabi (2013), N Pandey (2013), N Saha, BIJM Van der Heijden, A Gregar (2013), MN Nawaz, BK Reddy (2013), SS Bhola, S Dhanawade (2013), I Nazeer (2012), N Sarpal (2012), I Padmini (2012), K Kishore, M Mousumi (2012), P Ajith (2012), H Manwani (2010), and LK Sharma, V Saxena (2010) have stated that there exists a gap between industry expected skill-sets and the actual skill-sets possessed by management students and significant percentage of students (except belonging to the top ranked B-schools) are unemployable.

Table 1: Employability among Management Graduates in India

Theme: Current State of Employability among Management Graduates in India		
Year	Author/ Study	Findings on Current State of Employability
2018	KB Kumar, S Natarajan (2018)	One student out of five MBA students was employable.
2016	RM Metilda, PC Neena (2016)	One -third students in India disqualify of being employable
2016	T Selvam, JH Rozario (2016)	One out of ten management graduates
2016	S Ambekar (2016)	One out of ten management graduates in India is employable
2015	G. Gowsalya, M Ashok Kumar (2015)	One out of three management graduates was employable
2013	N Pandey (2013)	One out four MBA students is employable in India
2013	MN Nawaz, BK Reddy(2013)	One out of five MBA students was employable
2013	F Nabi (2013)	One out of ten management graduates is employable
2012	I Padmini (2012)	Two-third students in India disqualify of being employable
2012	N Sarpal (2012)	One out of five management students was employable

S Khan (2019) and H Manwani (2010) have discussed education policy and employability among management graduates in India. S Khan (2019) revealed that government education policy has failed to bridge the ever widening gap between skill set required by employers and the skill set available with MBA students. It was recommended that there should be fundamental change in admission strategies and processes. H Manwani (2010) presented a study on building human capital in India. It was revealed that there exists skill gap in management students in India. In order to bridge the skill gap, government of India should play role of an enabler. It was proposed that skill development process should begin at school level and such process should continue until students become employable.

I Padmini (2012) found that employability and problem solving skills of management students were positively correlated. Therefore, in order to enhance employability of management students, it was recommended that they must be well trained on problem solving skills. RM Metilda, PC Neena (2016) presented a study on skill gap analysis of entry level management students with regard their employability. They found that about one -third students in India disqualify of being employable. It was found that employability and living conditions of students were correlated. Therefore, in order to enhance employability of management students, it was recommended that the living conditions of students must be improved. SS Bhola, S Dhanawade (2013) presented a study on employability of students pursuing higher education. They found that there was a significant gap between industry requirement and delivery by management institutes, which resulted in students being unemployable. The gap was primarily due redundant curriculum design in management education. Therefore, in order to enhance employability of management students, it was recommended that the redundant curriculum must be updated to a fresh industry-oriented curriculum, which must be jointly developed by the Industry and management institutes.

G Gowsalya, M Ashok Kumar (2015) presented a study on gap in demand and supply of employment among students of higher education. They found that only one out of three management graduates was employable. There was a demand-supply gap of above 80 percent in management student employment market. Despite a strong pool of management graduates in the country, only one out of four management graduates had the required capabilities to be placed in a job by industry. T Selvam, JH Rozario (2016) presented a study on employability skills of management students in rural parts of India, particularly Tamil Nadu. The paper referred to the CII (Confederation of Indian Industry) data that only one out of ten management graduates were employable. The study reveals that there exists a skill gap between education and employability and there is a need to bridge this gap. DS Calonge, MA Shah (2016) presented a qualitative literature review employability skill gap, career progression generation and learning in management graduates.

MN Nawaz, BK Reddy (2013) presented a study on employability skills of new MBA graduates. It was found that only one MBA student out of five was employable, which was due to a disconnect between industry and academia. S Dhar (2012) presented a study on employability among management students studying in India and. It was found that admission criteria play an important role in determining employability skills among management students. It was revealed that the aspiring management students having mind-set of entrepreneurs enhances their chances of being employable. M Choudhury, P Sharma (2014) presented a

study on employability of management graduates from Human Resources managers’ perspectives. It was found that human resource managers face challenge that management students lack mastery in soft skills. It was revealed that employability and soft skills of management students were positively correlated.

Therefore, in order to enhance employability of management students, it was recommended that the student must be trained well in soft skills and there must be a collaboration between industry and academia.

N Bhatnagar, T Agarwala (2017) presented a qualitative study of employability of management graduates and skill gap from perception of employers of management graduates. It was found that management students lack mastery of employability skills, which becomes a constraint for the management graduates not only to be employable but also to be future business leaders

G Malik, A Venkatraman (2017) presented a study on skill gaps and employability. It was found that particularly in disciplines such as management studies and engineering, the gap is wide between the skills acquired by the students and the employer’s expectation of skills of students. The authors referred to survey report of leading consulting firm (McKinsey Global Institute) to argue that though India has a pool of the youngest population in the world, yet one out of four engineers in India is not skill-fit for employment.

K Kishore, M Mousumi (2012) and R Shah (2014) presented a study on skill gaps analysis education imparted by management schools and employability expectation of corporate. It was revealed that significant number of management schools have been founded in the recent times, which has significantly increased the number of students passing out as management graduates. It was argued that management graduates are deficient on employability quotient hence they aren’t matching skill expectation of employers. It was also revealed that management graduates aren’t matching attitude expectations of employers.

MM Sulphey (2015) presented a study on skill patterns among management graduates. It was revealed that despite training management graduates don’t match up to the expectation of employers. It was asserted that there should be more studies on skill patterns among management graduates, so that employment expectation reality-gap is bridged successfully. It was also suggested that peer assessment can be useful tool in mapping skill level of management students.

Table 2: Various Studies on Employability of Management Graduates in India

Various Studies on Employability of Management Graduates in India			
Year	Author/ Study	Key Issues Studied on Employability	Key Findings and Recommendations
2019	S Khan (2019)	Relation of employability of management students and Government education policy in India Relation of employability of management students with admission strategies and processes of business schools	Government education policy in India has failed to bridge the ever widening gap between skill set required by employers and the skill set available with MBA students. It was recommended that there should be fundamental change in admission strategies and processes.
2018	A Bhagra, DK Sharma (2018)	Thirteen critical employability skills needed in MBA students. Relation of employability of management students with teaching methodologies, such as case study approach and on the job training.	It was found that a significant gap remains to be bridged with regard to thirteen critical employability skills needed in MBA students. Teaching methodologies, such as case study approach and on the job training, can be useful in developing employability skills in MBA students.
2018	N AV, PS Aithal (2018)	Introduction of a quotient named ESMQ (Employability Skill Traits Management Quotient) to	ESMQ - Employability Skill Traits Management Quotient can measure employability of

		measure employability.	management students. The study suggested that all stakeholders should take initiatives to improve ESMQ (Employability Skill Traits Management Quotient).
2018	P Anand (2018)	Modern day management graduates and employability skills	Management students should be made job- fit by imparting employability skills.
2017	M Dhingra (2017)	Relation of employability skills of management students with their conceptual knowledge (hard skills) and general skills.	Business schools focus only on imparting conceptual knowledge (hard skills) while neglecting imparting of general skills, which are determinants of employability.
017	G Malik, A Venkatraman (2017)	Relation of skill gaps and employability.	It was found that particularly in disciplines such as management studies and engineering, the gap is wide between the skills acquired by the students and the employer's expectation of skills of students. Though India has a pool of the youngest population in the world, yet one out of four engineers in India is not skill-fit for employment.
2017	N Bhatnagar, T Agarwala (2017)	A qualitative study of employability of management graduates and skill gap from perception of employers of management graduates.	It was found that management students lack mastery of employability skills, which becomes a constraint for the management graduates not only to be employable but also to be future business leaders
2017	R Shankar (2017)	Relation of skill gaps and employability.	Only one out of eight management students is employable. It was recommended there should be an analysis of skill gap, so that the gap can be bridged.
2016	S Ambekar (2016)	Relation of employability with mushrooming of management schools every year especially in small town (tier 2 & 3 cities).	Only one out of ten management graduates in India is employable, which is largely on account of excess supply of management graduates passing out of mushrooming, less efficient and less effective business schools .
2016	T Selvam, JH Rozario (2016)	Employability skills of management students in rural parts of India	CII (Confederation of Indian Industry) data was presented which found that only one out of ten management graduates were employable.

			The study reveals that there exists a skill gap between education and employability and there is a need to bridge this gap.
2016	RM Metilda, PC Neena (2016)	Skill gap analysis of entry level management students with regard their employability. Relation of employability and living conditions of management students.	It was found that employability and living conditions of students were correlated. Therefore, in order to enhance employability of management students, it was recommended that the living conditions of students must be improved.
2015	D Sinha (2015)	Success of the top management institutes in India in bridging employability gap and failure of low ranking management institutes on the same ground.	The top ranking B-schools not only produce employable talent but also ensure high salary package through campus placement. but the other management institutes fail to produce employable talent.
2015	S Singh, NO Madichie, P Lewa (2015)	Mindset of Indian management schools for producing employable skilled manpower required by the industry.	Indian management schools don't have global mindset and are disorientated in imparting employability skills
2015	G Gowsalya, M Ashok Kumar (2015)	A study on gap in demand and supply of employment among students of higher education.	There was a demand-supply gap of above 80 percent in management student employment market. Though India has large pool of management graduates yet only one out of four management graduates is employable.
2015	MM Sulphey (2015)	Effectiveness of training of management graduates on employability. Effectiveness of skill level mapping through peer assessment of employability of management graduates .	A study on skill patterns among trained management graduates revealed training of management graduates had little effect on employability. Skill level mapping of management students through peer assessment is an effective tool for enhancing employability/
2015	P Banerjee, <u>YK Patter</u> (2015)	A study on employability skills level and perceived competencies of management students.	Innovative teaching pedagogy enhances employability skills and competencies of management students.
2014	R Shah (2014)	A study on skill gaps analysis of education imparted by management schools and employability expectation of corporate.	Number of MBA pass-outs exceeds the number of MBA required by industry on employability skills and attitude.
2014	M Choudhury, P Sharma (2014)	Evaluation of employability of management graduates from	Human resource managers find that management students lack

	MS Rao (2014)	<p>Human Resources management perspectives.</p> <p>Relation of employability and soft-skills of management students.</p> <p>Collaboration between industry and academia.</p>	<p>mastery in soft skills.</p> <p>Employability and soft skills of management students were positively correlated.</p> <p>It was recommended that the student must be trained well in soft skills and there must be a collaboration between industry and academia.</p>
2013	MN Nawaz, BK Reddy (2013)	Employability skills of new MBA graduates and connect between industry and academia.	It was found that only one MBA student out of five students was employable, which was due to a disconnect between industry and academia.
2013	SS Bhola, S Dhanawade (2013)	<p>Gap between industry requirement and delivery by management institutes.</p> <p>Relation of employability and curriculum design in management education.</p>	<p>It was found that there was a significant gap between industry requirement and delivery by management institutes, which resulted in students being unemployable.</p> <p>The gap was primarily due redundant curriculum design in management education.</p> <p>Therefore, in order to enhance employability of management students, it was recommended that the redundant curriculum must be updated to a fresh industry-oriented curriculum, which must be jointly developed by the Industry and management institutes.</p>
2013	N Pandey (2013)	Gap between industry requirement and delivery by management institutes.	It was found that only one out four MBA students is employable in India as there exists wide gap between fresh professional talent available in India and skilled talent demanded by industry.
2013	N Saha, BIJM Van der Heijden, A Gregar (2013)	Gap between industry requirement and delivery by management institutes.	<p>This study involved administration of an interview of organizations on employability determinants.</p> <p>It was found that though India has a large pool of skilled human resources, yet it has a wide gap between industry expectation of skill level and the actual level of skills possessed by human resources</p>

2013	F Nabi (2013)	A study on employability skills of aspiring management graduates and their self-perception of the same.	India is producing millions of management graduates every year. However, only one out of ten management graduates is employable despite B-schools' provisioning for training programs on employability skills.
2013	B Rath (2013)	A study on management student employability standards in India in relation to accreditation process of B-schools.	It was found that student employability standards are degrading in India. It was suggested that improvement in accreditation process of B-schools can help in improving standards of management education in India. It was suggested that accrediting agency should collaborate with various stakeholders in setting standards of management education in India for improving student employability.
2012	I Padmini (2012)	Relation of Employability and problem solving skills of management students.	It was found that employability and problem solving skills of management students were positively correlated. Therefore, in order to enhance employability of management students, it was recommended that management students should be well trained on problem solving skills.
2012	S Dhar (2012)	Employability among management students in India and its relation with admission criteria and entrepreneurial mind-set of the management students.	Admission criteria play an important role in determining employability skills among management students. Aspiring management students having mind-set of entrepreneurs are more employable.
2012	P Ajith (2012)	Employability of finance graduates and engineering graduates in India.	It was found that only one in seven finance graduates while only one out of four engineering students is employable in India. It was suggested that bridging employability skill gap required planned efforts, which is vital for nation building.
2012	I Nazeer (2012)	Skill gap and employability of MBA students.	It was found through a survey on skill gap and employability of MBA students that there is a gap between expectations of potential

			employers and skills possessed by MBA students.
2012	N Sarpal (2012)	Skill gap and employability of MBA students.	<p>A study of one hundred business schools (ranked next to the top twenty-five business schools in the country) revealed that only one out of five management students was employable.</p> <p>It was found that employability issue is of greater concern for business schools (ranked next to the top twenty-five business schools in the country).</p>
2012	K Kishore, M Mousumi (2012)	A study on skill gaps analysis of management education imparted by business schools in the country and employability.	<p>Number of MBA pass-outs exceeds the number of MBA required by industry on employability skills and attitude.</p> <p>It was found that management graduates are deficient on employability quotient and attitude expectations of potential employers.</p>
2010	H Manwani (2010)	Relation of employability of management students and Government education policy in India	<p>In order to bridge the skill gap, government of India should play role of an enabler.</p> <p>It was proposed that skill development process should begin at school level and such process should continue until students become employable.</p>
2010	LK Sharma, V Saxena (2010)	A study on skill gaps analysis of management education imparted by business schools in the country and employability.	<p>It was found that there exists a wide gap between education imparted by business schools and practical scenario faced by managers in business world.</p> <p>The authors demanded a benchmarking of students' employability determinants.</p>
2007	BS Sahay, RR Thakur (2007)	A study on relation of accreditation in management schools in India with employability	<p>It was found that there is accreditation of B-schools influences employability prospects of the aspiring management graduates</p> <p>Many B-schools haven't lived up to the expectation of accreditation bodies.</p> <p>It was recommended that management institutes should use their resources more</p>

			efficiently and effectively for improving accreditation rating improves for producing employable talent.
2005	IA Rizvi, A Aggarwal (2005)	A study on efforts made by B-schools in enhancing employability of management students.	It was found that there was a paradigm shift in approach of business schools for imparting employability skills with the help of industry experts.

F Nabi (2013) presented a study on employability skills of aspiring management graduates and their self-perception of the same. With reference to previously published report in 2012 by MBA-National Employability, it was mentioned that India is producing millions of management graduates every year. However, only one out of ten management graduates is employable. In order to address this issue, management schools have provisioned for training on employability skills. However, the training efforts haven't been really successful in bridging the ever widening gap in supply and demand of employable management graduates. BS Sahay, RR Thakur (2007) presented a study on relation of accreditation in management schools in India with employability of the aspiring management graduates studying in these management schools. This study pointed out that management institutes haven't lived up to the expectation of accreditation bodies. Therefore, it was recommended that management institutes should use their resources more efficiently and effectively so that not only the accreditation rating improves to excellent but also delivery of employable management graduates improves significantly.

N Saha, BIJM Van der Heijden, A Gregar (2013) conducted a study in West Bengal on strategy and tactics needed for optimum utilization of resource for improving prospects of employability of management graduates. This study involved administration of an interview of organizations on employability determinants. The study pointed out though West Bengal has a large pool of skill human resources yet it has a wide gap between industry expectation of skill level and the actual level of skills possessed by human resources in the state. IA Rizvi, A Aggarwal (2005) presented a study on improving employability skills of management students. The study included a critical appreciation of the efforts being made by modern day business schools for imparting employability skills in management students. The study reinforced paradigm shift in approach of business schools, wherein top professionals from industry are being employed to impart knowledge and enhance employability skills of management students. M Dhingra (2017) presented a study on employability skills status of professional management students. The author argued that modern day business schools focus only on imparting conceptual knowledge (hard skills). At the same time, the business schools neglect imparting of general skills, which are important for employability. Therefore, there exists a vast skill gap between skills possessed by management students and employability skills required by Indian Labour market.

P Banerjee, YK Patter (2015) presented a study on employability skills level and perceived competencies of management students. The authors argued that innovative teaching pedagogy enhances employability skills and competencies of management students. N Sarpal (2012) presented challenges faced by business school students for getting employment. The author presented findings of his study of one hundred business management schools ranked next to the top twenty-five business schools in the country. It was found that only one out of five management students was employable. It was argued that employability issue is of greater concern for business schools other than the top twenty-five business schools.

N Pandey (2013) found that only one out four MBA students is employable in India as there exists wide gap between fresh professional talent available in India and skilled talent demanded by industry. S Singh, NO Madichie, P Lewa (2015) questioned if Indian management schools are really having global mindset and if they are really orientated towards meeting skilled manpower requirement of the industry. There exists a significant gap not only in skills but gap also exists on salary package offered to students of low ranked versus on salary package offered to students of high ranked management institutes, which raises ethical concerns on utility of low ranked management schools. AVR Pandiyani (2011) conducted a study to understand viewpoint of employers on MBA curriculum.

D Sinha (2015) mentioned published reports on high salary being offered to fresh management graduates through campus placement. It was argued that the top management institutes in India are serving the nation by bridging employability gap, but the other management institutes (which rank below the top management

institutes) are failing to produce employable talent. Hence, it was warned that if low ranked management institutes continue failing in generating employable manpower, then the lucrateness of management education would soon start fading away. S Ambekar (2016) quoted report on national employability to argue that only one out of ten management graduates in India is employable, which is largely on account of excess supply of management graduates passing out of new business schools, who are being established every year especially in small town (tier 2 & 3 cities). The small town business schools don't have follow the same quality of management as followed by top management institutes in India.

LK Sharma, V Saxena (2010) found a wide gap between education imparted in business schools and practical scenario faced by managers in business world. The authors demanded a benchmarking of students' employability determinants. N AV, PS Aithal (2018) presented a quotient named ESMQ - Employability Skill Traits Management Quotient to measure employability. The study suggested that all stakeholders should take initiatives to improve Employability Quotient. P Anand (2018) revealed that modern day graduates lack employability skills. It was concluded that students should be made job-fit by imparting employability skills. P Ajith (2012) revealed that only one in seven finance graduates while only one out of four engineering students is employable in India. It was asserted that employability skill gap required planned efforts and bridging employability skill gap is vital for nation building. A Bhagra, DK Sharma (2018) found that a significant gap remains to be bridged with regard to thirteen critical employability skills needed in MBA students. Teaching methodologies, such as case study approach and on the job training, can be useful in developing employability skills in MBA students. R Shankar (2017) revealed that only one out of eight management students is employable. It was recommended there should be an analysis of skill gap, so that the gap can be bridged.

I Nazeer (2012) presented findings of a survey on skill gap and employability in MBA students. It was found that MBA graduates don't match up to the expectations of potential employers. A Singh (2015) found that only one out of four management graduates are employable in India. B Rath (2013) found that student employability standards are degrading in India. It was argued that improvement in accreditation process can help in improving standards of management education in India. It was suggested that accrediting agency should collaborate with various stakeholders in setting standards of management education for improving student employability.

III. Matrix to Tackle VUCA World in management education

As stated by Yehuda Baruch, (2009) that management education is aimed at enhancing employability of management students and enhancing promotability of a working professional pursuing management education. Various articles reviewed in the paper under review of literature section convergence on the point that the existing management education in India is not effective in enhancing employability and promoting promotability of management graduates. This condition leads to career of management graduates being volatile, uncertain, complex and ambiguous. Adding fuel to fire in VUCA world of management education, B-schools, as stated by G. V. Joshi (2014), have inadequate infrastructure, incompetent faculties and redundant curriculum. Review of literature in the present study reveals the following VUCA world conditions in management education in India:

- **Volatility** in
 - Employability
 - Promotability
 - Salary Package

The Cambridge Dictionary defines volatile as a situation which is likely to change suddenly and unexpectedly, especially by getting worse. Though it is a fact that passouts from top B-schools in India still remain in highly employable, yet employability of other B-schools (other than top ranking B-schools) is increasing getting volatile on employability, promotability and salary package.

- **Uncertainty** in
 - Employability
 - Promotability
 - Salary Package

The Cambridge Dictionary defines uncertainty as a situation which is which something is not known. Though it is a fact that passouts from top B-schools in India still know certainly of their employability, yet

employability of other B-schools (other than top ranking B-schools) passouts is increasing getting more uncertain on employability, promotability and salary package.

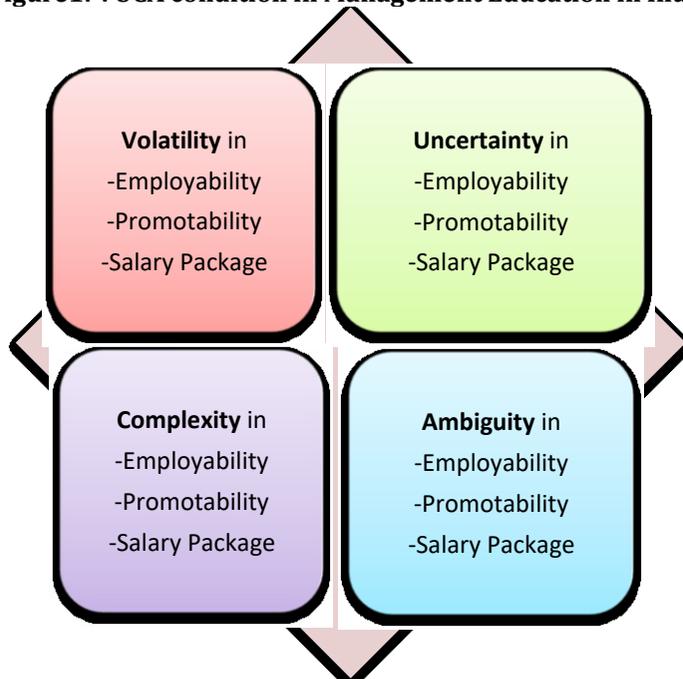
- **Complexity** in
 - Employability
 - Promotability
 - Salary Package

The Cambridge Dictionary defines complexity as a situation which is made up of several connected parts and often difficult to understand; complicated. Though it is a fact that passouts from top B-schools in India still enjoy almost lack of complexity of employability, yet employability of other B-schools (other than top ranking B-schools) is increasing getting more complex on employability, promotability and salary package.

- **Ambiguity** in
 - Employability
 - Promotability
 - Salary Package

The Cambridge Dictionary defines ambiguity as a situation which has multiple meanings, and therefore leading to possible confusions. Moreover, the term 'employability skills' is still a confused term with regard to employability in management education in India market. Though it is a fact that top B-schools in India are almost clear of employability determinants for their students, yet the same is ambiguous to other B-schools (other than top ranking B-schools) with regard to employability, promotability and salary package of their management graduates.

Figure1: VUCA condition in Management Education in India



(Bill George. 2017) proposed a simple mechanism (VUCA 2.0) to tackle :

- 'Volatility' with 'Vision'
- 'Uncertainty' with 'Understanding'
- 'Complexity' with 'Courage'
- 'Ambiguity' with 'Adaptability'.

Vision for managing Volatility in management education implies that the top executives of B-schools must set a clearly defined vision and mission aimed at making every student employable in SMART (Specific, Measurable, Attainable, Realistic and Time bound manner).

Understanding for managing Uncertainty in management education implies that the top executives of B-schools must have a complete understanding of industry's expectation of the required level of knowledge, skills, attitude and ESI Quotient (Emotional, Spiritual and Intellectual Quotient) of students.

Courage for managing complexity in management education implies that the top executives of B-schools must demonstrate leadership capabilities with swift decisions making.

Adaptability for managing ambiguity in management education implies that the top executives of B-schools must have adaptable mindset to respond to changing expectation of industry of the required level of knowledge, skills, attitude and ESI Quotient (Emotional, Spiritual and Intellectual Quotient) of students. Adaptability further may imply that the top executives of B-schools must have provision for contingency plans (Plan A, plan B if Plan A fails , plan C if Plan B fails)

Figure 2: VUCA Matrix

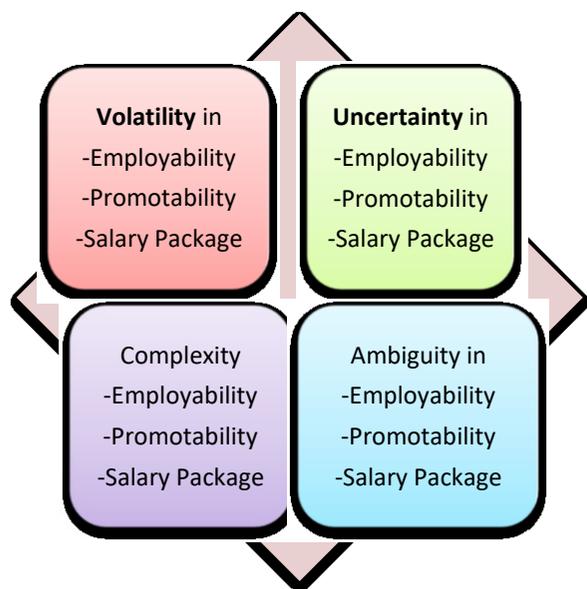
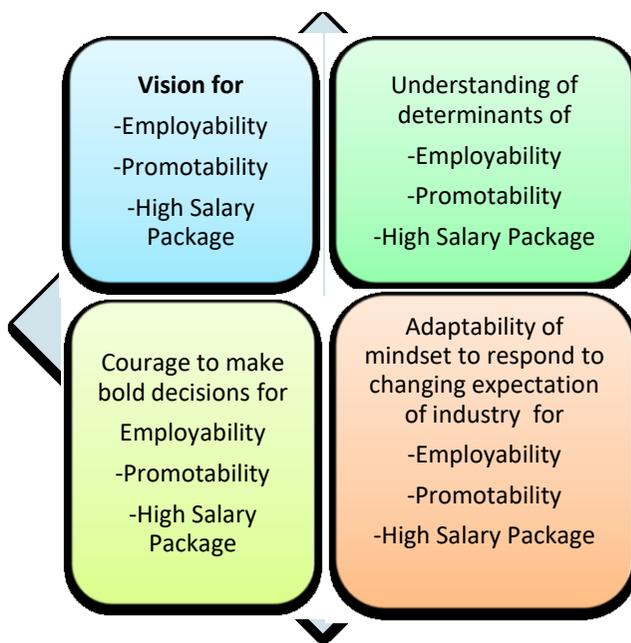


Figure 3: Application of Bill George's VUCA 2.0 Matrix in Management Education



IV. Proposed New Matrix to Tackle VUCA World IN MANAGEMENT EDUCATION

S-VYASA deemed-to-be University is India's only university to join the elite club of academic institutions offering program on Critical Thinking (the elite club now includes the S-VYASA deemed-to-be University, the Washington State University, the University of South Australia, the University of Tennessee, the State University of New Jersey/ Rutgers University, the Washington State University, the Victoria University of Wellington, and the Kettering University).

Today's VUCA world demands students to not only possess strong language, arts, math, and science skills, but must also to be skilled in critical thinking, which lays a strong foundation for problem solving, persistence, collaboration, and curiosity. Twenty-First Century MBA students require critical thinking skills, but such as program has hardly found place in existing curriculum of schools, colleges, and universities in India. The requisite twenty-first-century skills fall into three broad categories: foundational literacy, competencies, and character qualities.

The Unique Value Proposition (UVP) of Master of Business Administration (MBA) program offered by S-VYASA deemed-to-be University are the followings:

1. Twenty-First Century unique curriculum in the world: Workplace Spirituality

Twenty-First Century managers are disconnected with workplace spirituality. The same is being demonstrated in the form of feeling of meaninglessness at workplace, unhappiness at work, a disconnect from inner life, challenges in alignment of individual with the organization's values, apathetic behavior on values, and lack of transcendence. S-VYASA's MBA program bridges this gap by providing a solid foundation

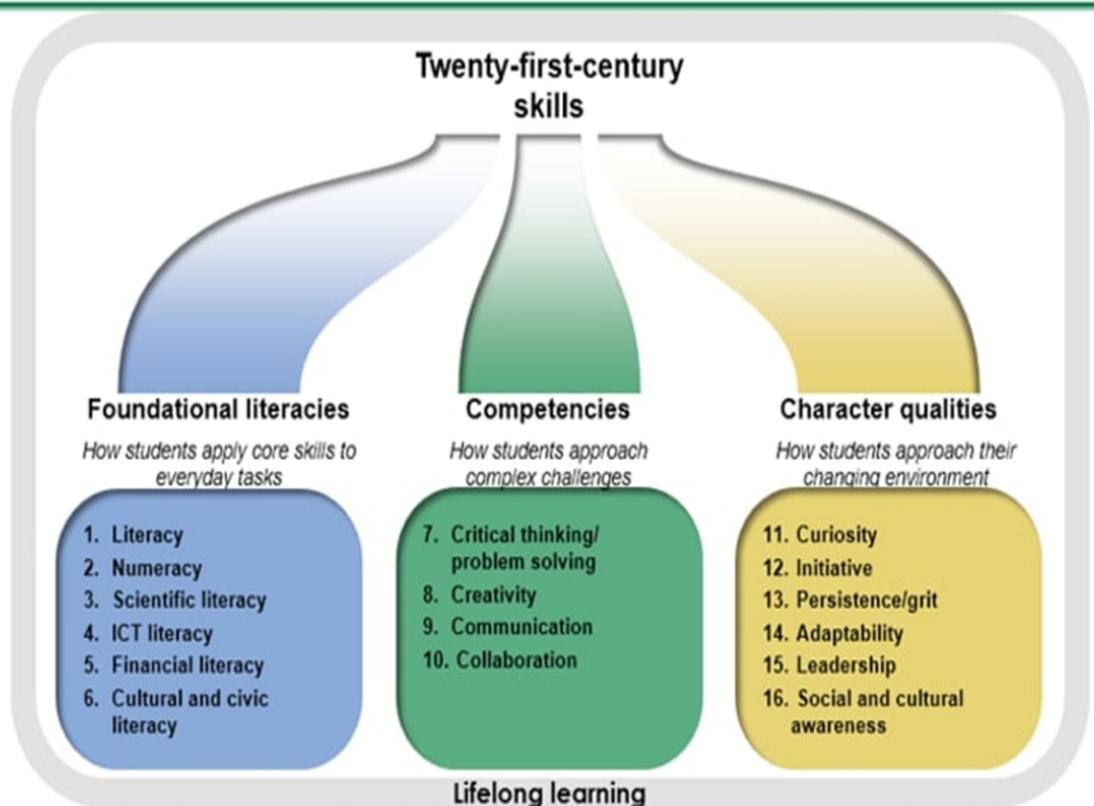
on workplace spirituality. The program is aimed at benefitting students with reduction in vices in the workplace, a deeper feeling of the meaning and purpose at work, sense of community, increased well-being and loyalty, Increased morale, sense of belonging to the organization, increased productivity and creativity ,Reduction in stress, Greater commitment to the organization, Increased happiness, greater job satisfaction, greater involvement with work and increased self-esteem. This program would result in managers becoming capable of reducing staff turnover, improved personal relations at work, improve communication, increase confidence among workers, increase in ethical behavior, improve performance and decision-making, accelerating innovation with increase in personal fulfilment, greater motivation and better adaptability.

2. Twenty-First Century unique curriculum in the world: Critical Thinking Skill

Twenty-First Century managers require are Critical Thinking Skills. Surprisingly, this subject has been ignored by most of the institutions in the world. S-VYASA deemed-to-be University is India's only university to join the elite club of academic institutions offering program on Critical Thinking (the elite club now includes the S-VYASA deemed-to-be University, the Washington State University ,the University of South Australia, the University of Tennessee, the State University of New Jersey/ Rutgers University, the Washington State University, the Victoria University of Wellington, and the Kettering University). Today's fast-changing world requires students who not only possess strong skills in areas such as language arts, math, and science but must also be adept at skills such as critical thinking, problem solving, persistence, collaboration, and curiosity. The requisite twenty-first-century skills fall into three broad categories: foundational literacy, competencies, and character qualities.

Fig 4: Skills to Compete in the Twenty-First Century

Students Require 16 Skills to Compete in the Twenty-First Century



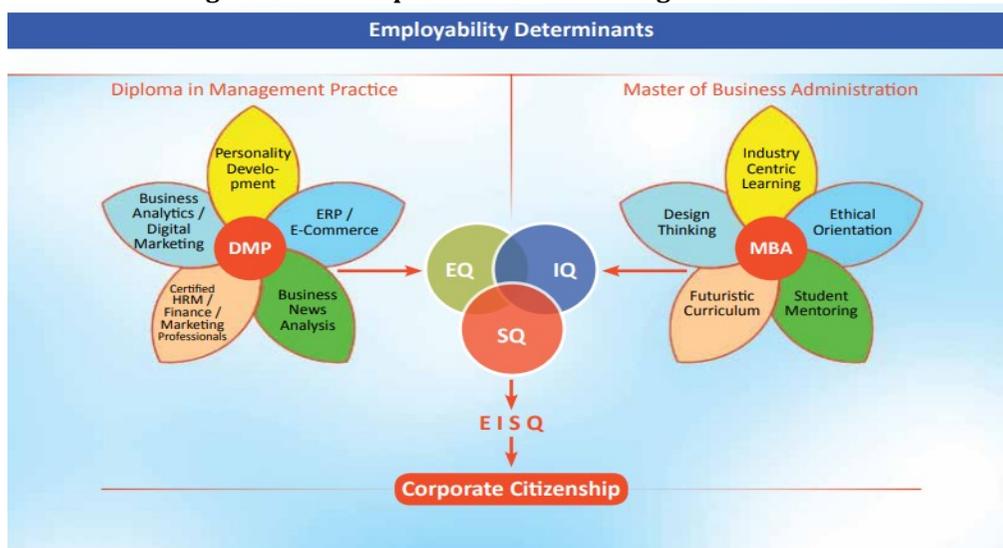
Source: World Economic Forum in collaboration with BCG.
 Note: ICT = information and communications technology.

Table 3: Twenty-first Century Skill

Twenty-first Century Skill	Description
Comprehension	*Understanding the meaning, interpretation, ability to state a problem in one’s own words
Evaluation	*Making Judgment about the value of data and concepts
Application	*Using what has been learnt to real life situations
Analysis	* Breaking down concepts into components to detect relationship among the parts and the whole (Requiring comparing and contrasting) *Distinguishing between facts and inferences *Recognizing logical fallacies in reasoning
Synthesis	*Forming a whole through connecting elements to create a larger and more coherent pattern
Deduction	*Moving from general principle to particular instances
Induction	*Moving from particular instance to generalized conclusions
Balanced Thinking	*Examination of arguments for and against a particular data, material or a concept.
Creative Thinking	*Ability to devise innovative solutions

S-VYASA deemed-to-be University offers Critical Thinking Process as core module for developing Critical thinking skills in MBA students. The skills have been classified by the UNESCO, as the most desired yet usually deficient skills for higher level employability and also as the enablers for innovations, creativity, problem solving, conflicts resolution, strategy & tactical planning and achieving ambitious goal. S-VYASA's Critical Thinking program is a one-stop solution, for developing specific higher order skills i.e. comprehension, evaluation, analysis, synthesis, deduction, induction, balanced thinking, creativity work, conflict resolution and goal setting.

Figure 5: The Proposed Matrix to Manage VUCA world



V. Conclusion

India has witnessed mushrooming of management institutes during last one decade. The top ranking institutes and universities are able to produce employable management graduates. However, the other low ranking institutes are witnessing a wide gap of skill-sets available in management students and the skill-sets required by potential employers, which has led to introduction of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) factors in job placement and career prospects of management graduates. The accreditation bodies haven’t clearly determined employability determinants. SVYASA deemed to be University, has adopted a unique approach to address VUCA world factors in management education, which involves

offering program on Critical Thinking, Design Thinking, modules on workplace spirituality & Holsystem (Holistic System of Management) , industry centric learning, student mentoring and specific programs on business news analytics, personality development, ERP, digital marketing, and certificate programs in specialization areas if HRM, Finance, and Marketing Management.

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EFFECTS ON INTERNAL RETAIL ATMOSPHERICS ON CONSUMERS' BUYING INTENTION IN THE APPAREL INDUSTRY

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ABSTRACT: *This paper discusses the internal retail factors that influence the purchase intention and thus the consumers' buying decision in the apparel industry of India. The objectives of the paper include: To study the internal retail atmospheric factors that influences the buying intention of the consumers and to analyze the impact of different internal retail atmospherics on consumers' perception and thus their buying intention. It provides a comprehensive model that will enhance the consumers' experience and result in positive approach towards the outlet.*

The model is built on the proposed model by Mehrabian and Russell's (1974) theory to study the impact of the situation on behaviour of an organism mediated by emotional responses, to a set of condition to generate an emotional reaction (affective, connotative, feeling), which in turn leads to a behavioral response. The S-O-R model is adapted wherein the Stimulus in the study includes the set of internal retail atmospherics elements like preferred brand, apparel type, availability of good collection, lighting, Merchandise display, Employee engagement, Music and sound, Store Essence and layout, floor space, cleanliness of the store and window display; the Organism is the Consumer and the response is the purchase intention.

The stimulus of the research is taken as the independent variables and the consumers' purchase intention as the dependent variable for the purpose of establishing a relationship between the two using statistical analysis to state that there exists a positive influence of internal retail atmospherics on the consumers' buying intention and the decision making process.

It was observed from the study that there exists a positive relationship between the independent variables and the dependent variable, which are highly correlated to each other. Analysis also showed that a particular set of factors if incorporated the retail outlet will maximize the overall effect on the buying intention of the consumers'.

Keywords: *Buying Intention, Consumer Buying Behaviour, Merchandise Display, Retail atmospherics, Store Essence*

1. Introduction

In this paper, we have discussed the various internal retail atmospherics that influence the purchase intention of the consumers' and thereby their buying behaviour. This paper is built on understanding these factors: preferred brand, apparel type, availability of good collection, lighting, Merchandise display, Employee engagement, Music and sound, Store Essence and layout, floor space, cleanliness of the store and window display with respect to the apparel industry in India and its effect on the overall buying intention of the consumers' within this industry. The purpose of the study is to build an extended model based on the Mehrabian and Russell's (1974) S-O-R model, which will comprise of the factors that heavily influence the purchase intention of the consumers' to generate a positive response towards the retail outlet. On studying the works of the researchers in the field, after a thorough understanding of their respective papers, it was observed that the cognitive and emotional factors that affect the consumers' perception and thereby their purchase intention, are unstable in nature and changes depending on the kind of product, the consumers' income, purchasing power, lifestyle, environmental factors etc. This paper is thus an understanding of the factors that can alter consumers' decision-making process and generate a positive response through influencing these factors according to the cognitive and emotional abilities of the individual while making a retail purchase.

2. Review of Literature

(Kim & Kim & Lennon, 2009) undertook a study with the objective to investigate the online atmospherics that affect the emotional and cognitive states of the consumers. The sample profile included 272 female college students. These students participated in the study. The study found that online atmospherics do have a significant effect on consumers. The study however cannot be generalized as it was limited to female college students and so the results might vary if the study is conducted elsewhere. The study proved the S-

O-R theory wherein the stimulus which are the online atmospheric factors has effect on the emotional and cognitive state of the consumer which is the organism which finally affects the purchase decision of the consumer which is the response. The web site designers and online retailers can thus use the study to provide the customers with best atmospheric factors that would encourage them to shop.

(Ballantine & Jack & Parsons, 2010) undertook a study with the objective to compare the apparent differences between a retail ambience with more hedonic experience and one with more focus on utilitarian by examining the role of a hedonic retail experience. Qualitative method using protocol analysis and semi-structured interview was used to conduct the research on ten participants. The result of the study showed numerous atmospheric cues and the influence of cues on the retail experience. The first category included stimuli that attracted the attention of the consumers and excite and elicit their behavior. The second category included the cues important for facilitating product engagement. The paper further provides a broad categorization of atmospheric cues, providing factors that shop designers can be aware of when creating a store with the hedonic experience in mind helping the retailers understand their customers well.

(Morrison & Gan & Dubelaar & Oppewal, 2011) undertook a study with the objective to test the effects of aroma and music on shoppers in a real retail set. The results show that there is a significant impact of music and aroma on the shoppers. The study further reveals that the impact of music and aroma results in a higher pleasure level which greatly affects the behavior of the shoppers. The effects of such stimulation of behavior is also present in the study. The study therefore adds to the better understanding of shoppers' emotions and behavior in response to in-store atmospheric factors and offers retailers practical insights into how to create competitive advantage by customizing the atmosphere in their stores. (Lunardo & Mbengue, 2013) undertook a study with the objective to study the instance where the environment of the store is perceived by the consumer as a manipulative tool used by the retailers. The study found that the consumers have a positive perception about the store atmosphere and the retailers. The customers accept the effort taken by the retailers to provide a store as needed by the consumer, which by all means proves to be helpful to the consumers. The study therefore will help the retailers understand the importance of using such a manipulative tool in order to attract the consumers.

(Riaz & Mazhar, 2015) undertook a study with an objective to recognize the impact of retail atmospheric factors on the purchase intention of the consumer. The study was conducted in the international retail outlets of Karachi in Pakistan. This study was the very first to find out the collective effect the variables of atmosphere has on the purchase intent. The sample profile included 300 customers visiting these layouts. Survey technique was used to collect the data. The selected consumers filled questionnaires. The study was analyzed using regression tool. The study found that store atmosphere variables like lighting, scent, cleanliness, display have a positive impact on the purchase intention of the consumers while factors like color, music have a fairly low impact on the purchase intention of the consumers. Factors like temperature have no impact. The conducted study has significant implication for practitioners and academicians and for further research in future.

3. Objectives of the Research

- To study the internal retail atmospheric factors that influences the buying intention of the consumers.
- To analyze the impact of different internal retail atmospheric factors on consumers' perception and thus their buying intention.

4. Research Methodology

The purpose of marketing is to attract attention and create interest. Marketing can create a brand image, change that image and get people interested in what's for sale. For effective marketing one must be able enough to connect the marketing strategies with the consumers' perception. Retail atmospheric factors form a crucial element to link these objectives. With the world becoming global and e-commerce taking over the marketing world its become much more important to strengthen the retail store atmospheric factors to attract the customers and enhance buying intention.

The research framework used in the paper is an adaptation of the S-O-R Model by Mehrabian and Russell's (1974). The Stimulus-Organism-Response Model is a classical model of psychology about human behavior. The model shows the affect of stimulus on the Organism, which thereby results in the response. Stimulus in the study includes the set of internal retail atmospheric elements like preferred brand, apparel type, availability of good collection, lighting, Merchandise display, Employee engagement, Music and sound, Store Essence and layout, floor space, cleanliness of the store and window display; the Organism is the Consumer

and the response is the purchase intention. The model used in the study shows the effect of the stimulus, which is the different retail atmospherics on the consumer, which is the Organism, thereby affecting the response, which is purchase intention.

A casual research was conducted in order find the relationship between the independent variables i.e. the retail atmospheric factors, and the dependent variable that is the consumers' purchase intention. The intention could be negative or positive wherein, the organism based on the emotional states develops a purchase intention. These emotional states are representatives of the consumers' perception and the impact of the atmospherics during the decision making process.

The type of sampling used for the research study is Convenience sampling. It is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher and a total of 200 responses were collected.

The data was collected through a questionnaire and the collected data was further analyzed using the statistical tools such as frequency analysis to understand demographic factors, correlation & regression of SPSS 16.0 software, to find the impact of each internal retail atmospheric factor on the purchase intention of the consumers.

5. Analysis and Interpretation

The analysis was done on the 200 responses that were collected during the survey of which there were 103 females and 97 male respondents belonging to an age group of 20 - 30 years old. The majority of the respondents belong to the student community who have easy access to both: retail outlets and the e-commerce platforms. It was however observed that 81% of the sample still preferred to buy apparel from the retail outlets despite the boom in the e-commerce industry recently.

The result can be viewed in the correlation table provided below:

Table 1: Correlation Analysis

		IMP_Overall	DM_Overall
IMP_Overall	Pearson Correlation	1	.762**
	Sig. (2-tailed)		.000
	N	200	200
DM_Overall	Pearson Correlation	.762**	1
	Sig. (2-tailed)	.000	
	N	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis shows a Strong positive linear relationship between the importance of internal retail atmospherics and its effect on the overall decision-making process of the consumers. This indicates that the internal retail atmospherics play a significant role in determining the purchase intention of the consumer as the correlation is above +0.75. This further proves the hypothesis of the study that is, Internal retail atmospherics has a positive influence on consumer buying intention and Internal retail atmospherics has a positive influence on consumer decision-making. A step-wise correlation was run on the collected data to study the impact of every retail atmospheric factor on the decision making process and the consumer purchase intention. These further build the model to include variables that have the most significant impact on the consumers' purchase intention. This can be studied from the following table:

Table 2: Step wise Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631 ^a	.399	.396	.58523
2	.717 ^b	.514	.509	.52759
3	.757 ^c	.573	.566	.49583
4	.774 ^d	.599	.591	.48146
5	.780 ^e	.609	.599	.47688

(a) Predictors: (Constant), [Cleanliness in the store]

- (b) Predictors: (Constant), [Cleanliness in the store], [Window display]
- (c) Predictors: (Constant), [Cleanliness in the store], [Window display], [Employee engagement]
- (d) Predictors: (Constant), [Cleanliness in the store], [Window display], [Employee engagement], [Store Layout]
- (e) Predictors: (Constant), [Cleanliness in the store], [Window display], [Employee engagement], [Store Layout], [Merchandise display]

In the final model that is, the 5th model, we see that the variables taken are Cleanliness in the store, Window display, Employee engagement, Store Layout and Merchandise display have the most significant impact on the dependent variable. The rest of the variables can be fit into the model, but only these variables are significant enough to be considered for a reliable prediction model. The step wise regression analysis has identified the factors that significantly influence the consumers' purchase intention and thereby has a positive influence on the decision making process of the consumers'. This proves the hypothesis of the research and substantiates the objectives proposed in the study.

6. Conclusion

The paper, “Effects Of Retail Atmospheric On Consumers' Buying Intention” is a study to illustrate and understand the importance of the many environmental factors in a retail outlet that affect the consumers' buying decision by influencing their intention to make or not make a purchase. This study was conducted to see the impact of retail atmospheric in the apparel industry and on its consumers.

The purpose behind the study was to understand how the retail environment could be controlled to induce purchases on these platforms when the market is experiencing a shift towards the online platforms. This paper allows the retailers to customize their outlets in order to maximize the experience for its customers and in return increase their on-site sales.

The survey indicates that of 200 respondents, 80% of them still prefer buying clothes from retail outlets owing to sensory factors such as touch, sight and the ability to try the apparel before making the purchase. The analysis of these factors also led to the conclusion that Cleanliness in the store, Window display, Employee engagement, Store Layout and Merchandise display are the factors that play a vital role when the customer is evaluating it's alternatives before making a purchase decision.

Since the analysis indicate the likelihood of the customer making a purchase when the given factors (Cleanliness in the store, Window display, Employee engagement, Store Layout and Merchandise display) are present, the hypothesis of the study stands true, that is, Internal Retail atmospheric have a positive influence on consumer buying intention and thence their decision making process.

7. Limitations of the study

- As the sample for the study was collected using the convenience sampling technique, the results provided by the study may not be useful for retail outlets that cater to a different demographic sector.
- The data is collected with reference to the apparel industry of the Indian market and so may not be in alignment with other industries and their retail environments or with reference to other economies.
- The factors have not been studied in depth for analysis and so the extent to which each independent variable functions cannot be obtained. This results in failure to understand individual impact of the variables on the decision making process of the customer.

8. Scope of future research

The study suggests the retailers to act upon the internal retail atmospheric in a marketing strategy of a retail store for further improvement. Further these atmospheric are as important as promotional activities in communicating brand value. The external atmospheric factors can be further researched in future studies. Therefore, the future research can address other retail atmospheric details of lighting, sound or aroma that influence the buying behavior of the consumers.

Furthermore, research can be conducted to understand the degree of each factor and its individual impact on the consumer. The study can be replicated for different industries and its reliability and validity can be challenged by future research.

The purpose of the study was to recognize the factors that influence the decision-making process and

determines the purchase decision of the customers. The data collected proved that these internal retail atmospheric factors play an important role in influencing customer-buying intention. A customer considers all these factors (Cleanliness in the store, Window display, Employee engagement, Store Layout and Merchandise display) to be a component of good retail outlet as these factors add to the shopping experience of the consumer and in turn affect their decision making process.

Future research can also be done to identify the means to integrate the different platforms (on-site and offline) to provide enhanced customer experiences leading to improved sales and building better customer relationships.

9. References

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“ENTICEMENT TOWARDS E-MARKETING”

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ABSTRACT: Marketing sector is changing its conventional marketing methodology to cyber marketing. The growth of E-marketing develops the process of creating, communicating and delivering the values of products and services to the customers through internet. The revolution in the marketing is connected with Noah's Ark by Philip Kotler in his book marketing 4.0 (i.e.) once the change occurs in civilization; new civilization develops likewise when traditional marketing shifts its conventional strategies into modern marketing a new set of customers (civilization) develops. The marketing sector has faced transformation from stereotype marketing to supermalls to cybermalls. This revolution changed the civilization to contemporary age. 'Customers do not buy the product, they buy product benefits'. -David Ogilvy

This paper will focus on how citizens get influenced by internet marketing. The market is becoming more inclusive where it eliminates geographical differences, availability of the product and it connects people throughout the globe, and now the world has shifted its market under one roof called the internet marketing. The customers are becoming horizontal oriented and they seek advice and review about the products and services, both online and offline. But of course there are advantages and disadvantages for their own; therefore, in any type of marketing the ultimate goal is to win the customer advocacy. Thus, the study demonstrates the changes in marketing era from conventional to present day with few dependable variables pertaining to Indian economic changes.

Keywords: Internet shopping, Cashless economy, millennial consumers, marketing revolution.

INTRODUCTION

Electronic Markets were established in 1991, long before the Internet became known outside the academic world and before the rise of modern electronic commerce and electronic business. The internet users are spread widely across the world and they completely utilize the strategies and techniques of the services provided by the online retailers. Every business seems to be jumping on the internet marketing so that they can easily reach out to the customers as and when they want. The internet is the most powerful tool used to put any business on a solid footing with market leader companies. The growth of electronic marketing depends upon the millennial consumers as they started accepting the product and services online and they felt that the time and money was saved. And it also provided 24/7 and 7 days' services to the customers. So the business can build and make customer relationships worldwide, and your customer can shop or order product at any time. Introduction of cashless economy has made payments for the purchases even easier (i.e.) by online methods.

DEFINITION:

E-marketing is the process of marketing a product or service using the Internet. E marketing not only includes marketing on the Internet, but also includes marketing done via e-mail and wireless media. It uses a range of technologies to help connect businesses to their customers.



WHAT MAKES THE CUSTOMERS PREFER ONLINE THAN TRADITIONAL?

Customers are the ultimate kings of entire marketing cycle. Their wants and preferences are to be satisfied by any business. In that case all the wants are not the same; they change from person to person and even time to time. Preferences of the people are elaborated when internet was introduced and the technological advancements struck everywhere, social life started developing drastically for the customers. Customers prefer to save their time and money and also to satisfy all their wants. This was the basic reason why customers preferred online than traditional shopping. Internet marketing is more measurable and sophisticated. The real facts are being disclosed to the customers by reviews and description of the products.

The decisions and strategies used in internet marketing will be more accurate than traditional because well trained and experienced traditional agency might miss out a fact but internet doesn't because it collects the data which is real and is completely connected with the customers from how to what they want and the complete conversation is saved as data.

The enticement can be even more precise by saying that the customers go for the best deals and discounts offered online and they feel that they have spent less from their pocket. the payments are more comfortable with various gateways like wallet payments, internet banking, debit / credit cards and EMI options. After demonetization customers started preferring more of cashless transactions.

The frequent display of the products previously searched will keep the preference for the products constant and make the customers buy them. So these strategies attract the customers and keep them online always.

E-marketing has its limitation too:

- Many buyers being illiterates, may find e marketing difficult
- Success of e marketing depends much on internet facilities. Technical problems may make it more difficult.
- Online payment has its own drawbacks. Sometimes the payment doesn't reach but the amount is debited in the customer's account.
- Sometimes fake products may be delivered as the customer doesn't physically check what he buys before placing the order.

CONCLUSION:

The E-marketing sectors are growing drastically in India. This created diversified products and services which are displayed in the domains like flipkart, Amazonian, and snapdeal, e-bay which ease the customers to avail the products and services. These e-shops create attractive contents and promotions deals and discounts to gain customers.

This paper discusses the attraction towards e marketing by the customers. How the customers prefer and why they prefer online shopping. These millennial customers are more attached to technology and they

prefer to satisfy their wants easily without spending much time and money. This cashless economy creates more development in the country and brings more customers worldwide under one roof.

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EXAMINING QUALITIES OF SELF-LEADERSHIP AMONG MANAGEMENT GRADUATES AT BENGALURU

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ABSTRACT: *In today's environment of life and living, people in general, experience different reactions from situations/people or even in the daily routine. Well, it can begin with the education system children are undergoing to college education to work environment and dealing with people a true balance is required. A comprehensible system of life is the most appropriate way to understand people and situations. Moreover, B-schools have major responsibility of developing future leaders for handling business environment, but the question is foundation; where it should begin with? Leadership is no magic, it requires, tenacity, quick understanding of the situations matured way to people management approach etc. The focal point of this study is to examine the qualities of self leadership among the management graduates. This paper digs deeper to finds some qualities in managing oneself, because if a person cannot manage self then managing others a question mark? There are certain variables tested in this particular study like self discipline, self awareness, concentration, flexibility and channelized thinking pattern. 117 management graduates and post graduates are considered as sample for this study. The data has been collected through structured questionnaire. The data is fed through IBM SPSS 20 for treatment. Cluster analysis, regression tests will be used to present the results. The demographic data collected will be presented in the tabular format.*

Keywords: *cluster, self discipline, self awareness, People Management.*

INTRODUCTION

The concept self-leadership focuses on conditioning oneself or thyself. Self-leadership cannot happen as a magic as it requires lot of effort and mental makeup with strong determination. However, self-leadership need to be inducted in order to develop individuals for positive outcomes in their lives. Self leadership is understood as disciplining oneself in order to achieve certain goals in life. This particular process involves a conscious move and control over the subconscious. In fact, this concept is more concerned with self management in the broader framework. In order to balance work and manage oneself energetic, mentally as well as physically in different kinds of environment, this concept is being focused. The Living conditions in the globe, a common man goes through several phases of life which includes solving ones problems, dealing with situations in the family as well as in the social being and finally in the job environment. Beyond all, the training in B-school about disciplining oneself is considered very important and also visualizing life with a positive outlook.

Concept of Self-Leadership

Argyris (1957) and McGregor (1960) suggested humanistic pattern of leadership. The belief of many studies state that very few people can become effective leaders, but the concept of self-leadership is a challenge to the main thrust area. The asserting area of self-leadership focuses on positive way of thinking, having an idea of worldly knowledge, thinking patterns of people. The main intention of self-leadership was to guide employees to perform in their organizational career. The situations at corporates have changed the subordinates themselves have to come out with solutions. More over a very important part of comprehensive management of time, healthy habits, right method of communication and value of life. It is the cognitive process of understanding how, why when, where and what. In order to develop oneself as self-leader, constructive patterns of thought, reward focused and full of energy.

The focus of this study, particularly self-leadership theory given by, Manz 1983, shares this focus on inclusion and participation more relevant to a learning environment in colleges and universities. According to Neck and Houghton (2006) self-leadership requires motivation and direction. The main focal point is that training management graduates to move to the path of leadership so that they can become effective leaders in the jobs they take up.

Literature Review

Ameneh Malmir and Fariba Azizzadeh (2013), this research paper states about the solution for evaluating self-leadership. Self-leadership includes self-knowing, self-awareness, self-management and self-discipline. By having a good self-leadership, an organization can have a good leadership which leads to its success of achieving its goal. The main theory of this particular was that self-leadership of the Payam Noor University workers are in ideal condition and this study result confirmed that their applied theory is correct.

Gye-Wan Moon et al.,(2014), here the researcher recognize the importance of self-leadership and also about the relationship between self-leadership and innovative behavior among the sports organization members. After the research it was proved that innovative behavior influence the self-leadership and the study also enhance our understanding about the concept.

Greg L. Stewart et al.,(2011), study here is to understand the concepts of teams, self managing teams, multiple level analysis. Self control is also known as self management was having four elements. Those are behavior, cognition and environment. The self management is a team level analysis is done to find the work design system in the organization. Team level analysis is always impacted through the internal elements. Internal elements are regulating emotions, compensation to the team, features of the job or nature of work that is to be done, conflict.

Abraham Carmeli et al.,(2006), the study here states that about the connection between self-leadership and employee's innovative behavior at work place. This study tested a model which links the three dimensions of self-leadership and employee's innovative behavior which assess the employee and also their superior in the organization which lends support for the functioning of the activities. So, the organization should invest more in developing self-leaders to improve their efficiency to do business.

Robert S. D'Intino et al.,(2017), this paper explains about self-leadership as a process of entrepreneurial success. The self-leadership provides the individuals with a very good way for examining the environment interface in entrepreneurial process. It also provides them with personal strategies which they can learn and practice to achieve their goals. Self-leadership and helps the entrepreneurs to do work-life balance interfaces.

Sharon E. Norris (2008), the study here starts with the concept of the self-determination theory which is way to motivate the self-leadership action. He has used correlation analysis was done to get understanding about the nature and relationship degree. The research has also shows positivity with self-efficacy and nature of reward, general strategies of self-leadership. The paper is related to self-leadership in the organization. There work force changes which force the organization to make changes in the environment of work. Researcher also mentions that many organizations have implemented the shared leadership.

Daniel T.L. Shek et al.,(2015), the researcher here wants to introduce the need of self-leadership in service leadership. The concepts here considered are self-management, self-improvement, self-leadership. The researcher speaks about the service leadership theory in which it is mentioned that leadership is one form of service and which is a required to satisfy systems, self, society. There were activities conducted in the school to find out how the service leadership and self-leadership have its outcome. They concluded that there was a positive result of conducting the difference of the self and service leadership.

Teresa Müller and Cornelia Niessen (2017), the study is about the self-leadership context with relevance to job context. Researcher considers quantitative and qualitative moderates overloads are self-control strength and self-leadership. The concept of self-control strength data was collected through the method handgrip task. Whereas self-leadership data collection was through focused behavioral and patterns of constructive thoughts. Self-leadership decrease self-control strength is high when work load is high.

Ute Tat and Natascha Zeitel-Bank (2013), the study is done to understand cognitive perspective for self-leadership skills and present challenges for this subject. The state that self-leadership is manner where one has the capability to control their behavior. The research also states that strategies for self-leadership are to find the focused behavior, rewarding for natural and thought which is of constructive nature. They also explain the experimental learning cycle of Kolb's. The self-leadership competence's are mentioned which are self-awareness, concentration, self-discipline, flexibility and balance. The current trends of self-leadership are health and fitness issues, intercultural issues, leadership sharing, many more.

Objectives

- To analyze the factors affecting self-leadership on management graduates.
- To know the impact of Self-leadership on the select factors like self discipline, self awareness, concentration, flexibility and channelized thinking pattern.

Research Design

The study is both descriptive and analytical in nature. For the particular study, management graduates belonging to different age ranging from 21-26 whostudy management courses were considered. Data was collected period of two months from November 2018 to December 2018.

Data collection: Primary data is collected though structured questionnaire and distributed to students who were studying management courses. Secondary data was collected through various journals and web links which are closely associated to this particular study.

Sample size: A sample of 117students who are studying in and around SampangiRamanagar(High Grounds) area asked to fill the questionnaire. The data was especially collected from management graduates only.

Sampling Techniques: Convenience sampling technique was used to collect data from the respondents. The study completely focuses on the concept of self-leadership. The major variables identified and tested are self discipline, self awareness, concentration, flexibility and channelized thinking pattern.

Hypotheses

H₁₁ There is significant impact of Self-Leadership on Self-discipline.

H₁₂ There is significant impact of Self-Leadership on self awareness.

H₁₃ There is significant impact of Self-leadership on concentration.

H₁₄ There is significant impact of Self-leadership on flexibility.

H₁₅ There is significant impact of Self-leadership on channelized thinking pattern.

Data Analysis

		N	%
Cases	Valid	117	100.0
	Excluded ^a	0	0
	Total	117	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.852	.852	12

Reliability Statistics: The reliability co-efficient is 0.852 the numbers are close to 1. Usually the alpha should be above 0.7 which are considered as having good internal consistency. Hence the result of the table (Table -2) shows 0.85it can be considered as data is perfect.

Table 3: Profile of the Respondents

Variables	Categories	No of Respondents	Percentage
Gender	Male	63	53.84
	Female	54	46.15
Age	21-23	69	58.97
	23-26	48	41.03
Income	21,000-30,000	57	48.71
	31,000-40,000	24	20.51
	41,000-50,000	36	30.76
Management courses	BBM	31	26.49
	BBA	18	15.38
	MBA	45	38.46
	PGDBM	23	19.65

The above table indicates the demographic details of the respondents where the majority is male with 53.84% and the rest are female. According to the age, maximum respondent's age was between 21-23 with 58.97% and others age is between 23-26 with 41.02%. The next variable is the respondent's income where the highest of them belonged to 21,000-30,000 categories with 48.71%, the second highest income is in between 41,000-50,000 with 30.76% and the lowest is 31,000-40,000 with holding only 20.51%. The last variable of the table is management courses where more of the respondents are MBA graduates with 38.46% and least were BBA graduates with a percentage of 15.38.

Table: 5 Chi square tests

Variable 1	Variable 2	Chi square value	P value	Results
Self- leadership	Self discipline	292.307	.000	Rejected
Self- leadership	Self awareness	159.763	.000	Rejected
Self- leadership	concentration	151.093	.000	Rejected
Self- leadership	Flexibility	125.838	.056	Accepted
Self- leadership	Channelized Thinking pattern	143.036	.002	Rejected

Table: 6 Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
V1	1	15.0000	15.00	15.00
V2	4	15.0000	2.30940	1.15470	11.3252	18.6748	17.00	15.00
V3	4	17.0000	2.16025	1.08012	13.5626	20.4374	19.00	17.00
V4	7	17.4286	3.25869	1.23167	14.4148	20.4424	22.00	19.00
V5	12	18.8333	1.94625	.56183	17.5967	20.0699	22.00	22.00
V6	12	18.5833	2.87492	.82992	16.7567	20.4100	23.00	22.00
V7	21	19.0952	2.42703	.52962	17.9905	20.2000	23.00	23.00
V8	15	18.4000	1.29835	.33523	17.6810	19.1190	21.00	23.00
V9	22	18.1818	2.78835	.59448	16.9455	19.4181	22.00	21.00
V10	12	15.0833	2.60971	.75336	13.4252	16.7415	18.00	22.00
V11	3	14.0000	2.64575	1.52753	7.4276	20.5724	17.00	18.00
V12	4	19.5000	4.35890	2.17945	12.5640	26.4360	23.00	17.00
							23.00	23.00
Total	117	17.8803	2.82587	.26125	17.3629	18.3978	10.00	23.00

Interpretation:

V1 and V2 shows the mean as 15, V3 shows mean value as 17, V4 mean value is 17.42, V5 shows the mean value as 18.83.

V6 mean value is 18.58, V7 shows the mean value of 19.09, V8 mean value is 18.40, V9 shows the mean value of 18.18, V10 mean value is 15.08

V11 shows the mean value of 14.00 and V12 shows the value of 19.50.

Table :7 Test of Homogeneity of Variances			
Levene Statistic	df1	df2	Sig.
2.030 ^a	10	105	.037

The above table Levene Statistic are derived from f test to test the null hypothesis in order to bring out the homogeneity among the variances of different groups. Therefore the result is positive with the significance of 0.037.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	249.428	11	22.675	3.517	.000
Within Groups	676.897	105	6.447		
Total	926.325	116			

Interpretation:

The value will help to know if there is any relative significance difference exist or not in the group. The significance value is 0.000.

Cluster Analysis

The cluster analysis is done to identify the distance in the homogenous group. All the management graduates are suppose have some knowledge on leadership. Cluster analysis attempts to identify relative homogenous groups of cases based on selected characteristics using algorithm that handle number of cases.

Table: 9

	Cluster	
	1	2
Self-discipline	22.00	12.00
Self-awareness	12.00	18.00
Concentration	10.00	24.00
Flexibility	12.00	21.00
Thinking Pattern	18.00	12.00

Interpretation:

For the purpose of the study cluster analysis is used and the variables are self-discipline, self-awareness, concentration, flexibility and thinking pattern. The initial clusters are found through selecting a group of variables which showed values for the research purpose.

Table: 10

	Cluster	
	1	2
Self-discipline	16.32	18.62
Self-awareness	13.79	17.53
Concentration	15.24	18.91
Flexibility	15.61	18.79
Thinking pattern	14.95	14.78

Interpretation:

The final clusters are derived in all cases when they are grouped into the clusters which has a less distance with each other. After the final clusters were arrived, according to the variable which have high value will be selected.

Table: 11

Cluster	1	2
1		6.551
2	6.551	

Interpretation:The distances between the final clusters are presented in the above chart.

Table: 12

ANOVA						
	Cluster		Error		F	Sig.
	Mean Square	Df	Mean Square	df		
Self-discipline	134.320	1	7.037	112	19.088	.000
Self-awareness	353.754	1	3.726	112	94.953	.000
Concentration	341.408	1	7.618	112	44.816	.000
Flexibility	256.860	1	4.980	112	51.583	.000
Thinkingpattern	.741	1	5.260	112	.141	.708

Interpretation: The ANOVA is used to check whether the cluster group differ within each other as per the selected variables of clusters. The table shows that the selected variables has differentiated the groups. The result shows that self-discipline, self-awareness, concentration and flexibility are significant 0.000. Only one variable of the table which is channelized thinking pattern is not significant with the value 0.708.

Post Analysis

The survey results reflects that data is good to conduct analysis and further procedures so one way Anova is conducted to determine the differences between the means. The results shows that there are slight differences in the means in the Anova. The data reflects minor differences among the student groups. Further treatments was done through cluster analysis which shows lesser distance between clusters. This shows that almost management graduates are almost same in the qualities but the variations shows some of them are self –disciplined, some are self-aware, some are flexible and some have better concentration and some have channelized thinking pattern. All the qualities are not fitting to the homogeneous groups. This may be because of generation or personality issues. A point need to be brought that management schools need to more focus on the point of leadership training skills as it may give them a greater foundation for handling corporate scenarios and manage team and self.

Conclusion

The research study focused completely on the attributes like, self-discipline, self-awareness, flexibility, concentration and channelized thinking pattern. There were some discrepancies in the channelized thinking pattern as many of the graduates are not highly focused on the career and goals. A handful of management graduates may fall under the particular cluster but not highly visible. However, management schools can appropriately provide training in the path of basic leadership right from communication to all walks of life. As far as self –leadership is concerned these are the most appropriate methods to know whether they will be able to manage issues or problems in the present scenarios. Here the authors also wish to tell an appropriate mentorship and leadership shadowing opportunities can help the young executive to motivate and get ready to take charge at the corporates.

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FACTORS AFFECTING THE CREDIBILITY OF BEAUTY INFLUENCERS ON INSTAGRAM

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ABSTRACT: Instagram is one of the most prominent social media platforms for advertising of beauty products using Influencers. Beauty brands associate themselves with a lot of influencers for promotion of their products and its very essential to understand the credibility of the influencer as perceived by the consumer. Heuristic systematic model is employed in this study to investigate influencer credibility. A study was carried out with a sample being 248 young women in the age of 18-35 who were instagram savvy and the results are tabulated. Trustworthiness, social influence, argument quality, and information involvement emerge to be the major factors affecting the credibility of beauty influencer on Instagram

Keywords: Instagram, Credibility, Heuristic Systematic Model, Beauty influencers

Introduction

Instagram is one of most rapidly growing social media platform and is more popular in its mobile application form and its essentially due to its simplicity and curtness. Beauty brands are the most represented and most followed on instagram as the eye catching visuals of this platform provide a suitable platform provide a rich and vivid experience to the user.¹ A beauty influencer is a social media user with a large and engaged following recommending specific makeup and beauty brands through shareable, digital content.² Women who want to purchase beauty products online are extremely interested in checking out the content posted by beauty influencers especially on Instagram. The dictionary defines “Credibility is defined as the quality of being trusted and believed in”. Credibility is a thing of perspective – what is credible to one may not be to the other³. Traditionally, credibility has been highlighted by expertise and trustworthiness. With the emergence of new domain called social media other factors may also emerge. The factors affecting the credibility of beauty influencers remains unexplored which leads us to our objective which is to identify factors affect the consumers perception of credibility of beauty influencers on instagram.

Literature:

Heuristic Systematic Model (HSM) is one of the principal models to comprehend individual reactions to information. Heuristic transformation uses cues to arrive easily at a judgment⁴. Heuristic information transformation can co occur with systematic information^{5, 6}. It has been noted that the co-occurrence of the two transforming modes has three effects and they are attenuation, additivity and bias.⁷ The attenuation effect of the HSM indicates the weakening of the effects of heuristic transformation based on the perception of the message.⁸ The additivity effect focuses on the independent impact of systematic transformation and heuristic transformation on individuals’ perception of a message when two forms are coexisting. Finally, the bias explains how heuristic transformation may influence systematic information transformation through biased judgment⁷. Heuristic transformation consists of two dimensions-one is based on the source credibility and the other is based on the platform. Here our source happens to be the beauty influencer and platform is Instagram.

Ohanian et al.¹³ asserted that expertise is how a communicator is perceived well informed, competent and experienced then he or she can provide precise information. Effectiveness of message deliveries was defined by McGuire’s (1985)⁹ model. Homophily is the similarity between the information source and the message receiver.

The feature of Instagram as a social-information platform that adds to the credibility is the comments section and the engagement of the Influencers. Exchange of information shapes influences and studies show that peer influence strongly influences the formation of self opinion. Fu, (2012)¹⁰, Sundar (2008),¹¹. Social advocacy is the conceptualization of peer influence. Interpersonal interactivity was considered as one of the heuristic information cues that influenced online credibility. (Sundar, 2008)¹¹. Involvement and knowledge play a vital role in the message credibility as attitude changes in low involvement and high involvement.

Argument strength is also very importantly examined factors found in many empirical studies examining information transformation¹².

Research Methodology:

Data was collected from a sample of 248 women in the age range of 18 to 35 already possessing instagram accounts and who already followed beauty influencers regularly over a period of minimum of a year or so.

A scale was constructed based on previous studies as follows

Expertise and trustworthiness (adopted from Ohanian’s (1990)¹³,

Likability adopted from Reysen (2005)¹⁴,

Homophily from McCroskey et al. (1975)¹⁵,

Social advocacy-Wang (2005)¹⁶

Interactivity (McMillan and Hwang (2002)¹⁷

Argument quality (Cheung and others all (2009)¹⁸

Involvement (Zaichkowsky (1985) ¹⁹and Zaichkowsky(1994)²⁰

Knowledge (Flynn and Goldsmith (1999)²¹

The hypothesis was then framed as follows

H1. Source credibility cues, such as perceived expertise (a), trustworthiness (b), likability (c), and homophily (d), are positively associated with the assessment of influencer Credibility.

H2. Social advocacy is positively associated with influencer credibility.

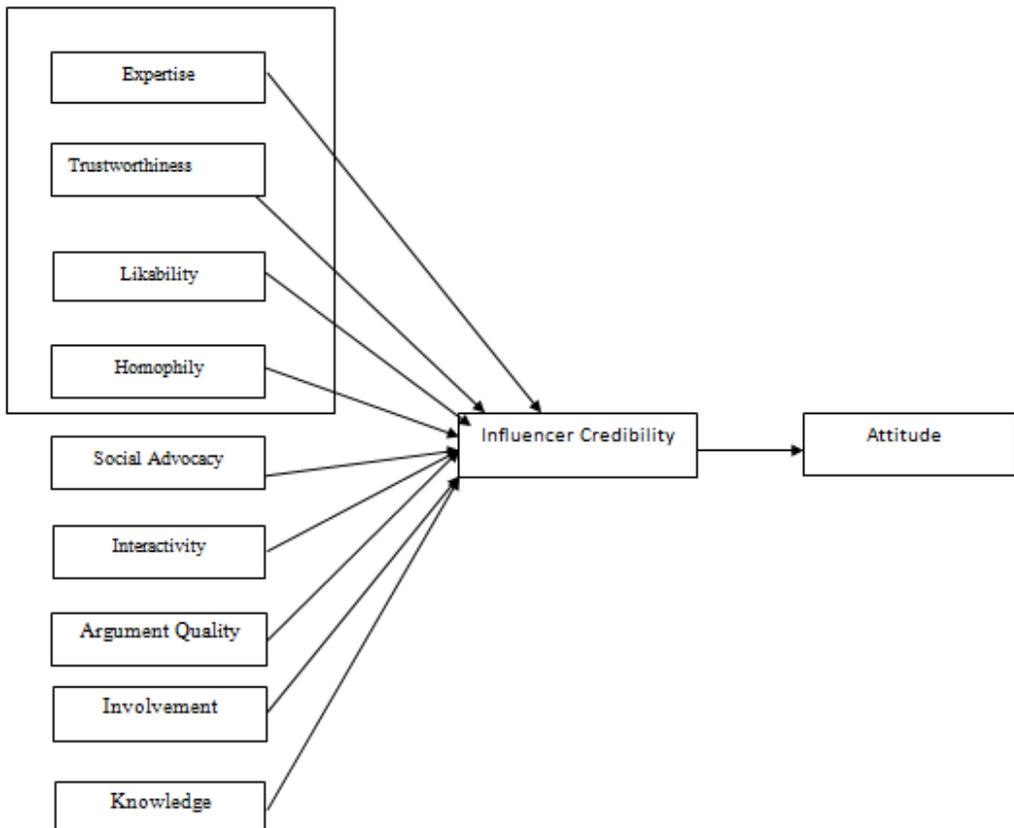
H3. Interactivity is positively associated with influencer credibility.

H4. Involvement is positively associated with influencer credibility.

H5. Knowledge of a brand/product is positively associated with perceived information credibility.

H6. Perceived argument quality is positively associated with perceived information credibility.

Structural model based Heuristic cues for processing Influencer Credibility

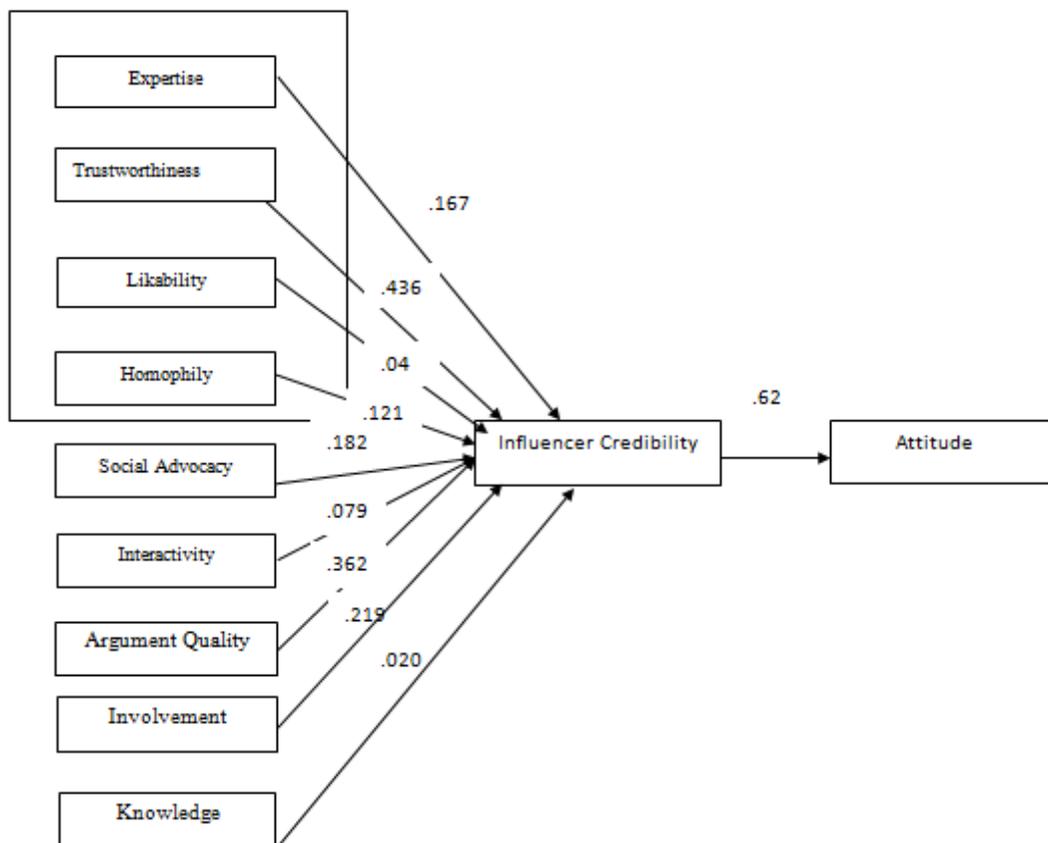


Result and implications

Structural Model showed the β values and SE values as follows

Paths	β	SE
Expertise → influencer credibility	0.165	0.063
Trustworthiness → influencer credibility	0.436	0.082
Likability → influencer credibility	0.04	0.048
Homophily → influencer credibility	0.121	0.045
Social advocacy →influencer credibility	0.182	0.067
Interactivity →influencer credibility	0.079	0.034
Argument quality→influencer credibility	.362	.073
Involvement → influencer credibility	.219	0.62
Knowledge → influencer credibility	0.20	0.30
Influencer credibility → Attitude	0.62	0.041

Structural model based Heuristic cues for processing Influencer Credibility



The first model discusses the heuristic information cues of the source ie influencer and the platform ie instagram and its effect on attitude was found to have an excellent fit.

Chi square and RMSEA results
 $\chi^2 = 1110.6752, p < .001, df = 656$
 χ^2/df ratio = 1.69

The rootmean square error of approximation (RMSEA) was .035 with a 90% confidence interval (C.I.) between .033 and .040.

All these values indicate a good fit.

Factor loadings were found to be fairly large with λ was ranging from .650 to .928

All factor loadings were sizable (). The composite reliability also showed a good score Average variance extracted (AVE) scores were calculated to estimate the convergent and discriminant validity of the constructs. The results of the β and SE values from the table above indicated that except for likability, all heuristic information transformation factors, were directly affecting influencer credibility.

The study reemphasizes that still trustworthiness has the most positive impact on the influencer credibility and marketers need to use it to evaluate the power of a beauty Instagram influencer. The beauty Instagram influencer's involvement is very essential to reach out to add to the credibility hence engagement plays a vital role to win the credibility of the audience. The study has its limitations as there is no differentiation considered with respect to the brands or the products and it is a general study.

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A Critical Review - When Organization Policies and Practices successfully meet the expectations of Repatriates upon return

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ABSTRACT: *Global assignments are becoming increasingly popular as companies are becoming more international in their operations. These types of assignments require employees to temporarily relocate into one of the company's foreign offices. As a result, the use of global assignments is common and necessary for a multinational company to succeed. With this scenario, organizations need to focus on managing repatriates well upon return ensuring the expectations of repatriates are successfully met. Well managed repatriates without any readjustment problems tend to perform to the expectations of the organization without having turnover intentions which finally results in organization commitment and organization learning. Human Resources support system is one intervention which facilitates the effective repatriation in an organization. This paper attempts to discuss the organization practices and policies supporting to achieve successful repatriation.*

Keywords: *Multinational Companies, Repatriates, Human Resource System, Organization Support.*

INTRODUCTION

Repatriates, who have returned to home country after completing a global assignment, can help establish and expand an MNC's international business because they possess first-hand knowledge of cultural contexts, including information about specific markets and customers. Repatriates understand how the company is perceived in another country and are part of a global social network that can advance the company's business around the world (Downes & Thomas, 1999). Repatriates have an irreplaceable role in organizational learning, given that they can accelerate the transfer of knowledge from host countries to headquarters, and vice versa. For these reasons, many companies view their repatriates as an important human capital investment (Caligiuri & Lazarova, 2000; Downes & Thomas, 1999; Tung, 1998).

Considering the large investment in order to develop, maintain, and transfer global assignees, losing an employee with valuable expatriate experience is costly and can affect the MNC's bottom line. Moreover, the loss of an internationally proficient employee often indirectly translates into providing advantage to direct competitors, as repatriates are likely to find jobs with competitors, thus providing the competitors with valuable human assets. In addition, high turnover intention among repatriates compromises the company's ability to recruit future expatriates because it signals to other employees in the company that, despite the stated message to the contrary, international assignments may have a negative impact on one's career (Downes & Thomas, 1999). Given this strategic human capital issue, ways to predict repatriate retention and lower their turnover is an important challenge facing organizations today (Black, Gregersen, & Mendenhall, 1992, 1992a; Gregersen & Black, 1995; Stroh, 1995). The present study will address the challenges by focusing on the repatriate support practices currently offered by organizations—and how effective they are at lowering repatriates' turnover intentions.

Career path planning is another critical function for retaining repatriates upon repatriation. Before repatriation, MNCs should offer multiple planning sessions to discuss the expatriate's concerns regarding repatriation, such as career growth objectives. The intention of these career path planning sessions is to give the expatriate a sense of security regarding his or her future with the company. This planning may utilize the skills of a team, including HR, the sending manager, and the business unit leader. Company-wide circulation of expatriate resumes pinpointing key points from international activities and experience in advance of their repatriation is an example of a program that would help expatriates find appropriate positions upon return (Hauser, 1999).

REVIEW of LITERATURE

Participants in Jassawalla and Sashittal's (2009) study reported that HR to be disorganized and ill prepared to deal with repatriate needs and expectations. Many participants described HR as being ad hoc and

reactive. As organizational support is negatively related to retention (Lazarova and Cerdin, 2007), it is something organizations should consider. It is interesting to note that Shaffer, Kraimer, Chen, and Bolino's (2012) review of the literature found HR had little involvement and most responsibility was devolved to the line manager with short-term assignments, whereas with long-term assignments HR was responsible for all aspects.

In many cases, expatriates are not guaranteed a position upon repatriation (e.g. Howe-Walsh, 2010; Doherty and Dickmann, 2009). A large number in Lazarova and Caligiuri's (2001) study stated they had a position only because they worked hard on their own to procure it. It should be noted, contrary to this, a high number (83%) of expatriates were promised a position upon return in Stahl, Miller and Tung's (2002) study of Germans. However, as their study was not longitudinal, it is unknown if those promises were kept and what kind of position they were given.

Forster's (1994) research of UK repatriates found that, over half were not happy with the amount of overall support they received both before and after repatriation. This could be rooted in something discovered in two other studies: a majority of organizations did not have clear repatriation policies in Suutari and Brewster's (2003) study and all participants' organizations in Kulkarniet al.'s (2010) study of Indian repatriates lacked a formal repatriation support program.

In another study of multi-country repatriates, only 42.4% of participants had communication about the repatriation process and a mere 41.9% of participants had career planning sessions available to them (Lazarova and Cerdin, 2007). But simply having a policy does not necessarily mean practice is executed properly. One example was found in Howe-Walsh's (2010, p97) study; expatriates whose assignments were ending were occasionally “overlooked in planning and simply forgotten by the business”. This “out of sight, out of mind” situation can cause great difficulty in securing an appropriate position upon repatriation (Shen and Hall, 2009, p810). Another example is found in the Brookfield Global Relocation Trends 2012 survey. Many organizations do not have alignment of their repatriation policies with other HR policies in such a way to facilitate effective career support: 71% of organizations had written repatriation policies but only 16% were linked to career management and retention (Brookfield GMAC, 2012).

As a result of being abroad for a long time, reorganizations, etc., expatriates may lose their contacts in the home country. This disadvantages them in finding a position upon repatriation (Dickmann and Doherty, 2008; Bolino, 2007). Mäkelä and Suutari's (2009) research of Finnish repatriates discovered that a number of their participants experienced this challenge. One suggestion to mitigate this issue is by assigning a home country mentor to apprise changes in personnel and other important information of the expatriate (Carragher, Sullivan and Crocitto, 2008). Moreover, expatriates' opportunity for promotion increases when a home country mentor is present, presumably having a positive impact on their careers (ibid). Additionally, career planning should be carried out well before repatriation (Shen and Hall, 2009) and both home and host HR should work together to find positions, focusing on utilization of newly acquired skills (Lazarova and Cerdin, 2007).

However, how employees perceive organizational support is important; it is their perception of support that is impactful and is a factor in retention (Lazarova and Caligiuri, 2001; van der Heijden et al., 2009). Perceived organizational support (POS) theory is the extent to which an employee feels their organization values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchinson and Sowa, 1986). Repatriates who are unhappy with their company's support are more likely to resign (Stahl, Chua, Caligiuri, Cerdin and Taniguchi, 2009; Lazarova and Cerdin, 2007). Support oriented to a long-term career and security aids retention (Dickmann and Doherty, 2008) and is one of three elements that make up organisational support (Kraimer and Wayne, 2001). As it applies to expatriates' careers, research has shown that perceived career (PCS) has a negative relationship with intention to resign (e.g. van der Heijden et al., 2009; Kraimer et al., 2009).

There has long been debate over whether ‘best practice’ (Pfeffer, 1994, 1998 cited by Kinnie, Hutchinson, Purcell, Rayton and Swart, 2005), a specific set of HR practices that purportedly benefits an organization regardless of context, or ‘best fit’, the context of the organization impacts which HR practices are most effective, impacts organisational performance (Schuler and Jackson, 1987 and Miles and Snow, 1984 cited by Kinnie et al., 2005, p9).

Extending HRM theory, Bowen and Ostroff (2004, p207) present a theoretical framework of HRM and firm performance developing our understanding of the link between strength and the HRM system. They postulate a shared and cohesive (a.k.a. strong) ‘climate’ in the organization enhances an employee's understanding of what “behaviors are expected and rewarded”, thus impacting organizational performance. Bowen and Ostroff's framework utilizes Kelley's attribution theory (1967) which proposes

that individuals' attributions are dependent upon three distinct variables that of: distinctiveness; consistency and consensus. The framework outlines a set of nine attributes related to HRM process: Distinctiveness (the degree to which a repatriates have a clear understanding of HR practices and what they can expect in terms of HR assistance) within distinctiveness the first four attributes are noted: Visibility defines the degree to which HRM practices are important and readily observable.

Understandability refers to the way in which different workers classify the information gathered from each HRM practice. For example, how easy is it to determine who will help the repatriate secure a return position. Legitimacy of authority is related to the perceived power of HRM in the organization, how HR is viewed by employees. Relevance relates to how useful the HR practices are. For example would the use of a repatriation bonus retain an employee if it is paid immediately upon return?

Consistency relates to how consistent relationships are over time, people and contexts. It is composed of the next three attributes: Instrumentality refers to the perceived cause-effect relationship between personal behaviors and rewards, which are stimulated by HRM practices for example is there an increase in salary for accepting an assignment?

Validity is concerned with whether the HR practices deliver what was intended. For example, did the assignment develop the individual's career? Consistent HR messages refer to the degree to which HRM practices convey similar and consistent messages across the organization and across time. Is there an unwritten rule that the repatriate will have a return position?

Finally, Consensus is the degree of agreement among employees. It incorporates the final two attributes: Agreement among principal HR decision makers and the degree to which workers perceive agreement across HR. This could be complicated in the case of a repatriate where they are working with home and host HR. Finally fairness of HRM practices relate to how individuals perceive the HR activity. For example, if the individual believes the appraisal system is undertaken equally amongst all employees or is an IA seen to compromise the appraisal's equity?

Studies have provided for Bowen and Ostroff's model in relation to 'customer service' as a strong climate created within a hotel industry (Tang and Tang, 2012), a strong climate for knowledge transfer (Minbaeva, Mäkelä and Rabbiosi, 2012) and a strong climate conducive to learning (Prieto and Pérez Santana, 2012). Although research into repatriation has yet to explore Bowen and Ostroff's model it is possible to extend the theory to repatriation. For example, Jassawalla and Sashittal (2009) found that all of the managers in their study were unsatisfied and felt ambivalent and powerless regarding the repatriation process. They note that one of the reasons for this was that most did not experience anything tangible which indicated their IA was valued by the organization. From this example it appears that a weak climate was created, at least in part, from conflicting messages. The first message is the importance to the organization that sending someone abroad gives. The second message is that the organization does not value their new experience. Another example is if stakeholders do not clearly know their roles in the repatriation process, as was found in Howe-Walsh's (2010) research, then certainly there would be negative repercussions on the climate. Additionally, she found that some HRBPs did not have a clear understanding of the contents of the repatriation policy which lead to inconsistency with how people were dealt, misalignment of policies, vital information not being shared with all expatriates and policies being misused to suit different agendas.

CONCLUSION

The context of expatriation and repatriation is changing which creates new implications for HR professionals. With the rise of globalization and the colossal scale of the global economy, international experience is becoming a critical asset for global organizations. International assignment experience is rare, valuable, and hard to imitate. In the right context, it can create competitive advantage—both for the individuals and for the companies that employ them (Carpenter, Sanders, & Gregersen, 2000). To be able to capitalize on their repatriates' skills and knowledge, MNCs need to cultivate a global vision and corporate culture that supports repatriates and values international experience and its contribution to the strategic development of the company.

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FINANCIAL EXCELLENCE IN A WORLD

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ABSTRACT: *VUCA is an acronym for volatility, uncertainty, complexity and Ambiguity is a very frequent and fast-moving concept and it is often discussed topic today. The term VUCA originated with the United States Army War College to describe the situation resulting from the cold war. The VUCA concept has been using this concept for business and organization in many industries and sectors to help leadership and strategy Planning. The awareness of this concept makes the people to avoid crisis management. If we see today's world in business there is lot of confusion and chaos and change has implemented in the financial domain Volatility across financial market and between economies has increased since 1990. the volatility in the stock market predicting market behavior increasingly difficult. And there is no concrete idea as to when interest rates will rise and fall. Volatility, uncertainty, complexity and Ambiguity are the situations which act us disasters to the planning and Strategies of companies identifying and getting ready themselves to face the challenges in the organization. Volatility may be unknown duration in the price fluctuations either in stock prices and interest prices. Uncertainty in respect of cause and effects for an event makes the business situation more challenging and coming to complexity in terms of multi regulatory environment, procedures, tariffs makes the business complex and still people face a lot of ambiguity in the business situations and difficult to take any decision in business makes the world unclear. And companies are facing a more and more global, complex and unstable market environment. Instead of looking for long term strategic sustainable alternatives, many companies are focused on short term profit making. This generates a lot of pressure. This paper will talk about the today's management and innovations strategies related to finance domain and it talks about the management, innovation and technological strategies to face the VUCA World.*

Keywords: *Management, Strategies, Innovation, Complexities*

Introduction

Today VUCA means planning for a better future. It must have the ability to change ourselves to any change & recover from any disruption.

Business can be continued when there is change and change of tool is to build the necessary organizational (resilience) it is still under pressure to adapt in order help organizations overcome this change.

Today's technology is the solution to challenge of ensuring resilience in the digital world. One thing can assure in this VUCA world is only fresh thinking and collaboration will make sure to business and people to continue their professions/ to meet the challenges in the outer world.

In the VUCA world, CFO's & senior finance execution are involved to play a role in strategy formulation and value creation for their companies. As a senior leader, it is very important for the company to identify & access profitable business venture M&A and also to plan for the growth strategy to create value.

The finance organization has a special role to play in delivering strong and sustainable value creation.

Objectives

1. **To understand the concept of VUCA**
2. **To know about the strategies for success during VUCA**
3. **To Find out the reasons for the sustainability in the organization**
4. **To identify the keys to success in the VUCA environment**

The Meaning of VUCA Concept

The VUCA is nothing but the volatility is about dynamics and change in the business, the volatility can be anything, it can be the changes in the prices of stocks, or changes in the interest rate or it can be the unexpected speed which enters the business.

1) Volatility creates turbulence causing fear and to the people that creates insecurities that, what knowledge we are having is not sufficient, we shall still modify or create things and go back to the basics and create it again.

2) Uncertainty is nothing but unpredictability of certain things in future, when cannot be known and can occur in future. Whether it is in the business of marketing or our personal life we are evidently seeing a lot of infinite feeling of uncertainty.

3) Complexity is nothing but a cumbersome in the methods/steps in the world of digitization, robotics

certified intelligence, big data and many more we feel that the above strategy are demystifying or simplify our lives but actually somewhere we try to navigate our self that the whole world is becoming a network when creates complexity as and volatility. For many organizations of course it has become a greater demand and supply between organization and people and increased globally.

Thus, complexity of doing business has probably increased too.

4) Ambiguity is the final letter in the VUCA acronym. Ambiguity is the opposite of clarity, means lack of clarity. Inability to come up to some situation/decision there are many options or solutions to choose from. It creates lot of conflict of interest & mixed messages or it can be a multiple demand. All creates an atmosphere of ambiguity that makes progress towards a common goal.

For a business person there can be a situation where there is information and no clear solution and the market place is full of multilayered and multidimensional, and the leader has to take the unconventional ways of solving problems facing a number of problems

Fear of disruption is a very growing concern for financial services from & the 2018 executive survey for that nearly 80% of top executives hat their firms were at risk of disruption and displacement from highly data driven competitors and the threats of encroachment coming from the big teen giants like Amazon, Google, Facebook and Apple and at the same time consumers going to expect greater customization and personalization of their financial services, experience at the marketing Fintech(Financial technology) can be characterized as the movement to bring transformative and disruptive innovation to financial services. The application of new & emerging technologies.

How does a financial firm create value?

- 1) The financial firm creates value by creating strategies that focus on customers in terms of anticipating, understand & respond to their needs rapidly & efficiency & finally establishing enduring between service provider & customers. There are number of different companies who created value for the success of business.

Creation of value in Financial Sector

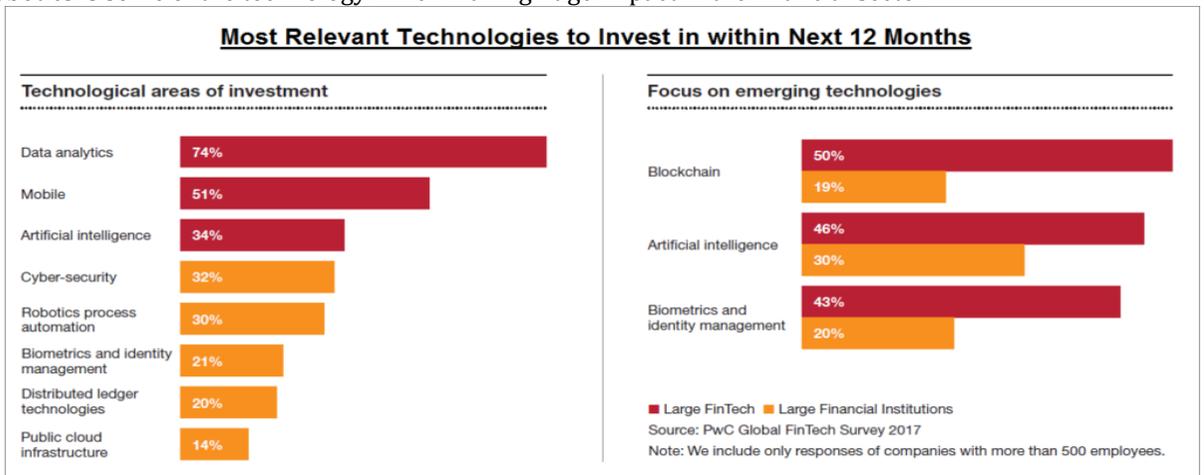
Fintech with reference to companies who are utilizing the technology to help finical services is becoming more valuable & productive & it has taken the world to a completely new scenario over the firm in the last 3-4 years.

The Fintech can boost their competencies to considerably higher level. The current financial service industry is focused on Client-Solution & information driven services. There are significant new business opportunities which are made available to all the banks as they take actions to add value to the capital market environment.

There is list of changes has been taken in the retail banking lending wealth management and the payment systems for SMES.

In the capital market because of increasing population. Initially it was burden on the system to work on this big platform and time consuming so there is a need of alternative mechanism where screen-based trading system and automated settlement system were considered to be essential

Some of the recent changes in the banking financial sector are Block chain, bit coin, artificial intelligence, robotics is some of the technology which making huge impact in the financial sector



To explain more about the VUCA world, this paper has categories into three section that is Management, Digitalization and technology to show the case studies of different companies how excellently they performed during VUCA Situations

Management

In business world today is very fresh, whether its new technology, new production methods, strategies in the business environment, customer is considered to be the king of market and because of this most of the companies are spending billions of together on R&D in the . Keeping this in mind, most of the business leaders are deciding about to change management. In the business organization because business activities are becoming global and customers demand are changing day-by-day so to keep this in mind, they want to sustain in the business by bringing numerous changes in the business organizations. So in the world of VUCA, it becomes very important for the companies to keep up the challenges, change, uncertainty, complexity & ambiguity. So when the recover this changes. The company will become very strong company and can be able to survive in any situations and faces the competitive world.

There are number of companies who managed the VUCA world threat and prove that they are stiff to face any changes in the business organization. Some of the companies which we discuss in this paper as a case study are: -

- 1) Lenovo
- 2) GM
- 3) Toyota
- 4) Shell

Lenovo

Lenovo is the second largest PC manufacturer in the world. Lenovo group acquired IBM as personal computer business. The merger of these large companies has focused many complex condition during its year. There was a lot of difference in structure between these two companies but still in spite of lot of changes in structures, culture and also due to natural obstacles, political, global financial crisis, and a stiff competition during the VUCA times. The Lenovo company has witnessed its growth a billion company with over 2700 employees, so during the VUCA world, the Lenovo company has clearly understood that, what changes should be taken immediately to lead by working as a team & be ready to act in today's business.

Ford & General Motors

Due to global financial crisis of 2008, left a dramatic change between the two US automobile industries, i.e. Ford & General Motors. How these companies faced their environmental performance and they define sustainability due to the global financial crisis. The sales of both the companies as a result they suffered a huge loss. GM filed for bankruptcy and reserved a bailout fund from U.S Federal Govt & started a new GM under the ownership of the govt. Whereas, Ford avoided bankruptcy and govt ownership.

These both companies have faced a lot of changes, chaotic and turbulent business environment in this VUCA world .but still they maintained their business to come up as a successful business in the competitive world

Shell

Shell Oil Company are one of the United States owned subsidiary of Royal, it is one of America's largest oil & natural gas producers.

In 2004 after the oil crisis that negatively affected Shells share price. A new chairman was appointed, under his regime he consider to save the share price. The company has to undergo change management. To survive, structured transformations needed to make. This is where change management came into effect. Through change management he is able to cover the company as a whole. And shell is able to recover.

Toyota

With the competition facing with the GM and ford, the Toyota engineers has understand that something has to be done in order to be keep pace with the western rivals, so they implemented Just in time approach in manufacturing sector. Instead of having order and store insane amount of heavy equipment and machinery's, they thought to manage a just in approaching manufacturing. Though it was not happened overnight but because of external changes the company made themselves to come some potential changes in the organization for sustainability

Digitalization

Digital Transformation is making its place in most of the companies and industries.

In the world of VUCA the volatility, uncertainty, complexity & ambiguity. It becomes very important to each and every company, to come up with the planning strategies, innovation, and ideology's to VUCA world, and prepare to the world of tomorrow, it is necessary to remove/reduce the fear of VUCA world and face the opportunities behind the terms

There are many developments taking place in the market, in the area of production, technology, communication.

Startups/entrepreneurs are coming up with the new technologies, innovations and strategies the break the new ground and reinventing traditional business models, in the environment, volatility, uncertainty, complexity and ambiguity have become most normal today. It is also called as digital normality.

There are 5 Indian Banks using Technologies and transformed in to a digitalization.

Some of them are: -

We all know that very well behind every successful industry today is technology. There are so many young customers who are becoming tech savvy, now they prefer personal banking. Here are top banks who are excellently performing and according to the situations and trends & trying to provide the services and sustaining themselves in the VUCA world

- 1) **HDFC Banks:** - This is the private sector bank who has got all popularity for launching wearable devices in the country & has launched “watch banking” which is Apple watch. This bank provides all it banking services through all wearable devices.
- 2) **Axis Bank:** - They are also making their pole by launching the Multi-Social payment app across social platforms such as Face book, Twitter & What Sapp
- 3) **Indus land Bank:** - Can speak to the customer through video conferencing directly. IDBI will soon launch e-huts which will be the one stop solution for all banking services that the bank offers and State Bank of India is the largest public sector bank who focus on technology and expanding services such as In Touch and In Touch

There are some other company besides banking who follow the digital technology to improve & develop their company such as Amazon.

Innovation

Innovation is nothing but a new idea device or method. It can be the process of creating and practicing a new idea in the farm of new products, services or operations. Innovations has been continuous process in the business. Innovation is important in any business sector whether it is involved in production, marketing or IT sector. Innovation is necessary, the companies has to be agile. This can be happened only through innovation. Some of the companies who are excellently performing through innovations are.

Apple

Apple is a multinational company that makes computer hardware. The company headquarters in, California that designs, develops & sells customer.

Apple is the most successful company which is started with few people with no formal structure or hierarchy or with little corporate.

Apple focuses on innovation. Today innovative product like I Phone & I Pad. Today Apple is the best innovative company in the world.

The main strategy of Apple is to customer needs and technology trend. So in the VUCA world their company who are able to keep the brand will be able to sustain.

Samsung

Samsung: - It is a famous company in the area of electronic industry. The company was established in 1969Toregu (Korea). The founder of this company was.

Samsung Sustainability is to create integrated values. Samsung will not create economic values by maximizing profits and shareholder values. Samsung is also having a stronger responsibility as a global company to create social values and the company is very good in delivering innovative products and services along the value chain when is based on core value in the field of economy, society and environment. The company also expert in monitoring the financial and non-financial that influence the society. The company has need the position as the innovation company.

Suggestions

1. It is very important for the leaders in the organization to plan for the short term and long-term planning in the organization and foresee the threats and opportunities in the long run
2. Individual Growth: It is very important the development should consider as individual growth, because people work faster when they feel responsible for their own success
3. Consumer oriented: Consumer is the king in the market, so the changes should be taken according to the consumers taste and demand
4. Retaining/recruiting good talent: Retaining good human resources in the company and recruiting a good talented people is the assets to the company at the times of good and bad times.
5. Giving training to the employees: Training should be given to the employees to cope up the stress in the organization. And employees should be updated of today's technology is one of the major solutions to face the VUCA world.
6. Flexibility: The organization should be flexible to adopt the changes .they should be open for values, discovery, diverse perspective and experimentation.
7. Innovation: Innovation is the motive of today's generation. Is not only a priority is not only to increase the cost, profit, time and flexibility but also innovation should be the priority

Conclusion

We are certainly living in volatility, uncertainty, complexity and ambiguity world. For business to sustain in this world has to make themselves responsible for the growth. Change is inevitable in the industry and increased volatility in today's global environment has created even more problems to all the corporate sector people there are not able to cope up with the changes and they failed in their business .It is very important for the organization to expose themselves to see the various changes in the business environment and be ready to adapt themselves for change.Vuca is complex and challenging should allow true talent to emerge in all the levels of the organization. One of the important lessons of the vuca world is, the leaders should engage all employees in the organization in all level to gain more talent and trust for the organization and try to contribute themselves in the challenges that vuca poses. So the vuca challenges becomes the opportunities for them rather than risk or threat

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Financial Literacy and Health Awareness Among Tribes of Jharkhand : A Special Reference to Paharia Tribe

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ABSTRACT: *The conditions of Primitive tribes of India are of greater concern presently. They are the aboriginals of the land yet are the most suppressed one. They form a huge pool of resource to be utilized in a better way. Being majorly detached from the main stream population their condition of living is very poor, moreover, in many cases they still lead the primitive lifestyle as hunter-gatherers. They are far from developments and sense of wellbeing practiced by people residing in urban areas. Throughout India, different tribes are found in different locations. One of such state inhabited by tribal is Jharkhand- the land of 9 primitive tribes. One of such tribe is Paharia tribe. They are majorly concentrated in the hilly areas of Jharkhand. The socio- economic condition of this tribe is very low. But these tribes are of historical importance in modern society as they dwell in these areas since ages. This paper majorly aims to find out their approaches and awareness about the benefits in terms of schemes, initiatives etc that are floated by government for betterment of the residents of India of which they are no exception. Being away from the modernization, the paper aims to study, how much they upgraded their knowledge and practices on specifically financial aspects and health aspects. The paper tries to reflect the reasons behind the gap still hindering their development and bring out solutions for easy development and preservation of this particular tribe. A part from this the intrinsic aspect of this paper is to find out a way to manage this mass of people, who are away from mainstream population yet is a contributor in the economy, can be channelized to create more value and given a proper direction for their and nation's development.*

Keywords: Tribal, Paharia, Financial Literacy, Healthcare, development schemes,

List of Abbreviations

- PTG – Primitive tribal group
- PHC- Primary Health Center
- RMP – Registered Medical Practitioner
- LPS – Lower Performing State
- HPS – Higher Performing State

Introduction:

India is a land of diversity with different sets of language, culture, religion, caste, creed, community, climate, species etc. The Aborigines or sons of soil are one of the prominent aspects of this diversity. The aborigines, refer as 'Tribal', is defined in dictionary as 'the original or native inhabitant of the country'. They are the survivors of later prehistoric stages of evolution.

India has the largest tribal population in the world that comprises of about 84.4 million (approximately) [1]. The indigenous people of the country, known as 'Adivasis', constitutes a significant portion of population, nearly, 8.6% of the total population and 11.3% of the total rural population of India [2]. The concentration of Adivasis is majorly in Central and Northern part of India [3]. The term Adivasi was coined in 1930s under the influence of political movement to identify the particular group of people throughout the country. It is a name given to identify heterogeneous groups of indigenous people collectively. Later the aborigines were categorized and named as Scheduled tribes by the constitution [4]. These people are mostly away from the mainstream population and have particular sets of tradition, practices, belief, rituals etc and are mainly involved in cultivation, hunting gathering, fishing, wood cutting etc. They have the poorest economic conditions and government take special note on their development and preservation aspects. But the influence of modernization has endangered many of the Adivasi communities one of such primitive tribes is Paharia Tribes of Jharkhand. Jharkhand is inhabited by nearly 9 types of primitive tribes out of which Paharia is one.

The primitive tribes of Jharkhand:

Jharkhand, the land of 32 tribes, which constitutes the total Tribal population as 27 per cent of the Jharkhand population of 2.70 crore [10]. Out of these 32 tribes, eight are under primitive tribes or PTG ,

namely – Asur, Birhor, Birajia, Korwa, Parahiya (Baiga), Sabar, Mal Paharia and SouriyaPaharia, Few surveys conducted by NGOs, in the 5 BirhoreTandas in Giridih portraits the literacy rate among PTG is just 16.87 per cent while the state average literacy rate being 54 percents. It also depicts the average monthly income of PTG ranges between Rs. 500 and Rs. 1,000 [11]. Socially they follow primitive pattern of existence, their sheer dependence on nature for livelihood is also an example of this.

The Majority of the primitive tribal population groups in Jharkhand is in perpetual poverty and stands much below the poverty line, suffering from an alarming malnutrition and high illiteracy. Being close to nature , natural calamities affect their livelihood . They are facing threats not only in terms of natural calamities even modernization , immigration etc are also taking toll on their originality. The state government along with the district administration is making best possible effort in creating sustainable development programmes among them. After having been specially identified as the Primitive Tribal Groups by the Government of India on the basis of certain administrative criteria, these sorted out tribal communities mitigating their hazards and anxieties, consternations and tribulations in their life-situation. The paper will deal with a particular tribe amongst the 8 PTGs. i.e. Paharia tribe.

The Paharias: As the name suggests they are the dwellers of the hilly areas of Jharkhand. Godda, Palamou, Sahebganj, Devgharand few other scattered locations of Jharkhand are inhabited by the Paharias. Not only in the district of Jharkahnd ,Paharias also dwell in some parts of West Bengal and Orissa. The main occupation of the tribe is shifting cultivation and gatherings from forest [5]. The tribe can be mainly categorized with very minute difference in two types like SauriaPaharia and Mal Paharia. The languages that are used by the tribe are Malto, corrupt Bengali and near to oraon language. They are basically vegetarian [6][7]. This study is basically concentrated on the SauriaPaharia dwelling on the hills of Rajmahal and SundarPahari of Godda District of Jharkhand.

Nearly in Jharkhand the total Sauria population of Paharia Tribe is 46222 [8]. As reported by Financial Express, “SauriaPaharias are a race of Proto-Ostroid. Their main residential place was in the area of Karnataka”[9]. Since they mainly dwell in hills or pahars thus they are referred as Paharia. The condition of this tribe is very poor. They lack in all Human Development Indicators. A very few NGOs are working towards their development. But being too backward and neglected they have created an invisible barrier around them and hence it becomes difficult to access them and even make them aware or indulge them in any concept, aspect or activity.

The derogatory conditions of their social, economic, health conditions can be observed very prominently in the region of Rajmahal hills and Sundarpahari areas. Farming small lands and selling woods in local markets are the sources of income, food habits are highly non- nutritional. Recently Honorable Prime Minister has introspected the condition and have taken up pledge to develop them and align them with the main stream civilization.

Thus this study mainly focuses on the moto of bringing out the condition of Paharia tribe and pin point the areas where development is highly needed to preserve this primitive tribe from extinction.



Objective of the study:

The broader objective is mainly to portray the condition of a particular section of community and draw attention towards them and explore the prospective market.

- ✓ Understand the background of primitive tribes in Jharkhand with special reference to Paharia tribe
- ✓ Understand their approach towards daily life monetary aspects with respect to earning saving and investment concepts : financial literacy
- ✓ Assess the awareness of Paharia tribal about financial schemes available
- ✓ Understand the health concerns of Pahariatribals
- ✓ Ascertain the awareness of Paharia tribe about health, healthy habits etc.
- ✓ Assess the awareness of them on health schemes by government.
- ✓ Identify the gap in the awareness and causes for that.
- ✓ Suggest recommendations for creating effective awareness and development of this tribe
- ✓ Finding ways to engage themselves in mainstream work to aid to value creation

Literature review :

As stated earlier the Paharia tribes can be classified into two types. The first type being the Mal Paharia , they basically resides in the south eastern hills of Damin-i-koh and in the south-east of SanthalParganas of Jharkhand majorly apart from this they are found in Odissa and West Bengal too. The second type of Paharia tribe is SauriaPaharia , they mainly live in santhalparganas of Jharkhand. Mal and SauriaPaharia tribes are close and near tribal groups. Hinduism is the main religion prevailing.

Apart from the two types one more category of Paharias is Kumarbhag. The are basically dwelling in the Jharkhand, central former SanthalPargana district, Godda district, SundarPahardi block, Pakaur district except southernmost block. In West Bengal, Bankura, Barddhaman, and Murshidabad districts; In Odisha, Mayurbhanj.

This study specifically tries to focus on the economic and social condition, specifically health condition, of SauriaPaharias of Jharkhand. To the astonishment, the sauriyaPaharia being one of the types of Paharia tribes except Mal Paharia, not much studies have been conducted on them. Very few studies have been targeted towards the Mal Paharias, moreover not much study covers the Paharia tribes of Jharkhand. Glimpse of few studies relevant to the paper are noted as background to indirectly understand the condition of the other type i.e. SauriaPaharias as they are closely and nearly related.

One of the study conducted on the elderly Mal Paharias on quality of life projects the socio-economic and demographic characteristics of them and comparison between two districts Dumka and Godda. It states in Godda the family size is on average 6-7 members. The occupational and income aspect is very low amongst Mal Paharias, thus elderly people do not get sufficient attendance to their needs that can be a factor of poor health. The study also states that the health problems in Godda district are high among Paharias. The health problems identified in the study, apart from normal elderly diseases as arthritis, are cough, disability, filariasis, chest pain, malaria, diabetes, migraine, skin diseases and tuberculosis. [12]

Another study conducted specifically on SauriaPaharias of Godda District attempts to bring out the beliefs, culture , education, rituals, occupations and other aspects of life. The study shows the transition prevailing amongst the Paharia tribes. From the perspective of occupation and earning livelihood the transition is prominent. Previously the Paharias were dependent on hunter- gatherer system apart from that they used to practice shifting cultivation, fishing etc. but imposition of forest laws have forced them to re-think about their occupation. Thus the Paharias started residing on the slopes of the hills and in the plain land and engaged in settled agriculture. Nearly 35.33% are involved in settled agriculture. But the major issue face in plains is they have very small land for agriculture which is not sufficient to cover their livelihood for a year. Few of them have drifted to other jobs like 8% are in minor jobs in government/non-government offices, women works 4% as agricultural labor, 7.33% as daily labor and 2.67% in Anganwadicentres. About the health concerns the study depicts that presently they have become bit aware about the health issues thus they prefer to visit local allopathic or Ayurvedic doctors. [13]

A study held on 2011 have previously spoke about Paharia tribe socio economic and political condition . The study emphasized on literacy rate , population growth, sex ratio and household latrine. Needless to say the condition projected was very alarming.[14]



Research Methodology :

Location - The study has been conducted in Godda District of Jharkhand where majority of SauriyaPaharia resides. The total tribe is classified on the basis of their area of dwelling as in Paharia residing on the top of hilly forests or higher level, Paharia residing in the middle level forest i.e. middle level and the last Paharia dwelling in the plains. The Paharia living in the plains have higher chance of losing their originality due to different influence.

Godda is an integral part of Jharkhand presently due to the presence of coal mines in Rajmahal Hills in Lalmatia area. Before 1980s, Godda was fully covered by dense forests and was far away from modernization and was ignorant of the civilized attributes. After the discovery of coal mines in the hills the district came into lime light. Godda was marked as the most backward district by Indian Government and ranked as 250 out of 640 and thus receives grants from Backward Regions Grant Fund Programme (BRGF). The district consists of 9 blocks or Mandals out of which in this study 2 blocks are inhabited widely by Paharia Tribes.

The total population of Godda district is 1311382, the block Boarijhore has schedule tribe population as 67590 where 30 different tribes are recorded. Out of them Paharia tribe has total three types Mal Paharia, Pahariya and SauriaPaharia . Our study is on SauriaPaharia having population of 5698 [16]. The study considers 6 villages of nearly 7 -10 houses from the block Boarijhore. The area where study is conducted total number of family residing is around 200- 250 families.

Table 1
Location Structure

Name of the Block	Name of the Villages from each block	Distance from block HQ (in kms)	Distance from district HQ (in kms)
Boarijhore	Talbaria	4	58
	ChhotaBoarijhore	5	62
	Dobri	7	60
Boarijhore	Anamu	12	38
	Kasamu	9	35
	Bador	10	41

Sample Size – 20 family.

Sampling method: Non- probabilistic Snow ball sampling adopted.

Data collection: The study has been done considering both secondary and primary data. Secondary data has been extracted by different websites and from different papers. The primary data has been collected from visiting field with the help of Saathe , an NGO working for their development.

Structured questionnaire has been formulated both separately for financial awareness and health awareness and have been filled personally visiting them. There were 14 questions on financial literacy and

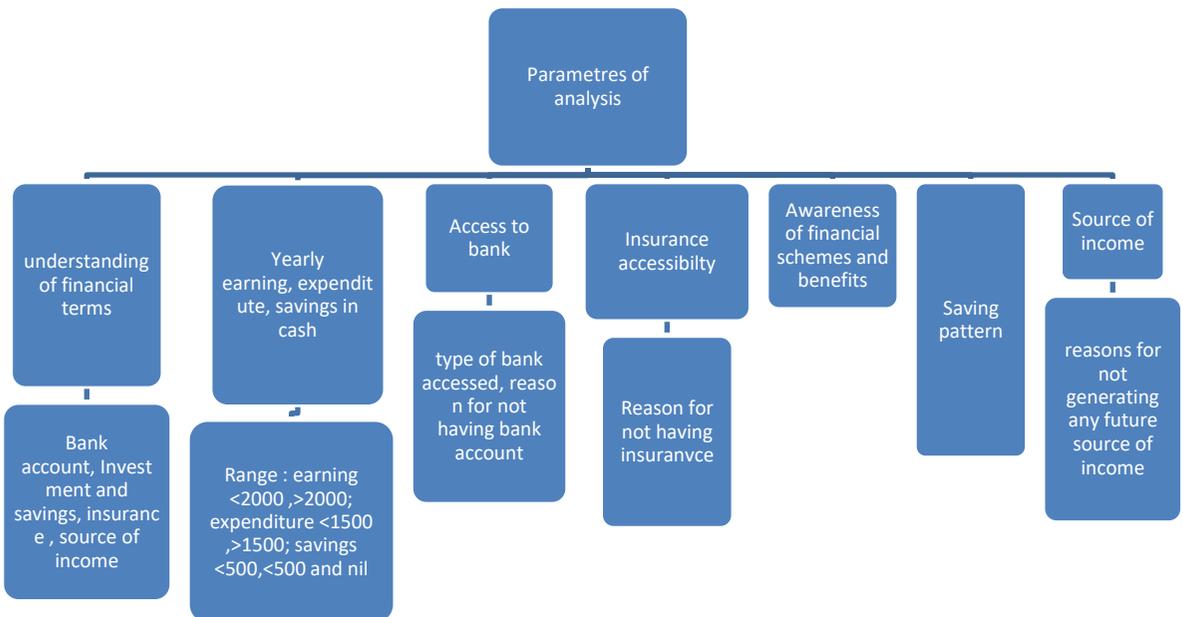
39 questions on health issues. Interview method was used along with questionnaire method. As Interpreter, two local people assisted us during total data collection session

Analysis for Interpretation:

Any information in its crude form will lead to ambiguity to give is a proper shape analyzing those data and interpreting them is necessary. Since the data were collected from people who are far from modernization and belong to very low socio-economic status ,it was tough to deduce other statistical tests . Percentage analysis is done to have a clear picture of their responses.

Base of any productivity of workforce can be enhanced and denoted by their education and health. Thus if these aspects are considered to understand then it will be easy to make them effective and efficient and will be directed towards value creation for the nation.

A. Understanding the Extent of financial literacy and reason out the gap if any
Financial Analysis:-



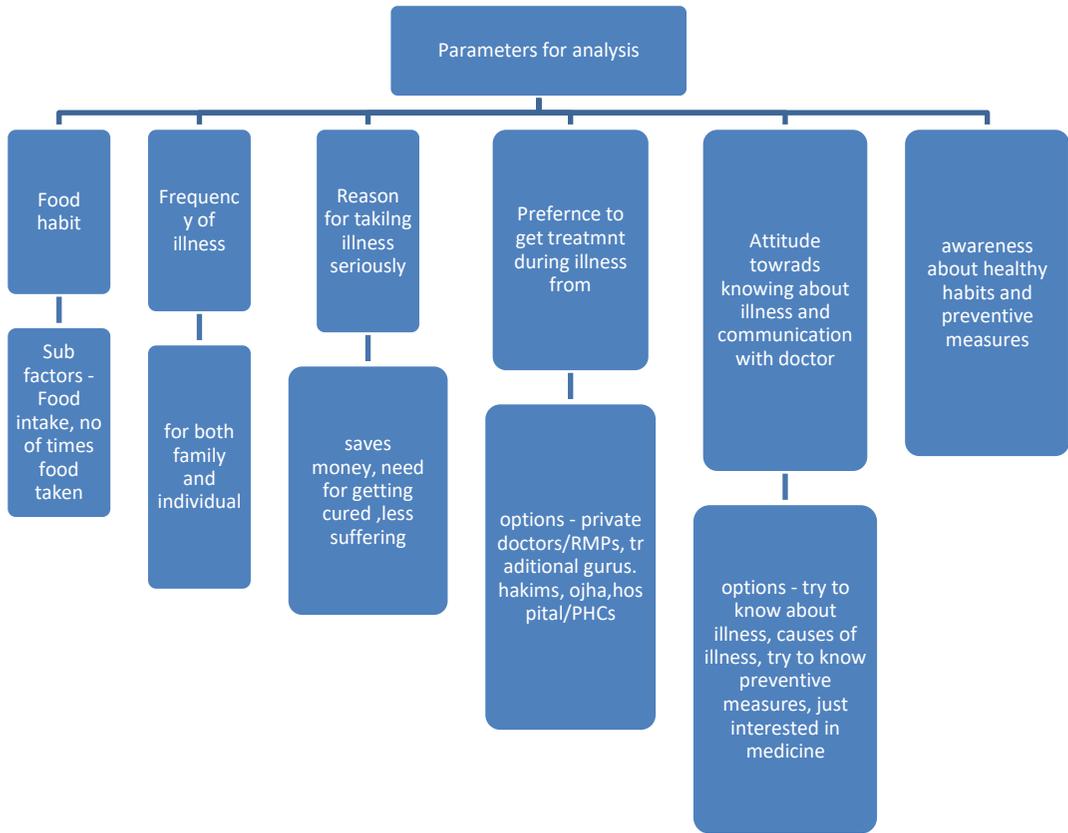
- 1. Understanding of Financial terms** - From the study it is observed that 55% of Pahariatribals respondents are aware of and understands the meaning of bank account and its functions. Related to that, 50 % of the respondents understand the meaning of investment and savings. Very few of them have any idea and understanding of the term source of money and Insurance. Lack of education and struggle for daily survival has made them detached from the world and information do not reach them.
- 2. Bank account access** -The study found that only 55%(11 out of 20) respondents has access to Gramin bank and has an account there in. Rest 45% (9 out of 20) do not have bank access. There are three major reasons behind not accessing bank account are found in the study ,like , first 66.67% of respondents says they don't have much money that they can save. Secondly, they are unaware about the bank and its actual functioning and how much credible they are i.e. 22.22%. They fear that is they are being cheated i.e. 11.11 %.
- 3. Yearly Earning , Expenditure and Savings in cash-** The earning of this tribe mainly comes from agriculture. They produce rice and other vegetables which they first use for their consumption and

there after the surplus they exchange for other necessary items, then the leftovers goods they sell for money. Thus very less amount of money they earn and they maintain their spending and savings accordingly. Majority of them do not have the habit and provision to save after expenditure made. The study showed that 50 % of the respondents earn less than Rs.2000 and rest 50 % earn more than Rs. 2000, while if we observe the expenditure is above Rs. 1500 for most people i.e 85%. Thus it can be understood that for most of the people(85%), lack of money restricts them to get into saving habit.

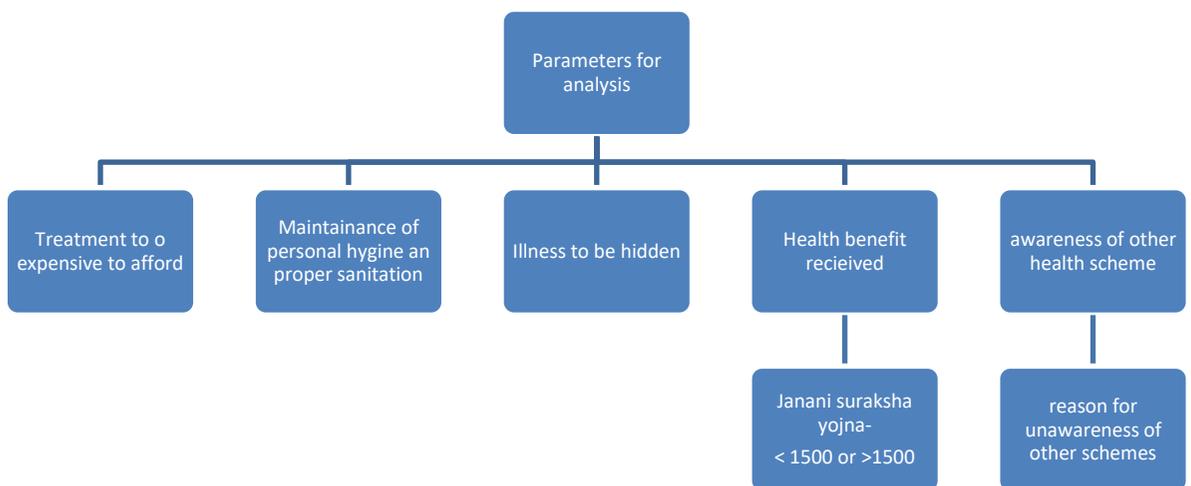
4. **Saving patterns and place of saving** - From the study it is found 65% of them do not save at all. Among 40% of respondents, those who save, 20 % of the respondents save at home and other 20% save at bank. 20 % of respondents save daily and 15 % saves once in a year others do not save . Thus it is understood that they lack habit of saving.
5. **Reasons for not having Insurance policy** - The study showed that majority of people donot understand insurance. The major reason for insurance failure among Paharia tribe is mainly unawareness. They lack contact with outer cities besides they have less educational base, thus they do not get necessary information about insurance and its benefit. 70% of respondents depict that lack of information as the main reason for insurance failure. 10 % of them reasoned, since they don't have steady income and also what they earn is very less to even conduct their daily activity, thus they do not have money to take insurance policy. The fear of fraud is very common among them, 15% of them opine this, and they have faced exploitation in many instances, with this. They have trust issues with anything that in new and out of their level of understanding. 5% of them are not at all interested to get insurance rather they don't even want to know the meaning and functions.
6. **Provision for creating source of income** - Creating a source of income from present income is one of the important aspect generating income. Investment in buying live stock or opening small shop or retailing of any product easily available to them can help them in developing their earning. But is it observed that 60 % respondents do not understand the concept of creating source of income and how it benefits them or how they can do it. Other 40 % of respondents who at least understand, do not have sufficient fund to think about it. They are mainly focused on daily survival and food intake.
7. **Lack of Financial schemes and benefit awareness** -Government floats different financial schemes for people of different economic strata to assist them in their economic development. But still many people, regions, states etc do not have information about them and thus are deprived of their benefits. Similarly, Paharia tribe being isolated from other communities has nearly negligible understanding about the schemes and benefits. They gets very few benefits of the schemes. The reasons being deduced from the studystates that major reason is no information provider, nearly 70 % of respondents opines this. Following this other two reasons as stated are monetary loss and no guarantee in receiving benefit, since they do not get full information and transparency about the process they lack the trust. For them monetary loss is a crucial factor.

B. Understanding of Health Issues and Awareness of Health Related Schemes.

Health and Health scheme Awareness -



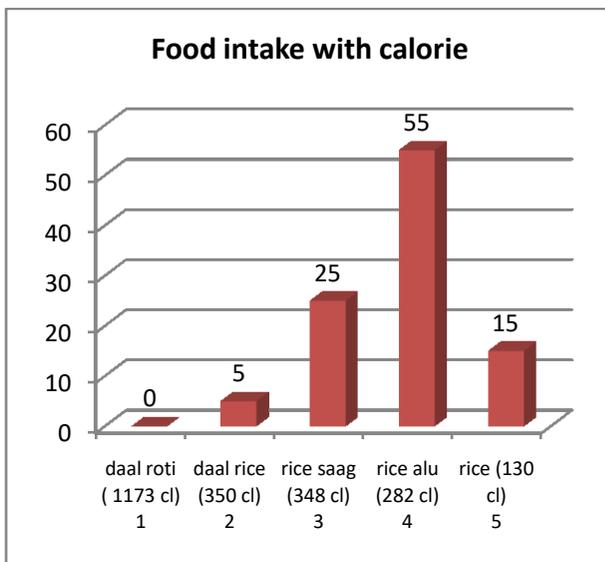
Contd.



1. Food Habit



(Fig.B1.1)

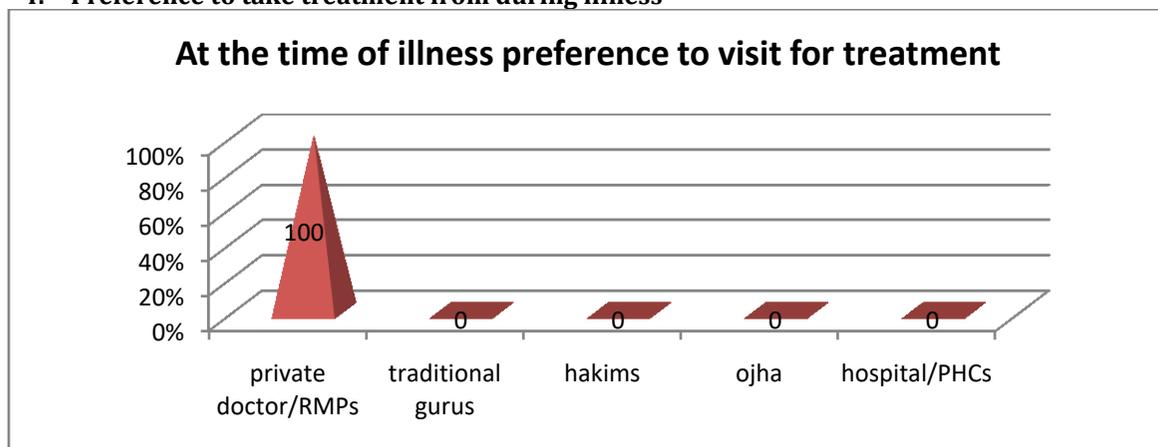


(Fig.B1.2)

The health condition of Paharia people are not much good as seen in the diagram. They suffer from malnutrition. According to national recommendation on the nutritional requirement, 2,400 kilo calories a day for rural areas and 2,100 calories a day for urban areas are needed for maintaining proper health [15], but for Paharias 70% takes food once in a day and 55% people take rice and potato which, if considered twice a day ,will lead to less than 1000 calorie per day far below the recommendation. Followed by 25 % rice and leafy vegetables and 15 % only rice and 5% daal and rice.

Not only these diagrams depicts health status it also gives a glimpse on economic condition of the tribe.

- 2. Frequency of getting ill both individual and family-** Study found that since the Paharia people suffers from malnutrition they are more prone to illness. 15% of them fall ill too frequently, 85 % people fall ill often, this shows the need for high medical assistance. Apart from normal flu , head ache , body ache may mostly suffer from Malaria and arsenic disease.
- 3. Reason for taking illness Seriously-**Despite their lack of education and low financial status they take illness seriously and try to opt for cure at the earliest. They gives out reasons and says to reduce suffering is the major contributor(45%) for taking illness seriously followed by need for getting cured(35%), as one day loss for them means a day food lost, thus they try to get back to work fast. Thirdly they believe early treatment will save money.
- 4. Preference to take treatment from during illness**



(Fig.B2)

These tribal people are very much concerned about their treatment of illness. They tend to believe and visit RMPs (Registered Medical Practitioner) who visit their villages. They do not access hospital as minimum distance of hospital or PHCs is 7 kms. They tend to avoid doctors as they do not pay much attention to them and have a biased behavior towards them. Doctor do not communicate well.

5. **Awareness about healthy habits and preventive measures** – The research showed since very few NGOs have taken initiative to help them learn healthy habits, moreover, in few villages WHO has intervened 50% of the respondents who belong to those areas where WHO is working found to be aware about these but 50% respondents belonging from those village where there is no such initiative taking place found that they hardly care about the healthy habits and prevention.
6. **Expense of treatment is high to afford** -50% of the respondents believe that the cost of treatment is high so they try to avoid getting treated. Since they have very less earning they tend to find remedies for illness at less cost. Even they also depend on home remedies for cure. Other 50 % says that they do not support this proposition.
7. **Maintenance of personal hygiene and proper sanitation**-It is observed that 50% of the people are concerned and maintain personal hygiene and sanitation. The villages that have been visited by WHO or by NGOs try to maintain these. But that's not true for the rest 50%.
8. **Illness needs to be hidden** - The study projects 60% of respondents believe that illness should not be hidden as it may aggravate the disease and if discussed more information can be gathered about remedies. But rest 40 % out of shyness and social taboo specifically for women supports that they should not be vocal about their illness. This may lead to loss in social status.
9. **Benefit received from any health scheme** -It is seen that all of the respondents(100%) have received benefit of the health scheme, JananiSurakhsyaYojna, floated by government to reduce infant and maternal mortality rate. The scheme assures cash assistance for institutional delivery. The scheme has specified the amount to be assisted on the basis of urban area -rural area and Lower performing state (LPS) – Higher performing state(HPS).[17]

Cash Assistance for Institutional Delivery (in Rs.)

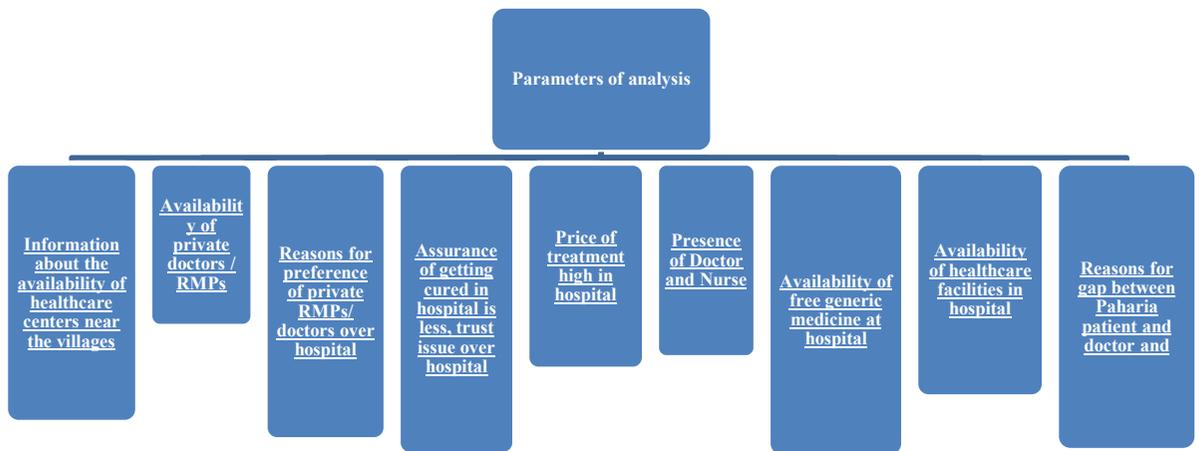
Category	Rural Area		Urban Area	
	Mother's package	ASHA's package*	Mother's package	ASHA's package**
LPS	1400	600	1000	400
HPS	700	600	600	400

It is observed from the response that they receive the benefit perfectly.

10. **Awareness about other health Schemes** -Cent percent of respondents says they are unaware of any other health schemes available. They reason out it as since there are no information provider thus they fear the chance of getting into trouble and getting cheated. The fear of unknown guide them. Thus the figure make sit clear that they no idea of schemes that government floats for their benefit thus cannot avail them.

C - Understanding of the Condition of Healthcare Units and Related Amenities along with PahariaTribe Attitude.

Condition of Healthcare units and related amenities



- 1. Information about the availability of healthcare centers near the villages** -It is seen from the study that there is no healthcare centre with in the vicinity of the villages. The condition of availability of healthcare units is not much satisfactory. Healthcare units are located beyond 3 kms and also there is only one healthcare unit. This shows they cannot access medical help at ease . Thus they have negative attitude for visiting hospital.
- 2. Availability of private doctors / RMPs**-The study shows that there is only one RMP doctor available to assist the tribal people in their illness if required while the people expect more than one doctor should be available such that in absence of one the other can treat.
- 3. Reasons for preference of private RMPs/ doctors over hospital**-From the research conducted it is clear that all of the respondents favors private doctors/RMPS though the reasons vary widely. Most dominant reason is the ease in accessibility ,45% respondents opines that. Since they do not have much conveyance facilities available carrying a patient is not easy. Other reasons for not preferring hospital are, lengthy process, ignoring attitude of doctor, absenteeism of doctors etc.
- 4. Assurance of getting cured in hospital is less, trust issue over hospital.**-The people have trust issue over the efficiency of hospital in treatment. Majority(90%) of respondents agree that hospital cannot treat well patients do not recover. The reason may be the inefficiency of doctor or amenities required hospital cannot provide and patient cannot buy from outside due to financial constraints.
- 5. Price of treatment high in hospital** - The study found that all of them believe that cost of treatment is high in hospital.The reason behind all of the respondent saying that is the hospitals there do not have any medical amenities thus tests has to be done from city. Apart from that they prescribe medicines to be purchased from outside. these increases the cost of treatment for them. Thus giving perception hospital is too expensive.
- 6. Presence of Doctor and Nurse.**-It is seen that attendance of doctor is less. According to the respondents whenever they have visited at any point of day, doctor is there. But Nurse always remains present and attend the patients.
- 7. Availability of free generic medicine at hospital**-Majority of respondents nearly 60 % accepts that free medicine are not available in the hospital. government have strictly made provision for free generic medicines for poor people at hospital but these tribal people do not receive that benefit as the healthcare unit do not keep much stock of it.
- 8. Availability of healthcare facilities in hospital** -It is seen that ambulance , bed is available in hospital. as stated by respondents there are nearly 10 beds, and the ambulance is of MamtaBahan scheme. The cleanliness is maintained in the hospital but other essentials like testing lab blood bank is not only unavailable in hospital but also in vicinity of 10 kms it is not there.
- 9. Reasons for gap between Paharia patient and doctor and nurse** -As the study shows ,the gap between the patient and the medical staff is the result of biased behavior of medical team and ego of

the tribal people. though few reasons cropped up while respondents .were interviewed. There is lack of voluntary communication from the doctor’s end, this leads patients to become more and more hesitant. For 80% of patients hesitant behavior poses restriction to communicate with doctor. 80 % respondents said that medical staffs have lack of interest towards their work specifically when it comes to helping them. According to 90% respondents the doctors speak very well with people with higher education but pay no heed to those who are less educated or illiterate this education based biasness increases gap more.

This study shows that the acceptance of the tribal people in mainstream human pool is tough and challenging.

Findings :

From the above analysis the following aspects got deduced are as follows:

- The economic condition of the Paharia Tribe is very pathetic. They struggle for maintaining a decent level of livelihood.
- The Paharia tribe is far from education and information about the outer world. Their life is confined within their territory .
- For the influence of NGOs and WHO they have started observing the people apart from tribal background. Thus they are having very minimum understanding about the financial terms. To be specific, as compared to their closed culture, there is great success on the part of the Government to reach out to them and at least motivated half of the population to have an bank account.
- The earning- expenditure – saving concept donot play a good role in their community. Since they struggle for the basic needs, these terms are too fancy for them. It is seen that the amount of expenditure is more than their level of earning leaving no scope for savings., rather they fall in trap of Mahajans as they borrow money. But their ignorance to the concept of creating future source of income creates more problem.
- Despite having ample scope for better living by availing the financial schemes those are dedicated for low income people by the government , this tribe hardly avail them due to the lack of information and fear of unknown.
- Insurance being one of the best financial benefit for any people be it in rural area or urban these tribal people are completely unaware of it. In today’s modern world of uncertainty and risk, insurance is the shield that provides protection. But Paharia people being totally ignorant of the benefits, become more vulnerable to miseries in terms of cultivation health and other aspects.
- About the Health aspect it is found that they do not have proper calorie intake thus suffer from malnutrition. Even with such less nutrition they had to work hard thus resulting in different diseases like body ache, arthritis, low hemoglobin, etc. Thus they tend to fall ill quite often. This reduces the productivity capacity. Even this poses threat to new generations as well.
- There awareness about healthy habits and preventive measures are there but how much that is applied is questionable as they tend to suffer from Malaria and diarrhea. This depicts despite knowing they do not practice them. Same for hygiene maintenance.
- Since they have very limited resource and they have less financial security and also is not literate enough they have high level of trust issues and also very skeptical about spending money even if for treatment. They fear that if huge loss occurs they will not survive.
- In many cases they fall prey to social taboo and stigma, thus avoid discussing illness resulting in worsening of the condition. But if they like to get treated they always prefer private doctors over hospitals or PHCs.
- The availability and accessibility of healthcare units are too troublesome. The healthcare units are located too far to aid any help to these tribal people plus they hardly have proper medication to sustain the patient unless moved to city hospital or other.
- Basis amenities like free medicine, tet labs etc. required for primary care is also not available. Moreover doctors do not consider them as they needed to get attention. There is biasness in treatment between this tribe and other people. This creates apathy towards the system.
- It is also found that presence of doctors and nurses are questionable. Mainly doctor is found hardly available in healthcare unit. Apart from that the number of medical staff is also less.
- They are also unaware of health related schemes that are available.

Findings :

The close observation during data collection reveals many other significant findings. They are as follows:

- The earning disclosed and living standard does not match in many of the villages.
- About their awareness of bank, most of them, who were in the interior villages, were aware about the concept of bank but were not ready to open an account due to trust issue.
- The villagers who were interviewed said that in case of emergency they borrow money from Mahajans with a high interest. Since majority of them are illiterate and they are not able to track the manipulation (if any) done by unethical mahajans, their loan hardly gets repaid and they have to give them from their produces to repay and trive on the residue.
- While surveying in the ChhotaBoarijnore coal mine area it was found that a 8 months pregnant woman who will not weigh more than 45 kgs was carrying a 40kgs coal chunk. On speaking to her it came out that she is a worker in that mine and she used to walk 1 to 2 kms carrying those chunks through steep roads. She cannot afford nutrients and rest as she needs to earn money, which is taking toll on the health of both.
- The hygiene factor that they are aware of does not get reflected in their habits. An incident would help to make this point clear, while interviewing a mother with her kid for this study she was asked to narrate the do's and don'ts. She was confidently saying that they wash their hands and raw food whenever they eat but then the kid was having a local fruit in her hand that she was eating fell on the ground her mother while speaking, picked up the fruit from the dusty ground and without washing deliberately gave it to her kid to eat. This incident shows that what they say and what they do is contradictory.
- Many NGOs and even WHO is trying to contribute into the development of many of the villages but yet they are far more away to receive the benefit.
- Representatives visit to make them aware but there are many fake people who exploit them in the name of those organizations. They revealed that they have been cheated by many people so they don't allow and trust strangers.
- On the observational part one more thing got very prominent that the Paharia Tribe is losing their basic characteristic. Since they have weak financial background they try to get it from wherever they can. In SundarPahari area the Paharia tribe is going through miscegenation. Few of the children there are not having the physical appearance and features as Paharia tribe. On interviewing it was revealed that women there are into prostitution for money thus the children's biological father are not always the actual Paharia but from different races. Racial Degradation will make the tribe extinct if their financial conditions are not stabilized.

Recommendations :

In the world of volatility, uncertainty, complexity, ambiguity (VUCA), value creation and development is the most challenging activity. Any contribution from any viable sources be it large or small has to be given importance at same level. This VUCA world calls for exploration of all feasible resources as well as if needed be creation of new ones , with optimal utilization of them , are essential. The paper is trying to project one of such feasible yet unexplored potential resource that can contribute to the value creation. The Aboriginals or the son of soils are resources that are not properly used in these years. The primitive tribe are on the verge of extinction. When a tribe becomes extinct along with that a culture, a language, a set of knowledge and potential resource dies. This is not desirable for any nation.

The Paharia tribe is thus the resource that the paper tries to establish. They require proper direction in every aspect. Being aboriginals they are far from social development. Thus these are the following suggestions how they can be utilized in value creation.

- ✓ First and foremost to derive benefit from anything it has to be prepared and molded according to need. These tribe needs attention in their fulfillment of needs. Government should take initiatives to provide assistance in fulfilling their basic need of food , education and health.
- ✓ They should be respected and treated equally with others and their fear of unknown will be erased off. Making them more confident and come out of the cocoon to learn something new. They fear threat to their originality thus they do not like to interact with other people. outside of their comfort zone.
- ✓ The tribe needs to be guided to learn to use their land and resources in such a way that will help them to create new source of income. They specially do shifting agriculture in hilly areas but they also have plain lands.

- Government should provide them with agricultural equipments and fertilizers.
- Government should appoint persons in each village to look after , educate and train them in utilizing agricultural equipments and fertilizer.
- ✓ Government may appoint financial advisors who will conduct different programs and try to educate them about different financial aspects that will increase the habit of investment to create more money and also saving.
- ✓ Education should be given at large extent. Each village should have a educational setting and then selecting an educated person from that village and appointing or providing job to him/her in the same village with the responsibility to develop that particular village. This will create job for them and also will motivate others .
- ✓ Since they are aboriginals and forest dwellers basically, their knowledge about forest produces are more. Information can be gathered from them and utilized to make something new. They can also be given training in forest based products like silk cocoon etc and utilize them to produce quality products and also not diluting their originality.
- ✓ They may be trained in making other products that they can sell and earn. They should be given a proper market where they can sell what they produce. Apart from that, their products may be exported and that may lead to economic gain.
- ✓ The Paharia tribe is been counted in India’s population but their productivity is very less. If they are educated , trained in different skills that will not only help them to eradicate their financial crisis but also will increase the per capita income of the nation aidig to addition in GDP growth of the nation.
- ✓ India was once the hub of medicinal plants .The Paharia people have some unknown knowledge about new medicinal plants in the forest and their uses. These information can be utilized in further Research and Development and creating some new medicines.
- ✓ Mainly they need to be paid attention to and assurance of development in education and health will help them to yield more .Proper direction and training may lead to greater contribution in the VUCA world.

Conclusion

The role of tribal people in value addition to the nation is quite promising. There is long way to go in terms of studying this particular tribe regarding their financial condition and behavior as well as their health and cultural practices and beliefs. The primitive tribes of Jharkhand are one of the most untapped areas for study. They have the tendency to keep their own cultural values, practices, habits, rituals, medicinal knowhow etc secret which are other way could be useful to the nation. The contribution of their primitive practices specifically in the field of medicine may prove to be useful in developing different medicines. They can be utilized in attracting tourists across the world and can create value to tourism industry. They constitute quite visible portion of the population. They are potential recourses for the economy. Thus if they can be educated, developed and helped to bring them to the main stream of the society with respect, they can be proved to be a boon for the nation.

Limitations of the study:

- The study is conducted on a particular district of Jharkhand and has targeted few villages of Paharia tribes in a single block. The study could have been more vivid if all the villages of all districts and blocks are considered.
- Amalgamation of the tribe with other races made it difficult to get the exact essence of them in many cases.
- Semantic barrier was a major issue while interacting, though the presence of interpreter was there but the gap in understanding of the question and the answers were prevalent.
- More extensive research study on this particular tribe can be conducted but time was a limitation.
- Access to them was really tough as most of them were unwilling and shy to interact. A few spokespersons from each village were vocal. But if each individual can be accessed and interviewed the result could have been clearer.

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A Multivariate Discriminant Analysis Technique to Predict Software Maintainability

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ABSTRACT: *Software maintainability is one quality aspect that takes the highest priority while evaluating the quality of software. Several research works have been performed in the recent past to investigate how maintainability levels of such Object-Oriented software can be improved further. Several open source software applications have been created using Object-Oriented(OO) technologies and there is a need to investigate these software systems for quality especially maintainability. Many research studies have shown that using design metrics give better predictions when compared with code metrics that are collected during the implementation stage. The objective of this research is to use an advanced statistical technique namely multivariate discriminant analysis on the jfreechart software and study the influence of certain design metrics on software maintainability.*

Index Terms—*Maintainability, Open Source Software, Object-Oriented, Design Metrics*

I. INTRODUCTION

Software maintainability has been a vital quality attribute that requires top priority while designing any software application. It has been an issue with proprietary software and this has become a concern while creating open source software too. Several research works have been done to evaluate the maintainability of open source software developed using OO paradigm. Most of them are predicting maintainability of the software depending on measures taken after the coding phase. Therefore, during this stage, it becomes difficult to improve maintainability. Instead, if the measurement of maintainability is done during the early phases of SDLC, especially during the design phase, this would help in enhancing maintainability to the next acceptable level. In this research, an effort was done to understand the impact of a few metrics on software maintainability using the multivariate discriminant analysis technique. To achieve this objective, certain key design metrics were extracted from a popular open source charting application jfreechart using the JDepend tool [12].

Several OO design metric suites have been researched and validated in the past literature. The performed case study demonstrates the relationships between design metrics proposed by Martin[10] and maintainability. The rest of the paper is organized as follows. Section II surveys the related work. Section III explores the case study design. Section IV highlights the multivariate statistical analysis performed with results and discussion. Section V highlights the important observations and conclusions. Section VI draws further directions.

II. Related work

Misra's[9] work found that coding and design metrics can be used as indicators to predict maintainability. The MI metric[3] has received considerable attention in the past and has also been validated in many research works. Welker [1] validated the MI and gave his observations on the practical use of MI in determining maintainability.

Currently, predictive models are being built using design metrics. These models help designers to make the necessary design or coding changes in their software applications. Yuming et al. [5] investigated the relationships between certain design metrics and maintainability of java open source software. Thwin et al. [4] have applied the concept of neural networks in estimating software quality using object-oriented metrics. Zhou et al. [6] proposed a modelling technique Multiple Adaptive Regression Splines to build software maintainability prediction models. Aggarwal et al. [7] developed a model ANN (Artificial Neural Network) for predicting maintainability using OO metrics. Muthanna et al. [14] performed a study to investigate the use of design metrics to estimate the maintainability of software using statistical methods. Elish et al. [17] have performed an empirical comparison of three metric suites (Martin, MOOD and CK) for

fault prediction in pre-release and post-release of faults in packages of OO systems while taking Eclipse IDE as a case study. Madhwaraj [18] has performed a comparative study between two Object-Oriented metric suites and found that prediction models obtained from the Martin suite were performing better than prediction models obtained from other metric suites. Madhwaraj [19] has also performed a case study on jfreechart software and proposed a predictive model for maintainability.

III. The case study

This section provides information on jfreechart and also describes the dependent and independent variables that were investigated.

III.1 About jfreechart

jfreechart is a charting application that is downloaded from open source repositories with maximum downloads per week. The significance of the selection was to investigate the evolution of an open source software system written with java language. Fifty Two (52) versions of jfreechart were taken for the case study.

III.2 Dependent Variable and Independent Variables

The Maintainability Index(MI) is used as a dependent variable in this study. This is a code metric which is used to measure maintainability[2]. The MI for all 52 versions of jfreechart were extracted to study the relationships between design metrics and MI. The first inference from the MI of all 52 versions is that most of the software versions had very poor MI. The design metrics of the Martin suite were taken as independent variables.

IV. Multivariate Statistical analysis results and discussion

This section introduces advanced statistical techniques namely discriminant analysis and factor analysis that were performed with the design metric dataset extracted from jfreechart software.

IV.1 Multivariate Discriminant Analysis Technique

This is a technique that is used to study the differences between two or more groups with respect to certain variables. The linear discriminant function is given by

$$D = L_1.X_1 + L_2.X_2 ++ L_k.X_k$$

where X_i 's are the variables that are predicted, L_i 's represent the coefficients in discriminant function, and D is the value of the function of a specific element. If this value is greater than the critical value $D^* = (\overline{D1} + \overline{D2})/2$, the element would be classified in Group I, else classified in Group II. In the present case study, there are three groups of software versions namely versions with low MI (Group 1: $n_1=58$), software with medium MI (Group 2: $n_2=194$), and software with a high MI (Group 3: $n_3=48$).

The seven important parameters for the analysis are the design metrics that have already been defined in section III. It is very evident from Table 2 that except Ca & Ce metrics, all the other five design metrics differ significantly between the two groups of software.

A canonical discriminant function is fitted as follows :

$$D = -18.823 + 1.152 CC - 2.591 AC - 0.264 Ca + 1.765A + 17.013 I + 15.142 D$$

Table 1 - Mean Score

S.No	Parameters	Mean Score	
		Software with lower MI-Y1 ($N_1=17$)	Software with higher MI - Y1($N_3=17$)
1	CC	6.065	4.230
2	AC	0.000	1.470
3	Ca	1.099	2.606
4	Ce	1.099	2.606
5	A	0.059	0.060
6	I	0.028	0.243
7	D	0.971	0.730

Table 2 - Tests of Equality of Group Means Univariate ANOVAs

S.No	Metrics	Wilk's Lambda	F (DF=1,32)	Sig
1	CC	0.456	38.104**	0.000
2	AC	0.191	135.423**	0.000
3	Ca	0.330	64.981**	0.000
4	Ce	0.330	64.981**	0.000
5	A	1.000	0.000	0.984
6	I	0.156	172.711**	0.000
7	D	0.175	151.249**	0.000

*- Significant at 5 % level **-Significant at 5 % level

The test functions that were used in this analysis are listed below :

Eigen value : 10.571

Explained variation : 100%

Wilk's Value = .085

Chi-square = 71.006**, Degrees of Freedom = 6 ; p value = .000

Canonical Correlation : 0.956

IV.1.1 Classification of Individual Software Versions

The software versions are classified and the correct percentage of classification can be observed in Table 3. Out of 17 software versions that possess lower MI, all versions (100%) were correctly classified. Another set of 14 software versions that have high MI, 18 software versions (94.1%) were also correctly classified.

Table 3 – Classification by using discriminant function

Exporters with	Using the Discriminant Function fitted Exporters are classed as		Total
	Software with lower MI-Y1 (N ₁ =17)	Software with higher MI -Y1(N ₃ =17)	
Software with lower MI-Y1 (N ₁ =17)	17	0	17
Software with higher MI -Y1(N ₃ =17)	1	16	17

Therefore, the percentage of correct classification is (33/34)*100 % or 97.1% of original cases being correctly classified. This shows that we have arrived at a good model by discriminating two software groups.

IV.1.2 Relative Importance of the Predictor variable

The relative importance of predictor variables and the obtained results are depicted in Table 4.

Table 4 - Importance of Ratios in discriminating between the groups

Metrics	Importance of the variable (I _j)	Relative Importance (R _j)	Rank
CC	2.1143	18.2	3
AC	3.8088	32.8	1
Ca	0.3977	3.4	5
A	0.0021	0.0	6
I	3.6528	31.4	2
D	1.643	14.1	4
Total	11.6187	100.0	

In table 4, three design metrics namely AC, I and CC are substantially important attributes when comparing software groups with lower MI and higher MI.

IV.2 Factor Analysis

This is a multivariate technique that is used to reduce large variables to smaller variables called factors. Using all the eight design metrics including MI, the results of factor analysis are presented in Tables 5 and 6.

Table 5 - Factors getting rotated

S.No	Metrics	Factors		Communality
		I	IV	
1	CC	0.050	-0.963	0.930
2	AC	0.919	0.313	0.943
3	Ca	0.835	0.078	0.704
4	Ce	0.972	-0.008	0.945
5	A	0.056	0.228	0.055
6	I	0.943	0.295	0.976
7	D	-0.961	-0.237	0.980
8	Y1	0.523	0.811	0.931
Eigen value		4.579	1.885	6.463
% of variance		57.235	23.558	80.793
Cumulative % of variance		57.235	80.793	

Table 5 gives the rotated values for factors, communality values, eigen values and the amount of variance explained by the factors. Out of the eight metrics, 2 factors have been extracted. These factors explain the total variance to the extent of 80.793 %. Later, rotation was performed to improve interpretability. Varimax rotation was performed on this dataset, the results are shown in Table 6.

Table 6 - Clustering of Variables into factors

Factor	Metrics	Rotated factor loadings
I. (57.235%)	AC	0.919
	Ca	0.835
	Ce	0.972
	A	0.056
	I	0.943
	D	-0.961
II. (23.558%)	CC	0.930
	Y1	0.931

The six metrics AC, Ca, Ce, A, I and D formed factor I that accounts to about 57.235% of the total variance. The two metrics CC and Y1 formed factor II that accounts to about 23.558% of the total variance. We found both these two factors, consisting of eight variablesexplained 80.793 % of the total variance.

Important observations and conclusions

From the case study that was done with the jfreechart software, it is observed that almost all the metrics are influencing the prediction of maintainability. Discriminant analysis and Factor analysis are other multivariate statistical techniques that help in studying the influence of design metrics on quality parameters. Apart from multiple regression that was done in earlier research works, these techniques as mentioned above are also ways or better choices to understand the influence of metrics on any quality attribute.

Further directions

Discriminant analysis and Factor analysis can be used with different OO metric suites apart from the Martin suite. This will give final inferences on what type of metrics are important in OO to design maintainable

versions in the near future. This will help software designers to make the necessary changes in their software design and generate software with better maintainability.

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IMPACT OF ADVERTISEMENTS ON CONSUMER BUYING BEHAVIOR: AN ANALYTICAL APPROACH

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ABSTRACT: Ads have been utilized for a long time to impact the purchasing practices of the buyers. Promotions are useful in making the mindfulness and observation among the clients of restorative items; both of these factors are deadly blend to impact the purchasing practices of the customers. This specific research was led on the 273 male or female who utilize diverse brands of makeup to check the impact of ad on their purchasing conduct while making the mindfulness and building the discernments. Multiple regression investigation were utilized to recognize the connection between these factors. The outcomes uncovered the better approach to chiefs to devise reasonable system for the promoting of corrective items. These outcomes demonstrate that notices are extremely helpful in making the mindfulness among the general population however they are neglected to assemble solid discernments in the psyche of purchasers. All these factors will inspire the buyer to purchase a specific item, as there is a positive relationship present in the middle of them.

Keywords: Consumer Buying Behavior, Advertisement, Amusement, Familiarity

Introduction:

Today no one can escape from the wide impact of broad communications (papers, TV, promoting, recordings, films, bulletins music, motion pictures, magazines, and the web) and so forth. Among the entire advertising apparatuses, the publicizing is recognized for the proceeding with effect on the eyewitness' psyche as its effect is more extensive. Fundamentally ad is an apparatus of the limited time blend that incorporates the 4p's of the promoting blend just as Product, Value, Place and Promotion. Presently multi day's ad is an extraordinary hotspot for advancing the business in the entirety advertises. The outcomes of notice keep on quickening by consistently. Notice use to develop the item's solid picture in purchaser's psyche. Publicizing has turned into an indispensable issue and researchers brought up that intrigue of promoting is the principle thought of a notice, and to get the consideration of the crowd. Presently in twenty first century the messages can be conveyed by various methods of media that comprise of paper, radio, magazines, mail arrange, standard mail, outside displays etc.

Publicizing is a method for correspondence to support a crowd of people for settling on buy choice about an item or administration and passing on data to watchers. It is considered as an indispensable and basic component for the financial development of the advertisers and organizations (Ryans, 1996). Promoting is normally a paid type of introduction or on the other hand advancement by some support that spans through different conventional media, for example, TV, paper, business radio ad, magazine mail, open air promoting or present day media, for example, online journals, sites and instant messages (Ahmed and Ashfaq, 2013). Advertisers have constantly adjusted to changing business requests with regards to making new notices. The utilization of promotions has altogether expanded in the 20 Century as industrialization extended the supply of made items. Be that as it may, relatively few organizations working on promoting at the time. Amid the late 80s notices were genuinely restricted to TV, radio, boards and papers. In the cutting edge times, organizations are inclining towards Digital Advertising.

Organizations are so engaged in internet based life and portable ads that they may assume control Television notice soon. In Bangladesh, the pattern of Digital Promoting is simply on the blossom. Most huge nearby and global mammoth organizations are presently rehearsing computerized showcasing going all out. The real point of publicizing is to affect on purchasing conduct; be that as it may, this effect about brand is changed or fortified as often as possible through individuals' recollections. Recollections about the brand are framed by affiliations that are identified with brand name in buyer mind (Khan, Siddiqui, Shah and Hunjra, 2012). These brands persistently impact thought, assessment lastly buys (Romaniuk and Sharp, 2004). Consumers purchasing conduct has dependably been given to such an extent significance and space in the writing investigation of effect of promoting with respect to its adequacy (Ajzen, 2002). More often than not shoppers purchasing conduct relies upon enjoying or hating of purchaser towards the notice of the item promoted (Smith et al., 2006). A decent quality notice is probably going to impact shoppers into purchasing that item while a low quality ad will do the inverse.

Past investigations have been led on adequacy of ad and on notice's effect on buyer purchasing conduct which delineated positive connections. Be that as it may, in this paper we have presented a mix of various factors and endeavored to inspect their impact on customer conduct. This paper plans to figure out which of these factors conveys the most significance as far as affecting purchaser conduct and which of these factors conveys less huge effect. This will assist advertisers with focusing on the correct factors and accomplish greatest profit by their promotion.

Review of Literature:

Excitement has been one of the essential criteria for making an ad. Stimulation is utilized as an instrument to pick up consideration of clients. A fascinating and engaging advertisement is bound to be recalled by shoppers instead of an exhausting one. Along these lines, it tends to be said that excitement expands the adequacy of publicizing. That is the reason numerous organizations are contributing a great deal of cash to make ads that are silly (Mandan, Hossein and Furuzandeh, 2013). Previous investigations propose that excitement in promoting creates consumer loyalty (Chang, 2006). This case was tried by later observational investigations. For occasion, Duncan and Nelson (1985) directed an exploration on how amusement in ad influences shoppers. They investigated 157 reactions towards publicizing and found that engaging promotions can impact customers. It impacts purchasers into tolerating and devouring the item (Duncan and Nelson, 1985). Essentially, Chang (2006) researched about engaging commercials and its effect on purchaser fulfillment and leave affect on their conduct aims. In light of his exploration on 152 members, he found that engaging publicizing can decidedly build customers' fulfillment, subsequently impacting customer purchasing conduct.

In spite of the fact that utilization of cleverness in notices can be dangerous now and again as an expansive number of individuals may not be engaged by a similar idea. Gulas and Weinberger in their book say that a fizzled endeavor to engaging advertisements is a lost chance to associate with shoppers. It might even annoy purchasers and push them away. They have exemplified this hazard with a 1999 Super Bowl ad for 'Only for Feet'. It demonstrated a gathering of white men following a shoeless, dark Kenyan sprinter who was medicated and constrained without wanting to wear a couple of running shoes (p. 174). The promotion was met with monstrous shock (Gulas and Weinberg, 2006). Nonetheless, engaging notices don't really mean hilarious promotions. Exciting, brimming with tension ads can likewise be considered engaging. One of the greatest instances ever is the Apple super bowl business "1984". It left individuals awestruck and it was quickly ready to get consideration of individuals. It was extremely compelling as far as spreading news about another time of PCs. It additionally had an immense part in creating deals for the organization. Harvard educator Teixeira has directed a fascinating examination on this respect and composed a paper "Why, When and How a lot to engage customers in ads?" The investigation depends on a facial following examination (programming used to follow the facial feelings) because of the TVCs. This is a first of its benevolent investigation and is the most recent (Teixeira, Picard and Kaliouby, 2013).

Teixeira found that diversion plays both a co-working and a clashing job, contingent upon its sort (i.e., area in the promotion). Diversion that is related with the brand is co-working, as it goes about as an influence gadget both in the intrigue and buys stages. Amusement that isn't related with the brand demonstrations overwhelmingly as a fascination gadget at the intrigue organize, in this way in a roundabout way coordinating yet additionally specifically clashing with a definitive objective of the promotion. The past research as furnished us with different data about the effect of stimulation on purchasers. It supposedly influences purchasers emphatically by catching their eye and making an enduring impression. Be that as it may, at times the effect was negative. In this examination we will endeavor to see whether these fluctuated impressions about engaging commercials truly have any effect on buyer's purchasing aim.

Alba and Hutchison (1987) characterized commonality as the quantity of item related or benefit related encounters that have been assembled by the buyer. These related encounters incorporate immediate and backhanded encounters, for example, introduction to commercials, associations with salespersons, informal contact, preliminary and utilization. Johnson and Russo (1984) saw recognition as being commensurate with information. Johnson and Kellaris (1988) have considered experience contributing to commonality. Survey of the writing demonstrates that learning; knowledge and recognition are nearly interlaced. Following Alba and Hutchison's (1987) definition, mark commonality is distinguished as the aggregated associated encounters that clients have had with a brand (Ballester, Navarro and Sicilia, 2012). The impact of brand commonality can be seen through a procedure called 'Item class prompts'. The item class or subcategory to which the brand has a place could fill in as a sign as a rule. A shopper may need a "natural product juice" to have with a dinner. Research on order forms has perceived the significance of

"prototypically" as a sign of the quality of relationship between a classification idea and individuals from the class (Rosch, 1975; Medin and Smith, 1981).

Prototypically of a brand is known as a proportion of how delegate the brand is of its item classification. Operationally, prototypically is estimated by people's appraisals of how "great a model" they think about the object of a class. Brands that are prototypical are bound to be reviewed quicker and all the more every now and again (Nedungadi and Hutchinson, 1985; Barsalou, 1985; Rosch and Mervis, 1975). This prompts a higher likelihood of being incorporated into the evoked set and to higher likelihood of decision. Zajonc (1968) in an examination has shown that experience to a boost can improve the affection for that upgrade autonomously of psychological assessments or logical affiliations. Essentially, this surge of research has affirmed that influence is a straight capacity of the logarithm of introduction recurrence (Harrison, 1977). Along these lines, as presentation to a brand increments, full of feeling responses to the brand turn out to be increasingly positive. It implies the more a brand is uncovered through notices and battles, the more introduction it gets, which in the long run prompts greater recognition of the brand.

Zajonc and Markus (1982) propose that recognition may prompt formation of positive impression of an administration or article. At the point when stood up to with a commonplace administration or brand, the purchaser may feel a sparkle of warmth and closeness. Nature with the brand along these lines makes a feeling of reliability in customer's psyches. The past specialists have all recognized how nature towards a brand causes a mental change in the psyches of the shoppers. It is seen that nature for the most part summons positive feelings about a brand on the shopper's psyche. This paper will endeavor to see if these adjustments in the brain research, in the end lead a customer to buy an item or not. Promotions for the most part have impact on how we see things around us. Through different kinds of notices, particularly TVCs depict how a client of a certain item is or ought to be. It once in a while demonstrates the social class the client of an item has a place with, their way of life and frames of mind.

In instances of excellence item this idea is very pertinent. In an examination led in 2009 it was seen that one of most compelling thoughts spread by the media is society's impression of excellence and engaging quality. The thin lovely lady and the good looking solid men are seen all over the place. What's more, as the impact of media expands, the strain to clutch these beliefs builds (Russello, 2009). In 2008, the YWCA USA distributed a report, Beauty at Any Cost, which featured the results of the excellence fixation on ladies and young ladies in America through media. This sentiment of instability and fixation is particularly liable to trigger buy of magnificence items (Britton, 2012). The broad communications is the most dominant approach to spread these pictures that speak to socio-cultural standards (Tiggemann, 2003). Publicizing advance social messages and way of life by outlining the situation of perfect shopper and animates purchaser's readiness to buy (Pollay and Mittal, 1993). Aside from the excellence business, another incredible case of social picture that is exclusively made by ad is the brand "Rolex". It isn't really the best item in the market nor does it add a great deal of convenience to one's life in this day of mobile phones. In any case, through its watchful advertisement situations they have picked up the fascination of millions. They have focused on games and club individuals from the world class and depicted them in their commercials. They have recognized how the way of life of a perfect client of their item is, the place they live, where they hang out, and so forth. In a way they have sent a subliminal message to the general population that 'Rolex' is just for the rich furthermore, advanced, it is the thing that separates an individual from the common. Rolex is presently even more an economic wellbeing instead of a period GPS beacon. Subsequently, an individual who has all of a sudden turned out to be rich would need to purchase a Rolex just to have a feeling of having a place in that 'first class' class.

Earlier examinations have demonstrated that stereotyping and order of a specific sex or gathering of individuals' affects mass populace. Individuals feel pressurized to look a specific method to get a sentiment of having a place. This may have both positive and negative effect on the general public. Be that as it may, in this exploration, we will concentrate on discovering in the event that 'social imaging' in a notice is fruitful in influencing individuals to buy an item by actuating their longing to have a place in a specific social class.

Promoting spending can have an impact in the purchasing conduct of individuals it could be said that the more cash went through can be connected with the nature of commercial also, the recurrence of notice. It might bring about making an enduring impression in purchaser's psyche. Publicizing is an essential extraneous prompt flagging item quality (Milgrom and Roberts, 1986). Overwhelming promoting spending demonstrates that the firm is putting resources into the brand, which implies the association has a tremendous speculation and therefore suggests that they may have a superior nature of item (Kirmani and Wright, 1989). Likewise, publicizing spending levels are great markers of not just high caliber yet in addition great purchases (Archibald, Haulman and Moody, 1983). Yoo, Donthu and Lee (2000) analyzed the effect of

the showcasing blend factors on shopper conduct. The methodology centers around the circuitous impact of these determinants on brand steadfastness. Since promoting spending influences desires for item or administration quality in customer's brain (Kirmani and Wright, 1989; Yoo, Donthu and Lee, 2000; Moorthy and Zhao, 2000), its job ought to be in a roundabout way connected to mark dedication suggesting that instead of the promotion itself, it is the ticket promoting influences client impression of the firm that is progressively basic in affecting purchaser purchasing conduct (Ha, Janda and Muthaly, 2011).

The prior examinations have presumed that when a colossal total is spent on commercials and other advertising efforts customers started to anticipate more from that specific brand. It makes and dream of better nature of item or administration from that mark. In this investigation, we will endeavor to discover that how these affiliations that shoppers make with 'Ad Spending' and the 'Brand' impact their buy choice. At the end of the day, we will endeavor to discover how buyers see ad spending and on the off chance that it at last impacts them to buy the item. Customer purchasing conduct alludes to the techniques included when people or gatherings pick, purchase, use or discard items, administrations, ideas or encounters to suit their requirements and wants (Solomon, 1995). A conduct that buyers show in looking for, paying for, utilizing, assessing and discarding items and administrations that they think will fulfill their necessities (Schiffman and Kanuk, 2007). It is a union of three fields of sociology, they are, singular brain research, societal brain science and social human studies (Ramachander, 1988). A hypothesis that answers what, why, how, when and where an individual makes buy (Green, 1992); it is especially critical to contemplate the subject of shopper purchasing conduct as it encourage firms to design and execute predominant business procedures (Khaniwale, 2015).

In this exploration we will endeavor to discover what factors impact buyer purchasing conduct. In past examinations certain factors were found to have an effect in buyers. These days, individuals approach the unending supply of notices. In any case, they extravagant something new, engaging and something that can get their consideration. Exhausting promoting won't continue in buyers' brains sufficiently long. Thusly, stimulation has been named as a noteworthy promoting system for expanding promoting viability and begging them to influence a buy (Madden and Weinberger, 1982). Commonality made by ad for a specific brand is likewise a vital factor that influences customer purchasing conduct. Macinnis and Park (1991) did a ponder with buyers to research the impacts of commonplace tunes in publicizing and shopper conduct. In their examination, buyers delineated fulfillment for items with recognizable tunes and a critical relationship was affirmed between the dimension of commonality of the tunes in the publicizing and its agreeability.

Social job and picture mirrors that promotions impact singular way of life and the degree to which an individual tries to show him or herself in a socially worthy way. Notwithstanding moving items and administrations, advertisements move picture and way of life. Customers find out about new way of life, picture and pattern through promotions (Pollay and Mittal, 1993; Burns, 2003). Publicizing advance social messages and way of life through showing the situation of perfect purchaser and animate social activity toward buy of that item. Promoting spending likewise makes positive impression about a brand in the brains of the buyers. Aaker and Jacobson (1994) additionally locate a positive relationship among promoting and saw quality. Henceforth, publicizing spending is emphatically identified with seen quality, which prompts more prominent measure of procurement from that mark as customers by and large want to buy from a surely understand mark so as to maintain a strategic distance from dissatisfactions over quality. From the review of literature following hypotheses have been generated:

- H1: Entertainment is having significant & positive impact on consumer buying behavior
- H2: Familiarity is having significant & positive impact on consumer buying behavior
- H3: Social Imaging is having significant & positive impact on consumer buying behavior
- H4: Advertisement spending is having significant & positive impact on consumer buying behavior

Objective of the Study:

- To study the impact of advertisement on consumer buying behavior

Research Methodology:

This investigation required an organized and unmistakable arrangement to recognize the connection between various factors and test speculations. Hence, this exploration was led following the formal research structure. The information accumulation method utilized in this examination included playing out a very close gathering with the respondents who are shoppers of any item or have been presented to any kind of ad. The survey was arranged and passed on to target respondent self-assertively. All together for the exploration to convey a sensible outcome, the information must be included countless. Henceforth, the overview was led among 273 purchasers.

As the exploration system demonstrates, there are four autonomous factors and one ward variable. So a modification in the autonomous variable will change the subordinate variable. As such, to look at the exploration questions and test the hypothesis a Causal survey is required. This investigation is centered around discovering the effect of promoting on buyer purchasing conduct. This paper additionally illuminates the structure of an association among the free and ward factors. In this way, this examination can be considered as Causal research. Logical research demonstrates an association among variables and furthermore the course of the relationship.

The inspecting technique that was utilized in this exploration is simple random sampling. Understudies, experts and matured individuals were considered for the study. The information was for the most part gathered among the general population from various parts of Kolkata, which is the capital of West Bengal, India. The majority of the components contemplated are assessed in multi-things scales which made in 5-point Likert scale with 1 delivers solid difference to 5 addresses determinedly concur. Multiple regression analysis has been conducted to find out the result of the study.

Data Analysis & Findings:

The advertisements impact on consumer buying behavior is having a Cronbach's Alpha eventual outcome of .897. From the outcome, analyst has portrayed that this current Cronbach's Alpha outcome tasteful and in like way the expert have driven the further examination. Cronbach's alpha has been utilized to quantify inward consistency of outlines and saw to be solid and attempted and genuine. Despite how the respect is well above, 0.70 so from the above information, specialist can induce that the Cronbach's Alpha outcome is excellent and in like way the genius can continue with the further examination(George &Mallery, 2003).

With the genuine target to ensure about the examination instrument and besides the information aggregated, realness is checked. For this examination, go up against realness, content validness, discriminant and concurrent credibility were checked for validation of the instrument. In face legitimacy inspectors pick if their instrument is satisfactorily certified to assess what is expected to check and this is finished by totally trusting in the genuineness of the instrument. With the genuine goal to support the instrument, academicians, pros and potential respondents were shown the overview to all around survey and separate the substance.

Content that was unfit and may have caused issues later on was erased or balanced. In substance legitimacy the substance of the audit was completely checked and encouraged with the theoretical structure. Three solicitations were killed resulting to looking at the substance with the ultimate objective to ensure that the instrument is significant. Thusly, here both face and substance genuineness has been checked. The make validness contains concurrent and discriminant realness.

Here between the unmistakable factors of the segments is having the solid co-affiliation coefficient and a far reaching some portion of the co-affiliation coefficients respects are in higher degrees. Thusly, here it displays that the focused legitimacy exists. Despite the route that there is high co-affiliation coefficients between the components of a specific factor, there are astoundingly frail relationship also exists between the one factor's variable to another factor's variable. Here it moreover displays that the discriminant legitimacy exists. In the tables underneath various backslides examination has been driven and the yield exhibits the diverse results about the examination.

Table 1: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.892 ^a	.795	.793	.404	1.713

a. Predictors: (Constant), Entertainment, Familiarity, Social Imaging, Advertisement Spending

b. Dependent Variable: Consumer buying behavior

Table 2: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.386	.135		2.865	.004		
Entertainment	.050	.022	.055	2.244	.025	.900	1.111
Familiarity	.809	.023	.865	35.010	.000	.895	1.117
Advertisement Spending	.048	.020	.056	2.351	.019	.961	1.041
Social Imaging	.008	.022	.009	.358	.001	.954	1.048

a. Dependent Variable: Consumer buying behavior

Table 1 clarifies that, to test the effect of promotions on shopper purchasing conduct, at first, specialists have found 0.892 is the Correlation coefficient (R) for Model 1, it underlines a degree of connection between's the free factors and ward variable. The R square regard clears up the 0.795 or 79.5% which is to an incredible degree admirable for the examination. The Durbin-Watson is overwhelmingly outlining that there is no auto-relationship at any rate the regard is well underneath 2. Table 2 spread out that, multi-collinearity has been checked through Variance Inflation Factor (VIF) which ought to be fewer than 3 for regard run. Here all VIF regards are in tasteful range in and it presumes that the parts are free from multi-collinearity.

From the table 2 the specialist has found that familiarity is having most affecting un-institutionalized B estimation of .809 and besides t regard is moreover high. So it is the most supported factor on purchaser purchasing conduct. After that the second most fundamental will be entertainment with the B estimation of .050. Advertisement Spending is the third most affecting factor and Social Imaging is the least affecting factor, which is also importantly affecting purchasing conduct. It has been what's more found that these four components are astoundingly colossal on 1% and 5% criticalness level. In this way, here the multiple regression model can be communicated as,

Consumer Buying Behavior = 0.386 + (.050) X₁ + (.809) X₂ + (.048) X₃ + (.008) X₄
 [Entertainment= X₁, Familiarity= X₂, Advertisement Spending = X₃, Social Imaging = X₄]

Table 3: Result of Hypotheses

Hypotheses	Results
H1: Entertainment is having significant & positive impact on consumer buying behavior	Accepted
H2: Familiarity is having significant & positive impact on consumer buying behavior	Accepted
H3: Social Imaging is having significant & positive impact on consumer buying behavior	Accepted
H4: Advertisement spending is having significant & positive impact on consumer buying behavior	Accepted

Managerial Implications:

This investigation demonstrates that there is certain effect of the considerable number of factors on customer purchasing conduct. This implies ad does in actuality influence the purchasing conduct of purchasers. Among the four autonomous factors notwithstanding, we can see that Familiarity and Entertainment have the most noteworthy effect. In this way, we can see that the mental effect that Familiarity has on buyers does in truth lead to positive purchasing conduct. For this situation, most shoppers have additionally taken Diversion as a positive marker towards a brand as opposed to negative.

'Advisement Spending' comes in third as far as hugeness. This infers individuals' relationship with 'Spending' and 'Brand' is probably going to lead individuals to purchase an item. As such, ad spending is to some degree effective in inducing individuals to make a buy. Social Imaging in Advertisement supposedly has the least effect. It implies that individuals' craving to have a place with a specific gathering some of the time makes individuals purchase an item. Be that as it may, buyers are progressively worried about other factors as opposed to the 'social imaging' in the commercial. Shoppers are increasingly spurred to purchase an item when they see an ad of it some place; they likewise feel safe to purchase an item that they have seen notice of. Buyer builds up a dimension of dependability for a brand they have seen ad of. They were even noted to gather data of items from promotion become acquainted with about the use and advantages of item and afterward settle on a buy choice dependent on that. Accordingly, notice is a good showcasing apparatus for creating more deals.

Purchaser's purchasing conduct ought to be ceaselessly watched while setting up the promotion messages/Ads. The ad messages must be clear with the goal that the basic customers can likewise comprehend them. Commercial arrangement ought to be structured as needs be topographically, to remember the socio financial status of the shoppers. Most recent notice ideas of promoting ought to be acquainted with accomplishes the greatest objective of the various Companies. An inventive method for notice must be received to grab the eye of the purchasers. The redundancy of the advertisements on one sort of media may diminish the enthusiasm of the watchers and, in this way, commercials ought to be given on electronic and print media. Mindfulness and examination advertisements will exceptionally supportive to grab the eye of the purchasers, towards the wanted products. Web based publicizing can catch the consideration of the web clients, they can specifically arrange from the on the web web-based interface. Prodding or astounding promotions like (most recent expansion is coming soon) are additionally

exceptionally useful to invigorate the shoppers. Item proposal is extremely regular practice; through along these lines numerous reasons can be accomplished. Message pass on to the prescribed individual and to the next general group of onlookers. In the shopping center or show the important thing close to one another, it will make a need of the customers to take another product with their ideal items.

Conclusion:

This exploration was an investigation on the effect of notice on shopper purchasing conduct. For this reason four free factors, Entertainment in Promotion, Familiarity of Advertisement, Social Imaging in Advertisement and Advertisement Spending were considered. In view of the investigation it tends to be inferred that promotion has critical effect on purchaser purchasing conduct. This investigation can be useful for advertisers to comprehend what triggers a customer's expectation to buy. They can figure out which component in publicizing is best and which has nearly brought down effect. In spite of the fact that this research can make critical commitment to writing yet for future examination subjective information can be utilized. Subjective information will give further understanding into the relationship among these factors. At last we reason that organizations should utilize appealing and instructive substance to make the mindfulness in the purchasers and they ought not depend on the commercial for changing the impression of the customers rather they should utilize better approaches for deals advancement or other medium to change the view of the general population. It will be simple for any organization to change the purchasing conduct of buyer by making mindfulness and building solid recognition in the brain of their clients.

Limitations & Future Directions:

A few confinements of this examination should be tended to. Right off the bat, the example size could have been more in the event that we approached a bigger number of individuals. Besides, it would have been increasingly attractive on the off chance that we could get hold of individuals from a differentiated age amass particularly, the more established age gathering of over 60 years. It would have been additional fascinating to find out about their musings on present day promoting. Thirdly, this exploration could have incorporated an increasingly differentiated scope of factors to investigate a similar theme from an alternate point of view. Shopper's purchasing conduct currently moving from customary ad to the most recent innovation like tabs and cell phones and so on, by including the new factor like "data rates" that for the most part made by the ecological reaction. Since it will investigate the reception procedure of the buyers. It will unmistakably give the thought regarding the mental conduct of the shoppers to appear: who are "Early adopters", who are "early larger part", who are "late lion's share" lastly who are the "slow pokes". It will demonstrate how items scatter in the market.

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IMPACT OF ENHANCED SERVICES ON CONSUMER BEHAVIOUR WITH RESPECT TO ONLINE PURCHASE OF APPARELS

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ABSTRACT: E-commerce is growing at a faster rate every year. In 2017, the total e-retail sales globally grew 24% than that of last year. Consumers find it easy to shop online and also has a lot of benefits. Different e-commerce platforms are available for different industries. Amazon, Flipkart, Myntra for retails, Ola and UBER for Taxi services, Swiggy, Zomato, Foodpanda, UBER eats for food, Magic Bricks for flats, Urban Ladder for furniture, Internshala and Glassdoor for hunting jobs. Every consumer shops differently and have their own preferred websites and brand. Not all of them order food through Swiggy and shop at Amazon. There is no, one particular reason for this behaviour. There are many factors which influence customer's behaviour from the moment they start shopping till they purchase it. The study tries to understand how consumer's behaviour results in service enhancement towards online purchase of apparels.

Keywords: E – Commerce, Behaviour, Shopping, Service enhancement, Online Purchase, E – Retail, Apparels.

STATEMENT OF RESEARCH PROBLEM

A study on the presence of enhancing services that influences the customer's buying behaviour. These enhancing services such as free delivery, replacement of the product, trial of the products will increase the brand equity as well as the buying tendency of the customers.

OBJECTIVES

1. To identify the enhancing factors for online apparel industry.
2. To understand the influence of enhancing factors on customers to buy apparel online.
3. To understand the negative factors which cause customers to switch brands or websites in online shopping.

LITERATURE REVIEW

Five types of risks while making purchase decision have been identified: performance, financial, time, social, and psychological risks. Demographics, vendor/service/product characteristic and website quality also influence the customers' attitude towards online shopping consequently their online buying (**Samadi and Yin-Fan, 2015**). Customers begin to see the information provided in the website and then evaluate the website quality (**Jairak, 2016**). If the consumers perceive that the website can operate well, they will consider to purchase the selected items and their expectations will increase after the product is ordered (**Jairak, 2016**). Customers won't be easy to trust any information given to online channels. In order to satisfy customer's concern, the online retailers need to care about the website quality, which is to perform helpful information and to be testable from the first visiting of customers (**Samadi and Yin-Fan, 2015**). Thus, a website quality is more dominant to get customer's attention and to decide if the given information is trustable enough to make a payment for their first online purchases. Customers will also see the product quality and decide whether to order from the same website (**Jairak, 2016**). The possibility of repurchase also depends on the service quality provided by the online merchants (**Jairak, 2016**). The green products which are environmental friendly will also be preferred by some customers. The market for green brands is growing exponentially at a global level (**Braimah, 2015**). Green consumerism may be viewed as a specific type of socially conscious or socially responsible consumer behaviours involving an 'environmentalist' perspective and could therefore be referred to as an 'environmentally concerned consumption' (**Braimah, 2015**).

Service quality, price and product diversity are important for customers to determine their purchasing decisions online. The article concludes that service and product diversity have significant effect on the decision while price has low effect (**Dita Amanah, Dedy Ansari Harahap & Dini Lisnawati, 2017**). The study was conducted in Indonesia with sample size as 90 members. Though the study has few limitations,

the results obtained were more or less true and it represents the population. The article restricted its study only to these 3 factors and has not considered many factors like brand image, consumer psychology, offers and discounts, ratings and reviews other factors causing negative emotions. Due to this, the result obtained may not be predominantly true as there are chances that the result may vary if all these factors are taken into consideration. One of the most important factors is the presence of the enhancing services which was not discussed in the article. Apart from the regular services provided customer's behaviour will change when these enhanced services are provided by the companies.

Customers take time to compare between the brands and select the brand which provide better product in terms of quality, services and so on. The article states that, in order to select a brand in planned purchasing, factors such as advertisements, word of mouth, in store presence and packaging play a key role (**Toney Sebastian, Pradeep G. Yammiyavar & Steven Jones, 2018**). These factors do play an important role, but also there are other factors which are not discussed in the article. Services are also one of the important factors that determine the behaviour of the customers. In case of durable goods, the post purchase services like installation, maintenance play a crucial role. Even though the product features are great, if it doesn't have proper services the customers don't mind changing the brand. Pre purchase services like free demo, experiences may also add to the brand. Overall, services play a crucial role in determining the brand while purchasing.

Online shopping has become a new trend with the internet facilities are available even in remote areas. It can be said it is evolving to be a need rather than a trend considering the fast changing lifestyle of the people. The article revealed that a lot of factors are responsible and it influences the customers to shop online. Method of payments, no travel to shop, wide range of products, no hidden costs, price, time saving are main reasons as to why people shop online (**Dr. Amit Kumar Singh, Malsawmi Sailo, 2013**). The article though did not discuss the demotivating factors that makes customers to switch brands. For instance a poor service quality may lead to disappointment for customers. This happens when shopping for durable goods. The sample size was limited to 30 and findings will not be able to completely judge the behaviour of the customers.

The article has identified little potential behaviour of the customers while purchasing online (**Vivek S. Kanade & Dr. Mrs. Preeti M. Kulkarni, 2018**). The need for buying of the product is influenced by internal or external factors. Next the customer's does extensive search and analysis of the product they desired to purchase through comparison of various websites. The customers trust that the selected brand will be good through analysing the reviews and the perceived images. Then, purchasing the brand again is determining the post purchase experiences of the product.

E-commerce market has great potential, especially the aspect of online shopping, but before every moves of development, we must understand the key factors. The objective of this study aims to investigate the decision-making process of online consumption and to evaluate how cultural, social, personal, and environmental factors could have impact on the customers' online shopping decision, specifically in China (**Ke Zhao, 2015**). The research was conducted using small sample frame so there is large scope for finding other factors that influence the buying online.

Online shopping is becoming progressively more popular (**Pahnila and Warsta, 2010**) and is attracting a great attention due to its potential for both customers and e-vendors which stimulate the widespread research aim in online shopping arena. Despite the fact that interactive nature of online shopping offers many opportunities, online practitioners need to develop a broad understanding of consumer in online environment. studies says that, experience is the strongest generator of self-efficacy and thus generating positive experience has acquired greater prominence due to its potentiality in influencing customer loyalty (**Rose et al., 2012**). Online consumer experiences refer to the psychological and emotional states that consumers go through while shopping in online platform (**Alba and Hutchinson 2000; Nambisan and Watt, 2011**). Understanding the customer's behaviours helps in predicting their future behaviour. An integrative conceptual framework of online shopping experience has been proposed.

The Indian retail industry has emerged as one of the most dynamic and fast-paced industries due to the entry of several new players. It accounts for over 10 per cent of the country's Gross Domestic Product (GDP). India's e-retail is expanding at a compounded annual growth rate of about 34 per cent, according to a report by Digital Commerce (**Mookerji, 2014**). With 75% of online audience between the age group of 15-34 years, India is one of the youngest online demographic globally (comScore, 2012). Qualitative content analysis was used for analyzing the textual content of the depth interview data. Increased Internet penetration, improved security measures, convenience of shopping in lives pressed for time, and, of course, dozens of retailers to choose from – these are a few factors that are attracting more and more consumers to

shop online (Joshi & Upadhyay, 2014).

Around 44 percent students in India use internet and overall 72% of the youth have access to Internet on regular basis. As a result of the vast usage of Internet, buying patterns are changing. Changing the way goods are purchased and sold, these results in the exponential growth in the number shoppers online. However, plenty of differences related to online buying have been discovered as a result of various consumers' characteristics and type of products provided and services. Perception toward online shopping and idea to shop online are not just affected by ease of use, usefulness, and enjoyment, due to other factors like consumer individuality, product distinctiveness, situational factors, previous online shopping understanding and trust in online shopping. Online shopping is having a bright future in India. Perception towards shopping online is getting better in India. With the help of internet, consumers can shop anywhere, anytime and anything with safe and easy payment options. Consumers can compare shopping between products, and, online stores. (Rastogi, 2010)

Another significant difference between genders is in the, in-home shopping tendency. Women are more comfortable and secure when they shop from home in comparison to men. Shopping from home gives shoppers the comfort and they don't have to take the trouble to dress up and they will be able to multitask. Shopping at home gives freedom and advantage in terms of time spent. It is to be noted, that the influences of shopping orientations and gender are more impactful on online information search on apparel products. This may indicate that online marketer or retailer must understand these features of their consumers who are in the section of college students, in order to gain greater competitive advantages and sales performance. Online retailers or marketers should also understand that online search activities include a number of websites visited by consumers prior to making a purchase, kinds of websites searched, frequency of browsing online, number of searches, and the search terms or keywords used [17,18]. (Mbayong, 2016)

The study reveals that customers who experience a Free Based Returns are more likely to make more purchases with same E-tailer than a customer who experiences a Fee based product return. 35% of the respondents opted to Shop more often with same E-tailer, while 24% of the respondents preferred to change the E-tailer with a less easy return policy, 11% opted to Recommend to a friend, 10% Focused on the quality of services than price, and 20% of the respondents preferred to accept all the parameters. (Sarika Punekar, Gopal, 2016)

Considerable rise in the internet penetration is revolutionizing online retailing in emerging markets in India and also in general. Understanding this, retailers of traditional store formats are entering into e-retailing. Indian online retail industry is estimated at USD 38.5 billion in 2017 and is growing at a rate of 45 to 48 per cent CAGR. This is triple compared to the Indian retail market of USD 672 billion in 2016 with a CAGR of over 15 per cent. Online retailing in India grows by leaps and bounds. The challenge in front of the companies and marketing professionals is to understand the driving force of online-shopping. What factors influence online-shopping buying behaviour? Considering the high growth rate for online shopping for food (80%), ticketing (26%), jewellery (25%) and perfumes (18%), women consumers play a major role and their buying behaviour is significant.

The six factors identified through factor analysis viz., *convenience & ease of use, utility, security, time effectiveness, outbound logistics and feedback* explained more than 69% of variance. Ease of use and convenience play an important role in persuading online female customers. Design of website and features which provide useful information to the consumers and ease of buying from home make them use online shopping. Security of the online transaction and credibility of the source of the supplier are important as well. Female consumers use online reviews of the products which they wish to buy to assess their utility. For most of the female consumers effective time management is an important factor for opting to buy online. Another important consideration for female online customers is the process of returning a product when it has to be done for various reasons. These factors are considered by the marketing managers while deciding on the strategies for online marketing of their merchandise. (Madhasu, Lakshmi, Mallika, 2018)

Electronic commerce has grown rapidly in recent years. The study relates to the importance of product uncertainty and retailer visibility in customers' online purchase decisions, as well as the mitigating effects of retailer. The author concludes that product uncertainty indeed plays an important role in online customer satisfaction. The research examines the impacts of retailer visibility on satisfaction. Retailers that do not have high visibility must come up with effective ways to attract customers and alleviate the psychological distance between them and the consumers. For this customer service is the most important. Customer service and pricing are the direct factors which affect the customer satisfaction. The nature of the online products and retailers should be taken into account when retailers develop their online competitive

strategy. A well designed website can help consumers to reduce the welfare loss from the mismatch between products purchased and personal taste (**Jifeng Luo, Sulin Ba & Han Zhang**)

Many on-line stores have little emotional or social appeal and lack human warmth. For some products, such as apparel, increasing a firm's social presence through socially rich descriptions and pictures will have a positive impact on attitudinal antecedents to purchase. The appropriateness and need for human warmth and sociability differ across types of products or services, however. The article states that perceived usefulness, trust, and enjoyment were found to be important antecedents to the attitudes of on-line shoppers regardless of the type of product they were seeking. Websites selling apparel benefit from higher level of social presence. Apparel is better suited for socially rich on-line presentations because the product itself evoked emotion and the socially rich design induced positive feelings in addition to providing additional information. On line vendors selling apparel are encouraged to consider infusing social presence in their Web site designs, because its potential impact is positive for this category of products (**Khaled Hassanein & Milena Head**)

Virtual models are potentially valuable when a customer is concerned with self-image and considerably less valuable when concerned with functionality. The results state that a consumer's information requirements depend on his or her attitude to a product rather than the product attributes; and meeting or not meeting these information requirements affects perceptions. Results indicate that evaluative attitude has a strong moderating effect on end-user perceptions. Specifically, people who had a value-expressive evaluative attitude toward a product felt more informed about that product when evaluating with the assistance of a virtual model. Conversely, people who had a utilitarian evaluative attitude felt most informed when evaluating with a catalogue-style interface (**Stephen P. Smith, Robert B. Johnston & Steve Howard**)

RESEARCH METHODOLOGY

Research Type:

The research type is going to be a Descriptive type research. The variable identified is the enhancing services that influences the customer

Sample Frame:

The sample will be the members who is a regular customer purchasing online. 125 samples will be chosen in Bangalore city and the research will be carried out.

Hypothesis:

NULL (H0): There is no significant relation between the Enhancing services and the customer buying behaviour.

ALTERNATE (H1): There is a significant relation between the Enhancing services and the customer buying behaviour.

NATURE OF DATA COLLECTED

Primary data:The data collected from the sample in the form of questionnaires and surveys. . Statistical tools will be used to find the results from the data collected.

Secondary data:Apart from the questionnaires, some of the live data related to the study such as facts and figures will be taken from the internet.

BUDGET

The cost of the project includes preparation of the questionnaires. Each questionnaire will have 2 pages and for 50 questionnaires, it will take Rs.200. for other miscellaneous charges Rs. 700. So totally the cost will be around Rs. 1000.

LIMITATIONS

1. The population of the study is 125 and due to the various constraints the same was taken as the Bangalore's population but cannot be treated as the whole cities result.
2. Couldn't take insights of the industry experts on the study due to the budget and time constraints.

ANALYSIS& INTERPRETATION

Objective 1:To identify the enhancing factors for online apparel industry.

POSITIVE FACTORS (Service Related)

FACTORS	PERCENTAGE
Delivery Time	21.6
Return Policy	16.8
Customer Service	9.4
Availability	19
User Interface	15
Mode of payment	18.2
TOTAL	100

Tool - Frequencies

For online apparel purchase delivery time has been recognized as the top most priority of customers who buy apparel online. The second most important factor for customers who buy apparel online is availability of different modes of payments .Thus with this we can see that delivery time of the ordered product and the availability of different modes of payment are the enhancing factors for customers who buy apparel through online purchasing apps. Delivery Time is the most important factor at 21.6% followed by Availability and modes of payment at 18.2%.

POSITIVE FACTORS (Product Related)

Tool - Frequencies

FACTORS	PERCENTAGE
Offers and Discounts	35.6
Trending Collection	20.8
Pricing Difference	21.4
Product Variety	22.2
TOTAL	100

Offers and Discounts is the most important factor in terms of the product (apparel) and customers prefer apparel that has a good offer or discount on it and this becomes their number one priority while buying apparel online. This is followed by product variety which is customer’s second most important factor in relation to the product.Hence customers need to be offered a decent amount of offers or discounts on the apparel being bought online and also be offered a good variety of clothes while they are buying clothes online.

Objective 2: To understand the influence of enhancing factors on customers to buy apparel online.

The influence of the positive or negative factors effect in the decision-making process in an apparel industry is affected is by enhancing factors and services which give the customer a better experience.

By using chi-square, we are finding the relationship between gender and the effect on these factors such as Delivery Time, Return Policy, Mode of payment, User Interface, Mode of payment, Availability, Customer Service.

To find the effect of the enhancing services which influence consumer decision based on gender:

	male	female	total
[Delivery Time]	32	22	54
[Return Policy]	22	22	44
[Mode of payment]	14	28	42
[Availability]	19	18	37
[User Interface]	16	17	33
[Customer Service]	13	17	30

To find the effect of the enhancing factors which influence consumer decision based on gender:

	male	female	total
[Offers and discounts]	27	35	62
[Product variety]	17	24	41
[Trending collection]	17	19	36
[Pricing difference]	15	15	30
Others	0	1	1

As per the analysis this is the order and the split of preferences when it comes to gender. To attract male customers, the websites should focus on the delivery charges and to attract female customers they should give them more offers to attract them shop online.

The companies can give customised options for the female customers who use their websites more offers to retain the customers and to prevent switching.

To attract female customers:

Mode of payment, user interface, variety, trends and customer service are to be focused more

To attract male customers:

Delivery time and availability

Pricing difference between websites and return policy are also the important aspects the both genders look into while online apparel shopping.

SPSS output:

Enhancing services:

Gender * Make your order of preference on various services influencing your buying decision?

Delivery Time Cross tabulation

Count

		Make your order of preference on various services influencing your buying decision?						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	32	11	2	6	5	7	63
	2	22	18	13	3	3	3	62
Total		54	29	15	9	8	10	125

Return Policy Cross tabulation

Count

		V8						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	22	17	8	10	0	6	63
	2	22	16	9	8	3	4	62
Total		44	33	17	18	3	10	125

Customer Service Cross tabulation

Count

		V9						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	13	20	11	9	6	4	63
	2	17	18	13	7	6	1	62
Total		30	38	24	16	12	5	125

User Interface Cross tabulation

Count

		V10						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	16	20	11	8	3	5	63
	2	17	22	12	4	5	2	62
Total		33	42	23	12	8	7	125

Availability Cross tabulation

Count

		V11						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	19	20	9	9	2	4	63
	2	18	23	9	5	4	3	62
Total		37	43	18	14	6	7	125

Mode of payment Cross tabulation

Count

		V12						Total
		1.	2.	3.	4.	5.	6.	
Gender	1	14	25	12	5	4	3	63
	2	28	13	5	4	6	6	62
Total		42	38	17	9	10	9	125

Enhancing factors:

Gender * Major product related factors which influence your buying decision?

Offers and discounts Cross tabulation

Count

		Major product related factors which influence your buying decision?					Total
		1.	2.	3.	4.	5.	
Gender	1	27	22	6	7	1	63
	2	35	13	8	3	3	62
Total		62	35	14	10	4	125

Trending collection Cross tabulation

Count

		V14					Total
		1.	2.	3.	4.	5.	
Gender	1	17	23	14	5	4	63
	2	19	20	18	2	3	62
Total		36	43	32	7	7	125

Pricing difference Cross tabulation

Count

		V15					Total
		1.	2.	3.	4.	5.	
Gender	1	15	23	15	6	4	63
	2	15	25	10	8	4	62
Total		30	48	25	14	8	125

Product variety Cross tabulation

Count

		V16					Total
		1.	2.	3.	4.	5.	
Gender	1	17	20	16	9	1	63
	2	24	19	9	7	3	62
Total		41	39	25	16	4	125

Others Cross tabulation

Count

		V17					Total	
		1.	2.	3.	4.	5.		
Gender	1	0	15	18	18	4	8	63
	2	1	13	21	15	7	5	62
Total		1	28	39	33	11	13	125

OBJECTIVE 3: To understand the negative factors which cause customers to switch brands or websites in online shopping.

NEGATIVE FACTORS

Tool – Multiple responses, Mean Frequencies

\$NEG Frequencies

	Responses	Percent of Cases	
		N	Percent
Wrong Delivery (colour, size, item)	53	22.4%	42.4%
Poor Quality	98	41.4%	78.4%
Delayed Delivery	49	20.7%	39.2%
Bad Packaging	22	9.3%	17.6%
Other	15	6.3%	12.0%
Total	237	100.0%	189.6%

a. Dichotomy group tabulated at value 1.

Poor quality causes the customers to switch the website the most followed by wrong and delayed delivery

FINDINGS

1. Delivery time of the ordered product and the availability of different modes of payment are the enhancing factors for customers who buy apparel through online purchasing apps.
2. Customers need to be offered a decent amount of offers or discounts on the apparel being bought online and also be offered a good variety of clothes while they are buying clothes online.
3. To attract male customers, the websites should focus on the delivery charges, delivery time and availability of the same.
4. To attract female customers the online portal companies should give them more offers to attract them shop online, focus on mode of payment convenience, good UI and variety of products.
5. Poor quality causes the customers to switch the website the most followed by wrong and delayed delivery.

CONCLUSION

The presence of enhancing services plays an important role in determining the consumer behaviour and also increases the satisfaction level. New emerging brands should try to adapt suitable strategies to sustain its position in the market. These additional services exceed the expectation of the consumers and it helps to maintain the brand equity. The study also talks about how the enhancing factors can be improved by

considering various demographics. In case of online portals transparency between the customer and the data mentioned on the websites is important. A study on the customer gives us various insights such as, when a customer is completely satisfied with the service provider the customer may or may not provide a feedback but when a customer has a bad experience he/she most of the times provides a negative feedback. So customer satisfaction throughout is vital. And also the company should focus on improving their service as the consumer behaves very differently each time. So these various enhancing factors must be kept in mind and the companies should focus on these and make the customer happy and satisfied. The companies should focus on smooth transaction cycle and delighting the customer.

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QUESTIONNAIRE

Introduction:

The study is conducted to understand the impact of enhancing factors on online buying of a customer. The inputs that you provide through this questionnaire would be very valuable for our research. The data collected is only used for research purpose and would not be used or shared for other purposes.

Gender: Female /Male /Others

Region: _____

1. AGE:

- a) 15-25
- b) 26-35
- c) 36-45
- d) 45 and Above

2. Occupation:

- a) Government Employee
- b) Private Employee
- c) Business
- d) Students
- e) Others

3. From which Website do you prefer ordering apparel?

- a) Amazon
- b) Flipkart
- c) Myntra
- d) Jabong
- e) Others: _____

4. How long do you browse the website of an apparel company?

- a) 5-10min
- b) b)10-20min
- c) c)20-30min
- d) d)>30min

5. Why do you prefer online ordering of Apparel?

- a) Lazy/Busy to shop
- b) More variety
- c) Special offers
- d) Brand comparison made easier
- e) Other_____

6. Make your order of preference on various services influencing your buying decision? (Rank from 1 to 6, 1 being highest and 6 being the lowest)

- a) delivery time
- b) Return policy
- c) Customer service
- d) User interface
- e) availability
- f) mode of payment

7. Major product related factors which influence your buying decision? (rank from 1 to 5, 1 being highest and 5 being the lowest)

- a) Offers and discounts
- b) Trending collection
- c) Pricing difference
- d) Product variety
- e) Other_____

8. What attracts your attention on social media or website of an apparel company?

- a) creative display of products
- b) Reliable information
- c) pop-up offers
- d) information on latest trends
- e) Updating information through emails, sms etc.

9. What makes you to discontinue/dissatisfied with online shopping experience? (Choose any three or less)

- Wrong Delivery (colour, size, item)
- Poor Quality
- Delayed Delivery
- Bad Packaging
- Other _____

11. Your satisfaction level mainly depends on (Rank according to your preference. 1- most preferred, 5-least preferred)

- a) Delivery Man’s Behaviour

- b) Packaging
- c) Detailed Information (Live tracking)
- d) Coverage of Remote areas
- e) Fast Customer care response

12. What is your opinion about delivery charge?

Excellent (1)	good (2)	satisfactory (3)	poor (4)	Bad (5)
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13. When you select a product with offers, do you think additional charges (like packaging, delivery) are applied to compensate the discounted amount?

- a) True
- b) False

14. Have you ever gone till the last page of the order and closed without ordering because of the presence of high delivery charges?

Always (1)	Regularly (2)	Sometimes (3)	Rarely (4)	Never (5)
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15. Have you returned a product due to some problem, and shopped on the same brand/ website again?

- a. yes
- b. no

If yes, which product and why did you return? _____

16. What makes you to switch over from one brand to another?

17. Do you recommend the app to others?

- a) Yes
- b) No

Impact of gold price on sectoral Indices in National Stock Exchange

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ABSTRACT: Gold has been traded across the world before Christ (BC) and now it has become a trend where most of the people invest their money either in gold or in the stock markets. Research conducted in this area are very less and the study has become obsolete. This paper aims to find out if there is any relationship between gold and stock market with a special reference to National stock Exchange sectoral Indices. Monthly data for above mentioned variables has been used covering a period of five years i.e. from April 2013 to March 2018. To examine the relationship among these variables Correlation, Multiple Regression equation model and Granger causality have been used. There is impact of gold on NSE sectoral indices, but the impact is less compared with other factors effecting stock market, gold has low degree Negative correlation.

Keywords: Gold price, Sectoral Indices, Granger causality, NSE, Multiple Regression.

1. Introduction

Stock is a place where shares of different companies are traded along with other securities. The total number of stock market in India is 23, and two of the main stock exchanges are National stock exchange (NSE) and Bombay Stock exchange (BSE) and 21 regional stock markets. The markets have a feature of recovering and issuing of Equity, Debt and other securities. There other kinds of instruments traded in stock market such as mutual funds, indices, pooled products. Change in NSE and BSE markets affects the other stock markets index price, it can be said that these two stock markets play a vital role in factors that effects the prices of the indices. NSE is the second largest stock market where in the trade takes place in large number according to World Federation of Exchanges (WFE) report. In NSE and BSE stock markets they offer a wide range of services such as stock listings, trading services, clearing and settlement services, indices, supply of market data, technology aids and financial education offerings. Gold is one of the precious metals which is preferred as an investment option by most of the people across the globe. As a result of this the price of gold has been increasing & fluctuating day by day. So, people use this an advantage and trade on the fluctuating price of gold. At the times of high inflation people consider gold as the safest place to invest their savings/earnings. Investing in gold has less volatility compared to other investment choices.

1.1 Sectoral Analysis of Index

Sectoral analysis is preferred by those people who look for the best, safe and less risk securities to invest their savings and to make sure that they don't lose their harden money. These investors usually select those segments that outperform from the other segments. And later the select the top 5-10 companies that perform the best in the sector, compare the returns invest in that company or instruments. By analysing the sectoral indices, we can know how the capital markets functioning & market efficiency. Where in connection between the information and change in the securities prices is obtained. Investor use this data to analysis the future price changes, it refers that the prices of the shares won't go high or yield unexpected earnings. If the stock market is showing unexpected earnings it means that the market is not efficient, usually stock market are assumed to be stable and consistent.

2. Literature Review

The main aim of this research (Kundu & Piplani, 2017) is to find the relationship between independent variable gold and Indian Stock exchange Bombay stock exchange SENSEX Analysis is based on the outcomes of statistical and financial econometrics models. They found that gold price has a positive effect on BSE SENSEX stocks

The objective of this (Muhammad , Abdul, & Gobind. M, 2016) study is analysis the long-term relationship gold and KSE-100 INDEX of Karachi Stock Market of Pakistan. To find the results they have used several tests like Unit root test by ADF, VAR test, co-integration test. It was found that there is no long-term relationship between Gold price, KSE 100 INDEX.

These authors (Prof. S.P & Preet Singh, 2012) aim at finding the relationship between active gold and Stock market returns. The results of the analysis showed that there is a positive relationship between gold price and stock exchange. The results of the granger causality show that returns of Sensex index do not lead to rise in gold price does not lead to increase in Sensex & increase in gold price.

The objective of this study (Dr. S.Babu & Srivastava, July 2016) is to make a comparative analysis on gold and NIFTY stocks market return impacted investor for their venture decision to their group. Methodology adopted was ADF, Johansen's co-integration, Lag length criteria & Granger causality. It was found that there is a +ve relationship between NIFTY returns & gold returns. The data have bidirectional effect on each other. This study (Le & Chang, 2011) aims at analyzing the relationship between oil and gold and financial variables (stock price, exchange rate & interest rate) of Japan stock market. Methodology opted by the authors are ARDL approach, cointegration methods, Johansen-Juselius and Engle-Granger cointegration approaches. They suggested that in the long run, the Japanese stock price & gold price have significantly +ve effect on the Japanese interest rate.

3. Research Design

3.1 Statement of problem

There are very few researches conducted on the influence of gold price on sectoral indices, usually the researchers tend to find the relationship between crude oil, dollar price, foreign exchange and the broad market indices, not the different indices like sectoral indices, government securities indices, strategic indices corporate bond indices, SLD indices and money market indices. And to be specific there's no research has been conducted on correlation between gold and sectoral indices in NSE. Considering the perspectives of researches in both theoretical and practical, an observation shows the lack of such studies, I have chosen to analyse the impact. The research question is - "Is gold returns and stock returns correlated? How do correlations change across different sectoral indices?"

3.2 Research Objective:

To determine the effect of gold price on the Sectoral indices in National Stock Exchange,

4. Methodology

4.1 Method of data collection

The data collected for this research is based on secondary data. The data collected for the purpose of analysis is obtained from MCX and National Stock Exchange (NSE) website.

4.2 Sampling design:

The population considered for the study is the index values of Sectoral indices in National stock exchange & gold price. Non-probability sampling design is adopted to select a sample from the population of Gold.

Sample Size

11 Sectoral indices have been considered for the study.

4.3 Statistical Techniques Used:

ADF Unit root test is used to check if the selected data is stationary or not. Descriptive statistics is used to describe features/variables. This study uses correlation coefficient to express the relationship between Commodity & Stock markets in India. Regression is used to test dependency of the dependent variables. Also, Granger Causality test is used to identify the causality between variables (Dependent & Independent). E-views10 has been used to obtain the test results for the above-mentioned statistical tools.

4.4 Hypothesis

Hypothesis-1

H0: Gold Price has no significant influence on Sectoral indices of National Stock exchange.

H1: Gold Price has significant influence on Sectoral indices of National Stock exchange

Hypothesis-2

H₁ there is no statically significant correlation between gold price and sectoral indices in National Stock Exchange

H₀ there is statically significant correlation between gold price and sectoral indices in National Stock Exchange

Hypothesis-3

H0: There is no causal effect of gold price on the Sectoral indices of National stock exchange

H1: There is causal effect of gold price on the Sectoral indices of National stock exchange

4.5 Limitations:

1. Relationship is determined between the indices and not on the individual commodities or shares prices.
2. Only GOLD commodity index is used in the study that effects on Sectoral indices of National stock exchange

5. Analysis and interpretation

5.1 Augmented Dickey Fuller Test statistic

Sl No	Name	Probability
1	NIFTY Auto Index	0.0000
2	NIFTY Bank Index	0.0000
3	NIFTY Financial Services Index	0.0000
4	NIFTY FMCG Index	0.0000
5	NIFTY IT Index	0.0000
6	NIFTY Media Index	0.0000
7	NIFTY Metal Index	0.0000
8	NIFTY Pharma Index	0.0000
9	NIFTY Private Bank Index	0.0000
10	NIFTY PSU Bank Index	0.0000
11	NIFTY Realty	0.0000
12	Gold	0.0000

Table 1

The probability value for all the variable is 0.0000 which is less than 0.05, the data collected and used for analysis is stationary. It is necessary to conduct this test in order to make sure that there are no errors in the further calculation

5.2 Descriptive Statistic

Sl No	Name	Mean	Std Dev	Skewness	Observation
1	NIFTY Auto Index	0.0769	3.0690	0.3954	1231
2	NIFTY Bank Index	0.0611	1.3745	0.0701	1231
3	NIFTY Financial Services Index	0.0621	1.2871	-0.0691	1231
4	NIFTY FMCG Index	0.0433	1.1028	-0.3104	1231
5	NIFTY IT Index	0.0441	1.1640	-1.0659	1231
6	NIFTY Media Index	0.0557	1.3461	-0.2440	1231
7	NIFTY Metal Index	0.0268	1.6452	0.0072	1231
8	NIFTY Pharma Index	-0.0056	1.1875	-0.4244	1231
9	NIFTY Private Bank Index	0.0178	1.3730	0.0524	1231
10	NIFTY PSU Bank Index	0.0726	2.1659	1.5458	1231
11	NIFTY Realty	0.0178	2.1242	-0.5125	1231
12	Gold	0.0068	0.8368	-0.6175	1231

Table 2

The mean values indicate that NIFTY Auto has the highest average return among the variables under study. Standard deviation is known as the measure of volatility, which indicates that NIFTY Auto is highly volatile among the other variables. The skewness figures indicate that NIFTY Bank, NIFTY Auto, NIFTY Media, NIFTY Private Bank & NIFTY PSU Bank are positively skewed while NIFTY Financial Services, NIFTY FMCG, NIFTY IT, NIFTY Media, NIFTY Pharma, NIFTY Realty and Gold price are negatively skewed which implies higher frequency of positive returns from NIFTY Auto, NIFTY Bank, NIFTY Media, NIFTY Private Bank & NIFTY PSU Bank but higher frequency of negative returns from NIFTY.

5.3 Correlation

Sl No	Name	(Probability)	(Coefficient)
1	NIFTY Auto Index	0.0166	-0.0688
2	NIFTY Bank Index	0.0000	-0.1967
3	NIFTY Financial Services Index	0.0000	-0.1948
4	NIFTY FMCG Index	0.0000	-0.1326
5	NIFTY IT Index	0.0001	-0.1092
6	NIFTY Media Index	0.0000	-0.1495
7	NIFTY Metal Index	0.0007	-0.0976
8	NIFTY Pharma Index	0.0014	-0.0914
9	NIFTY Private Bank Index	0.0000	-0.1885
10	NIFTY PSU Bank Index	0.0000	-0.1585
11	NIFTY Realty	0.0000	-0.1505

Table 3

H_1 there is no statically significant correlation between gold price and sectoral indices in National Stoc Exchange

H_0 there is statically significant correlation between gold price and sectoral indices in National Stoc Exchange

Weakly correlated

For every Changes in 1 unit of gold, NIFTY Auto decreases by 0.068, NIFTY Metal decreases by 0.0976 & NIFTY Pharma decreases by 0.0914. Its low degree Negative correlation. Since the coefficient is less than 0.5, its weakly correlated

Moderately correlated

For every Change in 1 unit of gold, NIFTY Bank decreases by 0.1967, NIFTY Financial Services decreases by 0.1948, NIFTY FMCG decreases by 0.1326, NIFTY IT decreases by 0.1092, NIFTY Media decreases by 0.1495, NIFTY Private Bank decreases by 0.1885, NIFTY PSU Bank decreases by 0.1585 & NIFTY Realty decreases by 0.1505. It is negatively correlated. Since the coefficient is less than 0.5, its moderately correlated.

Since, the p-value for all the sectoral indices is less than 0.05, which implies that null hypothesis is rejected (i.e.) is there is statically significant correlation between gold price and sectoral indices in National Stoc Exchange

5.4 Regression

Sl No	Name	Coefficient	Probability	R ²
1	NIFTY Auto Index	-0.2543	0.0166	0.0047
2	NIFTY Bank Index	-0.3247	0.0000	0.0387
3	NIFTY Financial Services Index	-0.3010	0.0000	0.0379
4	NIFTY FMCG Index	-0.1749	0.0000	0.0175
5	NIFTY IT Index	-0.1527	0.0001	0.0119
6	NIFTY Media Index	-0.2401	0.000	0.0223
7	NIFTY Metal Index	-0.1922	0.0007	0.0095
8	NIFTY Pharma Index	-0.1301	0.0014	0.0083
9	NIFTY Private Bank Index	-0.3112	0.0000	0.0356
10	NIFTY PSU Bank Index	-0.4126	0.0000	0.0251
11	NIFTY Realty	-0.3832	0.0000	0.0226

Table 4

Regression of the following dependent variables has been conducted with relation to the independent variable, i.e. Gold Price. The null hypothesis is

H_0 : Gold Price has no significant influence on Sectoral indices of National Stock exchange.

In case of NIFTY Auto Index, NIFTY Bank Index, NIFTY Financial Services Index, NIFTY FMCG Index, NIFTY IT Index, NIFTY Media Index, NIFTY Metal Index, NIFTY Pharma Index, NIFTY Private Bank Index, NIFTY PSU Bank Index, NIFTY Realty, probability value is less than 0.05 (significance level). And coefficient values of

the dependent variable have negative value, which implies that gold has a negative impact on the sectoral indices. Every unit change in gold price decreases the returns of National Stock Exchange's sectoral Indices. Looking at R² we can conclude that Nifty auto, Nifty bank, Nifty Financial service and Nifty private bank are affected more compared to other indices

Hence, Null hypothesis is rejected. Therefore, we accept Alternative Hypothesis

i.e. **H1**: Gold Price has significant influence on Sectoral indices of National Stock exchange.

5.5 Granger Causality

(Pairwise Granger Causality tests & Lags: 2)

Sl No	Null Hypothesis	Obs	F-Statistic	Prob.
1	Gold price returns does not Granger cause Nifty Auto returns Nifty Auto returns does not Granger Cause Gold price returns	1189	0.8433 0.2855	0.4305 0.7517
2	Gold price returns does not Granger cause Nifty Bank returns Nifty Bank returns does not Granger Cause Gold price returns	1189	3.6761 0.5643	0.0256 0.5688
3	Gold price returns does not Granger Cause Nifty Financial Services returns Nifty Financial Services returns does not Granger Cause Gold price returns	1189	0.2213 5.1184	0.8015 0.0061
4	Gold price returns does not Granger cause Nifty FMCG returns Nifty FMCG returns does not Granger Cause Gold price returns	1189	2.7549 1.2274	0.0640 0.2934
5	Gold price returns does not Granger cause Nifty IT returns Nifty IT returns does not Granger Cause Gold price returns	1189	8.1238 0.3940	0.0003 0.6744
6	Gold price returns does not Granger cause Nifty Media returns Nifty Media returns does not Granger Cause Gold price returns	1189	0.7282 3.6522	0.4830 0.0262
7	Gold price returns does not Granger cause Nifty Metal returns Nifty Metal returns does not Granger Cause Gold price returns	1189	0.0081 0.9585	0.9918 0.3837
8	Gold price returns does not Granger cause Nifty Pharma returns Nifty Pharma returns does not Granger Cause Gold price returns	1189	2.1845 0.9696	0.1130 0.3795
9	Gold price returns does not Granger cause Nifty PUS returns Nifty PUS returns does not Granger Cause Gold price returns	1189	0.8880 3.9458	0.4117 0.0196
10	Gold price returns does not Granger cause Nifty PVT Bank returns Nifty PVT Bank returns does not Granger Cause Gold price returns	1189	0.3527 3.3736	0.7028 0.0346
11	Gold price returns does not Granger cause Nifty Reality returns Nifty Reality returns does not Granger Cause Gold price returns	1189	1.0344 3.1264	0.3557 0.0442

Table 5

As per the output it can be interpreted that some of the probability exceed level of significant (0.05) and some do not exceed. There exists both unidirectional and bidirectional effect/ univariate and bivariate granger cause.

Hypothesis-2

H0: There is no causal effect of gold price on the Sectoral indices of National stock exchange

H1: There is causal effect of gold price on the Sectoral indices of National stock exchange

From the above table it is found that the probability value of Nifty Bank, Nifty IT and Nifty Media Returns is less than 0.05 ($p < 0.05$), so we reject the Null hypothesis, there is no casual effect of gold on sectoral indices And the probability value of Nifty Auto, Nifty Financial Services, Nifty Metal, Nifty Pharma, Nifty PUS, Nifty PVT Bank and Nifty Reality is more than 0.05 ($p > 0.05$), we accept Null hypothesis, which means that there's no casual relationship between gold and sectoral indices.

Unidirectional effect/ univariate granger cause

Nifty Bank, Nifty Financial Service, Nifty FMCG, Nifty IT, Nifty Metal, Nifty Pharma, Nifty PUS & Nifty PVT Bank

No unidirectional effect/ univariate granger cause or bidirectional effect/bivariate granger cause.

Nifty Auto, Nifty Bank and Nifty Media

We can say that Nifty Bank, Nifty FMCG, Nifty IT & Nifty Media are casually affected by change in gold price. And sectoral indices are not casually affected by change in gold price such as NIFTY Auto Index, NIFTY Financial Services Index, NIFTY Metal Index, NIFTY Pharma Index, NIFTY Private Bank Index, NIFTY PSU Bank Index, NIFTY Realty.

6. Conclusion

It is found that gold impacts most of sectoral indices in NSE, but the impact is less compared to other factors that affect Sectoral indices which are not been studied in this research.

Some major impact of gold on sectoral indices which have been analysed using statistical tools are summarized as follows.

1. Correlation test results stat that the correlation is a low degree Negative correlation which means that when the gold price goes up, the sectoral indices comes down and wise versa.
2. Regression Modeldiscloses that fluctuation of Gold price has a negative impact on the sectoral indices in National Stock Exchange which means that increase in gold price decreases the returns of sectoral indices specifically Nifty auto, Nifty bank, Nifty Financial service and Nifty private bank are affected more compared to other indices
3. According to the outcomes of granger causality it is very clear that Nifty Bank, Nifty FMCG, Nifty IT & Nifty Media are casually affected by gold price.

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The Impact of Guerrilla Marketing on Consumer's Purchase Intentions

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ABSTRACT: *The research purpose has been conducted to explore Guerrilla Marketing effects on consumer behaviour. As the advertising world is constantly changing and experiential ways of reaching the customer is constantly growing, it is imperative to measure the level of change Guerrilla Marketing on consumers. The consumer intention helps in attaining and understand where the brands can direct their efforts to finally close a sale. Thus, this study primarily investigates the impact of guerrilla marketing on consumer's purchase intention. The study considers Guerrilla marketing effects as an independent variable with five appropriate dimensions such as Novelty, Aesthetics, Relevance, Emotional arousal and Surprise and Consumer's purchase intention as the dependent variable. The study was conducted using close ended questionnaires and data analysis using IBM SPSS. The study found that these independent variable dimensions indicated a high level of impact Consumer's purchase intention. The findings of the present study suggest that the Guerrilla marketing effects are having a moderate positive relationship with Consumer's purchase intention. Individual dimensional analysis presented that Relevance of the advertisement had the highest individual effect on the purchase intention.*

Keywords: *Guerrilla Marketing, Purchase Intention, Consumer Behaviour, Advertising*

1. Introduction

Guerrilla marketing is based on marketing the implicit attributes of products or services rather than their explicit, functional aspects. Rather than introducing the product itself, by introducing the idea that comes with it, it addresses the emotional ideology bound up with the product. This is done with the superiority of attention obtained at least in the very moment of communicating. Thus, guerrilla marketing tries to target the emotional aspects of a buying decision by differentiating a product on an ideological level rather than a functional level. Guerrilla effect is the favorable ratio between cost and benefits. Through Guerrilla Marketing companies try to find the maximum cost benefit analysis by enhancing the impact of each deliverable presented to a customer. This form of marketing has been gaining traction in the recent past and has been constantly evolving the marketing methods in the modern world. Guerrilla Marketing has been gaining traction in the recent past and growing momentum. However, the factors behind the uptick of this form of marketing has not been analysed cohesively. This paper gives an insight on the important factors that affect Guerrilla Marketing thereby, leading to a purchase. In the article by (Katharina Hutter and Stefan Hoffmann, 2011) the authors talk about how consumers are exposed to advertisements on a regular basis, which leads to the creation of a wear out effect. This wear out effect can be tackled with the help of Guerrilla Marketing. (Mai, 2015) consider several factors that combine to create a Guerrilla advertising and provides some distinctive results. It was found that novelty and relevance indeed interact and combine with each other into creativity factor which leads to a direct and indirect flow of WOM factors. The result supports the common sense that when the participants perceive the ads as creative and are startled by them, they will have higher tendency to share such impressions with others. Another revealing conclusion was drawn from (Leibing, 2008) regarding the importance of tangibility in Guerrilla Marketing, reducing the scope of such marketing through online platforms. The article explained differentiation and determining ways in which Guerrilla Marketing can impact advertising decisions. A major change that the article highlights is regarding the use of emotional values in creating an impact on the participants. The campaigns need to be specifically tailored to the target group for highest impact in terms of WOM and purchase consideration. While looking at advertising communicated through congruent non-traditional (ambient) media enhance consumer perception of advertising value compared to advertising placed in traditional or incongruent non-traditional (non-ambient) media (Dahlén, 2015) has found that consumers care about where the brand places the advertisement. In another study by (Prévot 2009), A creative guerrilla campaign done right can have a positive effect on brand equity in the minds of the customers, as positive experiences with the campaign can transfer as positivity towards the brand. Specially a creative campaign has a chance to amaze those who see it, and this amazement is part of the intangible value that can be applied to a brand. This research aims to understand how each of these factors affect the customers.

In an article by (Sivakumar, 2017), the author explains how Guerrilla Marketing requires constant innovativeness and timely implementation of campaigns to create a long lasting effect on the customers. Viral marketing is the most sought after and impactful form of Guerrilla Marketing. In article by (Salih Yildiz, 2016) it is found that Guerrilla Marketing can be effectively employed by SMEs to rival the marketing events of larger corporations.

2. Research Objectives

- A. To understand the impact of Guerrilla Marketing on purchase intention.
- B. To analyze the level of impact each dimension has on purchase intention.
- C. To understand the change in impact of guerrilla marketing over traditional marketing on consumer's purchase intention.

2.1 Research Questions

- A. What is the impact of Novelty, Aesthetics, Relevance, Emotion arousal and Surprise on Purchase Intention?
- B. How do customers perceive a brand based on the Guerrilla Marketing?
- C. Does Guerrilla Marketing lead to purchase?

3. Research Methodology

The method of sample collection employed is convenience sampling. This is a non-random form of sample collection based on the respondents actually exposed to Guerrilla Marketing, looking at the relative novelty of this form of marketing to ensure validity of the data collection. A total of 219 respondents data was used for analysis using the SPSS software. A close ended questionnaire was administered to a controlled group with answers being measured through a 5 point Likert scale. The impact of the variables has been studied using correlation and regression among other statistical tools.

Study Design: Closed Ended Questionnaire with Quantitative Analysis

Study Location: Christ University, Bangalore

Study Duration: October 2018 to February 2019.

Sample size: 219 Respondents

Sample size calculation: The sample was calculated based on non-random convenience sampling which near the university premises.

Subjects & selection method: The respondents were chosen based on their exposure to Guerrilla Marketing Advertisements.

Inclusion criteria:

1. Exposure to Guerrilla Marketing
2. Either sex
3. All ages

Variables:

Independent Variable: Guerrilla Marketing

Dimensional Variables – Novelty, Aesthetics, Relevance, Emotional arousal and Surprise

Dependent Variable – Purchase intention

Dimensional Variable – Brand Recall, WOM, Brand recommendation, Information Generation

Hypotheses:

H0 - Guerrilla Marketing has no impact on consumer purchase intention

H1 - Guerrilla Marketing has an impact on consumer purchase intention

H0 - Novelty has no impact on consumer purchase intention

H1 - Novelty has an impact on consumer purchase intention

H0 - Aesthetics has no impact on consumer purchase intention

H1 - Aesthetics has an impact on consumer purchase intention

H0 - Relevance has no impact on consumer purchase intention

H1 - Relevance has an impact on consumer purchase intention

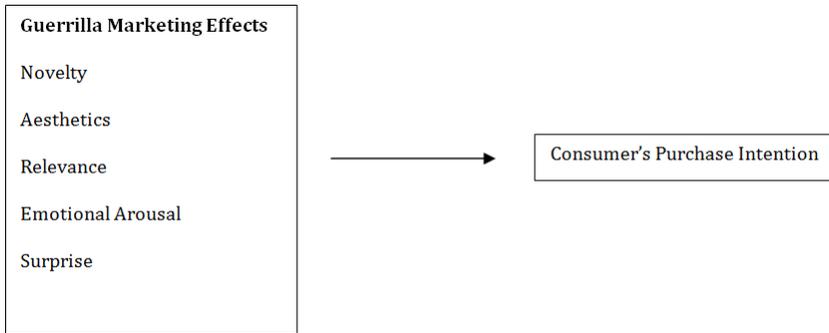
H0 - Emotional Arousal has no impact on consumer purchase intention

H1 - Emotional Arousal has an impact on consumer purchase intention

H0 - Surprise has no impact on consumer purchase intention

H1 - Surprise has an impact on consumer purchase intention

Theoretical Design:



4. Data Analysis and Interpretation

	N	Minimum	Maximum	Mean	Std. Deviation
Guerrilla Marketing	219	1.00	5.00	3.7863	.73297
Novelty	219	1.00	5.00	4.0685	.86463
Aesthetics	219	1.00	5.00	4.0639	.85832
Relevance	219	1.00	5.00	3.7032	.97728
Emotion	219	1.00	5.00	3.4155	1.09038
Surprise	219	1.00	5.00	3.6804	.91151
Valid N (listwise)	219				

Independent Variables: Guerrilla Marketing and its Dimensions

Guerrilla Marketing effects are measured with the help of Novelty, Aesthetics, Relevance, Emotional Arousal and Surprise. Guerrilla Marketing as an independent variable has moderate to high level of contribution on the consumer's purchase intention (Mean Value = 3.78, refer to table ()) As per the individual analysis conducted, it is found that consumers have a high level of contribution towards these guerrilla marketing dimensions whose mean values stand at 4.07, 4.06, 3.7, 3.4 and 3.68.

Novelty as a variable has the highest contributing mean value in the system and emotional arousal has the least mean value. This shows that although all factors favorably lead to purchase intention, novelty has a higher weightage towards this impact.

Dependent Variables: Consumer's Purchase Intention

This has been analyzed by posing 5 specific questions that directly relate to a customer's affinity towards purchasing the products, which includes, recommendation of the products, certainty of buying, run across the shop and buy the products, look for more information and consideration to buy the products. Mean values of these indicators are 3.67, 3.71, 3.63, 3.90 and 3.85 respectively. This shows that consumers have a high level of contribution to the purchase intention (Mean Value = 3.75).

We find that consumers tend to look for more information after looking at these Guerrilla Marketing advertisements, which is a key factor of Purchase Intention.

	N	Minimum	Maximum	Mean	Std. Deviation
Purchase_Recommend	219	1	5	3.67	.944
Purchase_Certainty	219	1	5	3.71	.974
Purchase_Across_The_Shop	219	1	5	3.63	.922
Purchase_MoreInfo	219	1	5	3.90	1.018
Purchase_Consider	219	1	5	3.85	.970
PI	219	1.20	5.00	3.7525	.69568
Valid N (listwise)	219				

Impact of Guerrilla Marketing Effects on Consumer’s Purchase Intention

Model Summary (Table 3)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582 ^a	.339	.336	.56701
a. Predictors: (Constant), Guerrilla				

Simple Linear Regression has been performed on the variables to find the impact Guerrilla Marketing has on Consumer’s Purchase Intention. The R Square value based on Table 3 is at 0.339 and the adjusted R-Square Value is 0.336, which indicates that there is a moderate relationship between guerrilla marketing effects and consumer’s purchase intention. As per the analysis, Guerrilla Marketing has a 33.9% impact on consumer’s purchase intention.

Coefficients ^a (Table 4)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.661	.202		8.221	.000
	Guerrilla	.552	.052	.582	10.543	.000
a. Dependent Variable: PI						

According to Table 4, the t value is less than 0.05 and the B value is 0.552. Its means that if guerrilla marketing effects is increased by one point consumer's purchase intention is increased by 0.552. Based on the proof it can be concluded that the guerrilla marketing effects positively impact on consumer's purchase intention.

So we reject the null hypothesis,

H0 - Guerrilla Marketing has no impact on consumer purchase intention

Hence, the second hypothesis of the study was accepted. i.e.

H1: Guerrilla Marketing has an impact on consumer purchase intention

Hence, the equation for consumer’s purchase intention can be written as follows:

$$Y = 1.661 + 0.552(\text{Guerrilla marketing effects})$$

Dimensions of Guerrilla Marketing Effects

Dimensions of guerrilla marketing effects of Novelty, Aesthetics, Relevance, Emotional arousal and Surprise also significantly and positively impact on consumer’s purchase intention.

Impact of Novelty on Consumer’s Purchase Intention

Model Summary (Table 5)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.359 ^a	.129	.125	.65093
a. Predictors: (Constant), Nov				

Based on Table 5, the R square statistics is 0.129 which means that novelty has a 12.9% impact on consumer’s purchase intention. Adjusted R Square indicated that the 12.5% of the variation in the consumer’s purchase intention is explained by Novelty. Table (), indicates that the B value of novelty is 0.288, which means if Novelty is increased by one point consumer’s purchase intention is increased by 0.288. Significant of t value is 0.000 that is less than 0.05. Based on the evidence it is concluded that the Novelty positively and significantly impacts consumer purchase intention.

So we reject the null hypothesis,

H0: Novelty has no significant impact on consumer purchase intention

Hence, the second hypothesis of the study was accepted. i.e.

H1: Novelty has a significant impact on consumer purchase intention

Coefficients ^a (Table 6)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.579	.212		12.161	.000
	Nov	.288	.051	.359	5.657	.000
a. Dependent Variable: PI						

According to Table 6, the t value is less than 0.05 and the B value is 0.288. Its means that if novelty is increased by one point consumer's purchase intention is increased by 0.288. Based on the proof it can be concluded that the guerrilla marketing effects positively impact on consumer's purchase intention. Hence, the equation for consumer's purchase intention can be written as follows:

$$Y = 2.579 + 0.288(\text{Novelty})$$

Impact of Aesthetics on Consumer Purchase Intention

Model Summary(Table 7)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309 ^a	.096	.092	.66309
a. Predictors: (Constant), Aesthetics				

Based on Table 7 the R square statistics is 0.092 it means aesthetics has a 9.6% impact on consumer's purchase intention. Adjusted R Square statistic indicated that the 9.2% of the variation in consumer's purchase intention is explained by aesthetics.

So we reject the null hypothesis,

H0: Aesthetics has no significant impact on consumer purchase intention

Hence, the third hypothesis of the study was accepted. i.e.

H1: Aesthetics has a significant impact on consumer purchase intention

Coefficients ^a (Table 8)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.734	.217		12.580	.000
	Aesthetics	.251	.052	.309	4.792	.000
a. Dependent Variable: PI						

According to Table 8, the t value is less than 0.05 and the B value is 0.251. Its means that if aesthetics is increased by one point consumer's purchase intention is increased by 0.251. Based on the proof it can be concluded that Aesthetics positively impacts consumer's purchase intention.

Hence, the equation for Aesthetics can be written as follows:

$$Y = 2.734 + 0.251(\text{Aesthetics})$$

Impact of Relevance on Consumer Purchase Intention

Model Summary((Table 9)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.346	.343	.56379
a. Predictors: (Constant), Relevance				

Based on Table 9 the R square statistics is 0.346 it means relevance has a 34.6% impact on consumer's purchase intention. Adjusted R Square statistic indicated that the 34.3% of the variation in consumer's purchase intention is explained by relevance. It is important to note that this dimension has one of the highest impact on the purchase intention in comparison to the other variables.

So, we reject the null hypothesis,

H0: Relevance has no significant impact on consumer purchase intention

Hence, the fourth hypothesis of the study was accepted. i.e.

H1: Relevance has a significant impact on consumer purchase intention

Coefficients ^a (Table 10)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.201	.150		14.713	.000
	Relevance	.419	.039	.588	10.721	.000
a. Dependent Variable: PI						

According to Table 10, the t value is less than 0.05 and the B value is 0.419. Its means that if relevance is increased by one point consumer's purchase intention is increased by 0.419. Based on the proof it can be concluded that relevance positively and significantly impacts consumer's purchase intention.

Hence, the equation for Relevance can be written as follows:

$$Y = 2.201 + 0.419(\text{Relevance})$$

Impact of Emotional Arousal on Consumer Purchase Intention

Model Summary (Table 11)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.538 ^a	.290	.287	.58762
a. Predictors: (Constant), Emotion				

Based on Table 11 the R square statistics is 0.290 it means emotional arousal has a 29% impact on consumer's purchase intention. Adjusted R Square statistic indicated that the 28.7% of the variation in consumer's purchase intention is explained by emotional arousal. It is important to note that this dimension has one of the highest impact on the purchase intention in comparison to the other variables.

So we reject the null hypothesis,

H0: Emotional Arousal has no significant impact on consumer purchase intention

Hence, the fifth hypothesis of the study was accepted. i.e.

H1: Emotional Arousal has a significant impact on consumer purchase intention

Coefficients ^a (Table 12)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.579	.131		19.715	.000
	Emotion	.343	.036	.538	9.410	.000
a. Dependent Variable: PI						

According to Table 12, the t value is less than 0.05 and the B value is 0.343. Its means that if Emotional Arousal is increased by one point consumer's purchase intention is increased by 0.343. Based on the proof it can be concluded that Emotional Arousal positively and significantly impacts consumer's purchase intention.

Hence, the equation for Relevance can be written as follows:

$$Y = 2.579 + 0.343(\text{Emotional Arousal})$$

Impact of Surprise on Consumer Purchase Intention

Model Summary (Table 13)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.434 ^a	.188	.184	.62824
a. Predictors: (Constant), Surprise				

Based on Table 13 the R square statistics is 0.188 it means surprise has a 18.8% impact on consumer's purchase intention. Adjusted R Square statistic indicated that the 18.4% of the variation in consumer's purchase intention is explained by surprise. It is important to note that this dimension has a high impact on the purchase intention in comparison to the other variables.

So we reject the null hypothesis,

H0: Surprise has no significant impact on consumer purchase intention

Hence, the fifth hypothesis of the study was accepted. i.e.

H1: Surprise has a significant impact on consumer purchase intention

Coefficients ^a (Table 14)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.534	.177		14.318	.000
	Surprise	.331	.047	.434	7.094	.000

a. Dependent Variable: PI

According to Table 14, the t value is less than 0.05 and the B value is 0.331. It means that if Surprise is increased by one point consumer's purchase intention is increased by 0.331. Based on the proof it can be concluded that Surprise positively and significantly impacts consumer's purchase intention.

Hence, the equation for Surprise can be written as follows:

$$Y = 2.534 + 0.331(\text{Surprise})$$

4. Findings and Interpretation

As has been believed in popular marketing theory that Guerrilla Marketing is an effective tool to reach the customers, it has been proved that using this form of marketing impacts consumer's purchase intention favorably. As the first hypothesis proved that Guerrilla Marketing has a 33.9% impact on the purchase intention, which is a very high value compared to other forms of marketing. This is the basis of the research which seeks to highlight the importance of Guerrilla Marketing and how it affects the way people decide to purchase. The novelty variable was analyzed using questions about imagination and striking. These questions relate to how this variable could be used favorably to prove that it has an impact on purchase intention. Novelty has a 12.9% impact on Purchase Intention which is moderately significant. Even though this variable isn't highly impactful, it serves as a precursor to other factors that affect the dependent variable in a higher capacity. It is in line with other research publications which have found a similar results. Aesthetics are a set of principles concerned with the nature and appreciation of beauty. These have gained serious significance in the recent past. It has been measured using artistic and style values of the advertisement. Aesthetics seems to have the least impact at 9.6%, which could make this variable look less desirable, however, it is imperative to use aesthetics to derive the dull picture for Guerrilla Marketing.

Relevance as a dimension is related to how the advertisement relates to the individual respondent. It has been valued with the help of meaningfulness and usefulness. Relevance has proved to be the highest contributing factor in consumer's affinity towards purchasing a product. It has a 33.6% impact on consumer's purchase intention. Moreover, a one point change in relevance leads to a 0.41 times change in consumer's purchase intention.

Emotional arousal is the way a consumer connects to the emotions expressing the advertisement. It has been measured using arousal and frenzied values. The R-square value is .29 which converts to a 29% impact on the consumer purchase intention. This variable is more impactful than Novelty, Aesthetics and Surprise in the study conducted.

Surprise has been analysed with the help of startle and unexpected variables. It has a rate of 18.8% which moderate as compared to the other variables. Surprise has been used in several Guerrilla campaigns over the years and has thus, become an integral part of this form of marketing. Purchase intention refers to the affinity towards buying a product. This has been measured using several dimensions of purchase intention including, recommendation, certainty to buy the product, running across the shop, thus buying the product, seeking more information and consider buying the product.

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IMPACT OF INDIVIDUAL BEHAVIOUR ON INVESTMENT DECISION MAKING IN MUTUAL FUND

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ABSTRACT: *Mutual Fund (MF) plays an important role in capital market and offer different schemes to different types of investors. A large number of investors are contributing to the progress of Mutual Fund market in India. Before talking about performance of MFs, it is required to study about the investment choices of different personality type of individual. Indian MF investors are of peculiar in nature and it is difficult to predict their behaviour as they belong to different religions, cultures, lifestyle, social status, education levels and income groups. The study was conducted with the aim of analysing the inter-relationship between decision making skills, investor bias and personality factors of MF investors. Primary data was collected using convenience sampling techniques through a well-defined questionnaire from a sample of 225 respondents in Bengaluru city in Karnataka who have invested in MFs. Data was collected during January-February, 2019. The relationship between decision making skills, investor bias and personality factors were analysed through the statistical technique Structural Equations Modelling (SEM). The study found that there is a strong positive direct effect of investors' bias and positive indirect effect of personality factors on decision making.*

Keywords: *Mutual Fund, investors bias, personality factors, decision making.*

1. INTRODUCTION

Every investment has certain risk attached to it and degrees of risk vary from high to low. Last two decades in stock market, a major portion of the investors preferred to invest in capital market. Uncertain nature of capital market stimulates the investor to take suitable measures to analyse the condition of the market on regular basis so that they can get good return with minimum risk. People have different alternatives for investing their money, i.e. deposit in bank, investment in jewellery, real estate, financial market, etc. Investment in Mutual Fund (MF) may be the best option for a new investor for safe return of their investment and minimize their risk. Investors do not require a considerable initial investment, the minimum amount required for investment for most MFs is as low as Rs.500, carry only a moderate amount of risk, and are also capable of providing a secondary income (Lavanya Mohan, 2017). Small investors are benefiting more from MFs because they will earn returns on otherwise idle cash savings. Before talking about operation of MFs, investment selection of different personality traits of investors is very much needed. This study is an attempt to examine how the decision making of investors are affected by their individual behaviour studied through investor bias and personality factors.

2. REVIEW OF LITERATURE

The personality traits of the investors have an effect on the individuals while taking decisions and influenced strongly on determining the method of investment (Ramya & Chitra, 2011). Suleyman et al. (2011) found that there is an interaction between demographic and financial behavior factors in investment decisions. Also, the gender has interaction with financial behavior factors such as overreaction, herding, cognitive bias, irrational thinking, and overconfidence. The behavioral factors such as overconfidence (Kent Daniel et al., 1998; Le Phuoc Luong & Doan Thi Thu Ha, 2011) loss aversion and mental accounting (Sayed and Sara, 2011; Stephen, 2008), herding (Gunay & Demirel, 2011; Le Phuoc Luong & Doan Thi Thu Ha, 2011) affected the decisions of the investors. Enrico Rubaltelli et al. (2010) conducted a study that how investors' affective reactions toward a fund influence their decision to sell the investment and they found that the affective reactions influenced participants' confidence and also the socially responsible fund induced a more positive reaction than the ordinary fund. Investor's decision making was found to be positively affected by psychological factors though the studies made by Qureshi et al. (2012), Lim (2012), Qadri and Shabbir (2013), Wamae (2013). Further it was also found that decision making was not affected by some of the psychological factors. Indian investors are prone to behavioral biases during their investment decision process. Income was found to be a significant factor impacting the overconfidence level. Gender, age, income, wealth, and marital status of individuals also affect their decision on investment. (Mittal & Vyas, 2009; Meenu Verma, 2008). Individuals who are more extraverted intend to engage in short

term investing, while those who are in neuroticism avoid this activity (Cliff et al., 2008). The main aim of this study was to fulfil the gap in the knowledge of literature relevant to the MF investors in their decision making skills. Based on this, the research question is framed as “How do impact the MF investors’ various personality bias on investment decision? The above previous research study issues assist to build a greater understanding of subsequent research issues, and it leads to an answer to the above research question.

3. MUTUAL FUND IN INDIA

MF came into existence in India in the year 1963. Unit Trust of India was the first association to launch the concept of MF in India. After the post liberalization, around 24 million UTI shareholders were assured high returns on investing in MFs. Currently, a large number of financial institutions, banks and insurance companies are issuing various types of MFs in different schemes with more features for the benefit of small investors. It has grown to be a main vehicle for mobilization of savings especially from middle income group for investment in stock market which ensures high return and low risk. It borrows money from a cross-section of investors by issuing units, build a diversified portfolio of stocks, bonds and other investment instruments and invest the same in the capital market with the aim of providing steady flow of income with high capital appreciation. As the prime regulators of capital market actives in India, Securities and Exchange Board of India’s (SEBI) basic objective is to protect the interest of investors. Every mutual fund shall be registered with SEBI. SEBI’s Investor Survey (SIS), 2015 said that, among 5,356 mutual fund investors, around 66% (or 3,536 investors) have put their money in MFs investments, making MFs the most favoured financial instrument among Indian investors. According to the data from the Association of Mutual Funds in India (AMFI), “the assets under management (AUM) of mutual fund industry is at Rs.22.86 lakh crore and net inflow in mutual fund schemes stood at Rs.46,475 crore in June 2018”.

MF investment facilitates diversification of investment, expert investment management, liquidity, convenience transparency, flexibility and high capital appreciation. However, lack of clarity about the risks associated with new and existing schemes and poor transparency in the computation of Net Asset Value (NAV) are the main concern in the MF market. These issues are keeping the investors away from the Mutual Funds. In India, investors belong to different cultures, religions, lifestyle, social status, education levels and different income groups and hence it is risk to predict their behaviour. This study attempts to find out the effect of personality traits and investors bias on decisions making skills of investors with regard to MF.

4. OBJECTIVE OF THE STUDY

To analyse the inter-relationship between decision making, personality factors and investor bias of MF investors.

5. METHODOLOGY

5.1 Data and Sample

Primary data was collected from respondents through personal enquiry method through a well-defined questionnaire from 225 sample respondents in Bengaluru city in Karnataka who have invested in MFs. Hair et al. (1998) proposed that with quantitative research, as a minimum 100 respondents should be considered in order to carry out the statistical analysis. Data was collected during January-February, 2019. Convenience sampling technique was used to select samples from the population of MF investors in Bengaluru city. As the total population cannot be determined and thus sampling frame could not be found, convenience sampling was used to select the sample. (Bryman and Bell 2007). The questionnaire is designed to have four segments such as demographic profile, decision making skills, investors’ bias and personality factors and of MF investors.

5.2 Statistical Tools

The relationship between decision making skills, investor bias and personality factors were analysed through the statistical technique Structural Equations Modelling (SEM). The statistical software SPSS and AMOS were deployed for data analysis.

6. Research Framework

The conceptual framework of the study is displayed in Figure 1. It ascertains the impact of the factors of personality traits and investors bias on investors’ decision making in MF investment. There are four personality factors which are Extraversion, Openness to experience, Agreeableness, and Conscientiousness and six Investors bias variables which are Over-confidence, Cognitive dissonance, Availability bias, Illusion

of Control, Mental Accounting and Loss Aversion. All of these personality factors and investors bias variables are found to have played important roles in determining investors’ investment decision-making attributes such as Achievement, Deliberative, Emotional Involvement, Risk bearing and Routine based on studies by previous researchers.

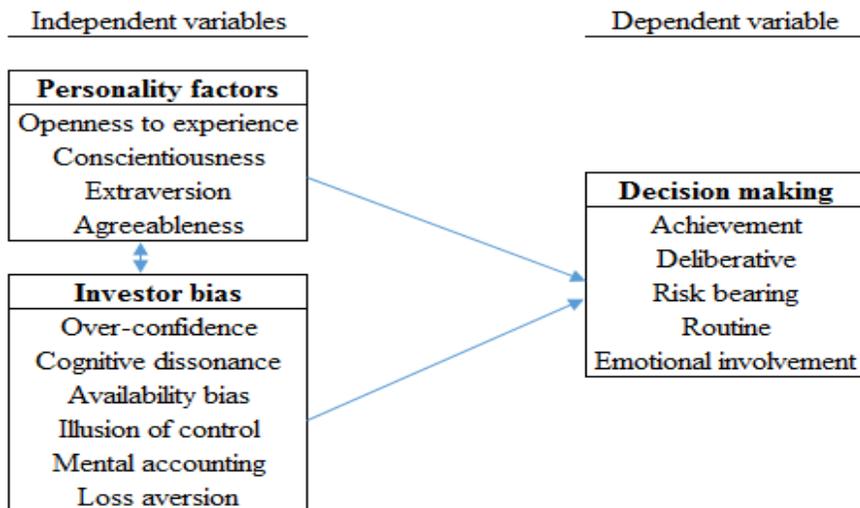


Figure 1: Conceptual Framework

The personality traits described by the Tupes and Christal (1961) have been taken as independent variable to know the impact on decision making skills of investors. The factors are openness to experience, conscientiousness, extraversion and agreeableness. Digman (1990) advanced his five-factor model of personality in 1990 and Goldberg (1993) extended this to the highest level of organization. Many researchers followed these domains as the basic structure behind all personality traits.

The investor bias variables have been taken from the various studies. The frame dependence means that the way people respond to situations depends on how the situation is framed or presented, rather than on the actual facts of the situation. While making investment decisions, investors are usually more influenced by how the information is presented than what information is presented (Daniel Kahneman and Amos Tversky, 1979). Festinger's (1957) cognitive dissonance theory suggests that “an inner drive to hold all our attitudes and behavior in harmony and avoid disharmony (or dissonance)”. This is known as “the principle of cognitive consistency”. According to Marx and Weber (2012), availability bias or the availability heuristic refers to “the human tendency to judge an event by the ease with which examples of the event can be retrieved from your memory or constructed anew”. Biases influence how people process complicated information. Ellen Langer (1975) describes that “the illusion of control is the tendency for people to overestimate their ability to control events”. Richard Thaler (2008) stated that “Mental accounting describes the process whereby people code, categorize and assess economic outcomes”. In decision theory (Katie & Orri, 2015), loss aversion indicates to “people's tendency to strongly prefer avoiding losses to acquiring gains”. Aversion to loss is a strong emotion. The aversive response replicates the critical role of negative emotions (anxiety and fear) to losses (Rick, 2011).

7. IMPLICATIONS OF THE STUDY

For each of the attributes of decision making skills, separate models were fitted using multiple regression analysis with various factors of personality factors and investor bias as independent variables. The models fitted by SPSS software is depicted in Table 1 and it can be observed that decision making variable ‘achievement’ is positively influenced by illusion of control and extraversion. The decision making attribute ‘deliberative’ is positively influenced by the factors conscientiousness, over-confidence, availability bias and mental accounting, and negatively influenced by agreeableness. The decision making attribute ‘emotional involvement’ is positively influenced by extraversion, conscientiousness, mental accounting and negatively influenced by ‘agreeableness’. The decision making attribute ‘risk bearing’ is positively influenced by cognitive dissonance and illusion of control. The independent variable extraversion and openness to experience have a significant positive impact on decision making attribute ‘routine’ and availability bias has a negative impact on ‘routine’ attribute. The following hypothesis is assumed for the model.

Hypothesis: There is no impact of Personality factors and Investor Bias on decision making of investors in mutual fund.

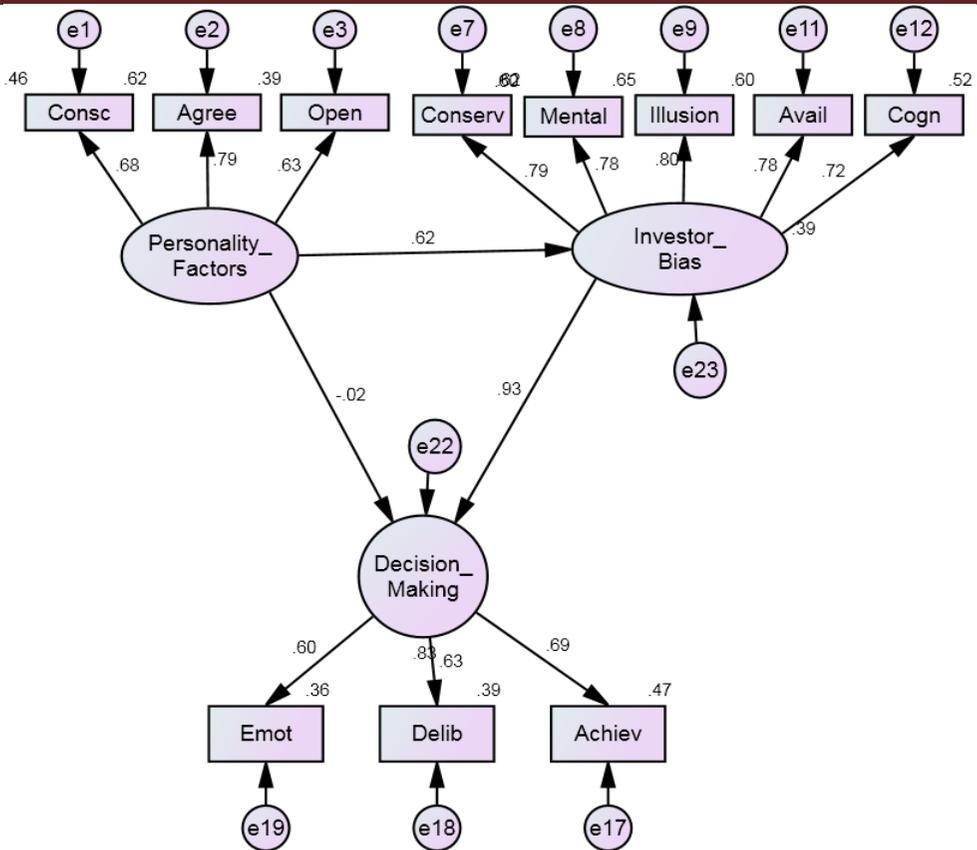
Table 1. Coefficients in the models

Independent Variables		Dependent Variables (Decision Making)				
		Achievement	Deliberative	Emotional Involvement	Risk bearing	Routine
Personality Measures	Extraversion	.521		.252		.228
	Openness to experience					.299
	Agreeableness		.153	-.224		
	Conscientiousness		.512	.429		
Investor Bias	Over-confidence	.713	.179	.333	.118	.201
	Cognitive Dissonance				.284	
	Availability Bias		.236			-.391
	Illusion of control	.219			.281	
	Mental Accounting		.248	.327		
	Loss Aversion	.348	.112	.118	.358	.255
R ²		.653	.701	.485	.728	.352
F		23.523	18.151	18.313	41.497	10.261
P		.000	.000	.000	.000	.000

Source: SPSS output (Step-wise Regression method)

All the five models were significant ($p < .01$) at one per cent level of significance. The model for the attribute 'risk bearing' has the highest R-squared value of .723, which implies that about 72 per cent of its variation is explained by personality factors and investor bias variables. Also it can be noted Risk bearing is explained only the investor bias variables – over confidence, cognitive dissonance and loss aversion, but not influenced by Personality factors. Also, it is evident that at least one of the personality factor explain the decision making variables. The R square for the attribute 'deliberative' is also above 70 per cent, and the R-square for 'achievement' is 65 per cent, but the R square for the other attributes are less than 50 per cent.

Although separate model was developed for each of the attribute, the researcher was also interested to know how the inter-relationship between personality factors and investor bias will have an effect on decision making skills. Therefore, structural equation modelling is used to find out the effect of personality factors and investors bias on decision making skills along with inter-relation among them. The unweighted least squares estimates were used in the model. The conceptual model along with estimates is depicted in Figure 1, which suggests that personality factors has no direct effect but an indirect effect on decision making. Also, investors' bias has a significant high positive impact on decision making. Further, investor bias is positively influenced by personality factors and has a strong direct positive impact on decision making.



CHI-SQ = 4.806; DF = 41; GFI = .985; AGFI = .976; RMR = .027;

Figure 2: Structural Model for Decision Making (with estimates)

Table 2. Result of Confirmatory Factor Analysis

Chi-Square	df	GFI	AGFI	RMR
4.086	41	.985	.976	.027
Norms		>.9	>.9	<.05

The results of the above model in Table 2 suggest the norms of a reasonably high-fitting model are satisfied.

8. CONCLUSION

This study was focussed on how the bias of investors and personality factors influence the decision making of investors towards MFs. The study revealed that there is a strong positive direct impact of investors’ bias and positive indirect effect of personality factors on decision making. The further research will focus on other factors and also on how MF performances are affected by portfolio management of specific fund and pattern of investment in the capital market. It was difficult to define the population for this study because of today’s investor may not tomorrow’s investor. The population of MF investors are variable in nature. This research focused only on Bengaluru city in Karnataka and hence the findings are subjected to geographical variations in other parts of the world.

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ISSUES AND CHALLENGES (VUCA) IN HRM

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ABSTRACT: *Few executives play a significant role for the successful operation of a company. In fact skilled, Trained and experienced people are the most important human resources and assets of the company. The Late Rensis Likert suggested and developed, “Human resources accounting”. Even though great deal of money is invested in the recruitment, selection and training of people, human assets are not shown as a distinct category. Hence, it is to admit that recruitment, endowments is a challenging function of managers, where in the original growth and operation is in their hands.*

There are challenges which gives an impact over the stability of staff tenure. Normally, the number of staff needed in an enterprise depends only on its size but today the following factors form the reason for staffing;

- *Goal, tasks*
 - *Original structure*
 - *The reward system*
 - *Automation*
 - *Change in company plan*
 - *Layoffs, short list*
 - *Demotions*
 - *Early retirement*
 - *Modernization*
 - *Technological advancement*
 - *Highly qualified to take up the current demand for labour*
 - *Laws and regulations which affect staffing*
 - *Lack of recognition*
 - *Loss of intellectual capital due to competitions*
 - *Dominance of the administrative executive*
-

INTRODUCTION

AN OVERVIEW OF STAFFING FUNCTION

Staffing requires an open-system approach. Proper staffing facilitates leading. Selecting quality managers affects controlling, but proper staffing facilitates leading. Recruitment within the organisations are carried out taking into account –internal factors such as personnel policies, the organisational climate, and the reward system. External factors are taken into consideration when high technology demands well-trained, well-educated and highly skilled managers.

Threats and Issues in Systems Approach to HRM

1. Legal regulations from hiring to wage payment, workplace safety, compliance with labour act.
2. Saturation period will emerge when business grows and experience low productivity and morale during periods of change.
3. Leadership development practices are below average.
4. Lack of investment in trainings and development program.
5. Risk in quick adoption of technological change.
6. Overtime, low cost benefits in payrolls, taxes
7. Lack of health care benefits, leave with pay etc.
8. Huge investment for attracting talent.
9. Difficulty in bridging gap between business growth and placing suitable ideal person in right job.
10. When the employee turnover is expensive, it brings negativity in economic growth.
11. Generation gap, cultural and linguistic differences brings work place diversity.
12. Lack of analytical and problem solving ability among managers.
13. Outsourcing has become very popular with globalization.

SOLUTIONS AND REMEDIAL MEASURES

- Update with employment law guide.
- Regular staff meeting to understand the whereabouts of the changes.
- Leadership development is to use strengths to develop the skills.
- Senior managers should give counseling and act as a mentor and give online training.
- Setting clear objective to learn new technology and innovation.
- Performance appraised to reward employees, by the way of bonus, incentives, perquisites etc
- Purchasing a plan for health insurance and getting tax benefits.
- Utilizing Staffing agencies or companies or companies to hire or temporarily appoint personal at relatively at low risk .senior staff should be made business partner.
- Setting standards of behaviors and implementing diversity training program.
- “keep in touch with alma meter ” this benefits the company by sharing their knowledge and may also result in re-employment after separation.
- A-fired or laid off employee cannot get chances to spread false information in the social media if a good alumnus meeting is arranged.
- Managers requires effort, time, energy and long hours to work with a significant characteristics of ability to communicate with empathy.
- Stress could be managed with planning time management, health, nutrition, career planning, a change in job by way of promotion ,meditation, relaxation, recreation facilities etc.

T- Test

Two companies A & B are tested with the salary of Rs.25000 in the month of September in order to find out whether stress the main reason for staff turnover.

Hypothesis

Irrespective of high salary stress does not play a vital role in staff turnover.

COMPANY	WORK OVERLOAD	IRREGULAR WORKING HOURS	NO EARNED LEAVE	LOUD NOISES	BORING JOB	INSOMNIA	RESPONSIBILITY WITHOUT AUTHORITY
A	28	30	32	33	33	29	34
B	29	30	30	24	27	29	-

CONCLUSION

AT LEVEL 5% We reject the hypothesis. So, that we conclude that stress plays a vital role in staff turn over.

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LEADER SHIP IN THE TIME OF VUCA

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ABSTRACT: *Several principles/rules that initiated success in the organisation earlier are no more a distinctive consideration for successful leaders in today's agile environment. The challenges will be addressed differently by different leaders based on their levels of observation of growing digital revolution and expanding global markets. The role of a leader remains very significant in this juncture where organisations are struggling to find competitive edge and stimulate growth. Establishing a network between several intruding factors in the organisation and human resource management are indispensable in generating value. The trending acronym VUCA translates the complexities a business may encounter and leaves challenges for management teams who can embrace the same and can lead the organisations to the path of success. Strategic entrepreneurship is one significant contribution in the field of value creation for the organisation. The outcomes of strategic entrepreneurship are highly motivating for all stake holders and materialistic in adding value in this 21st century business domain.*

INTRODUCTION

“You can't manage men into battle,
You manage things; you lead people”

-Grace Hopper (1906-1992) Admiral US Navy

The quote's each word is worth a million taken in the sense of business and complexities faced by organisations in today's agile environment. The concept VUCA has its roots from US military college that emphasized the need of understanding the world of problems and the same was ascended to the world of business. VUCA can be synonymized as:

VOLATILITY – Indicates rapidly changing and highly unpredictable challenges

UNCERTAINTY – Situations that raise question and not sure of something

COMPLEXITY – Complex situation where confusion permits and no cause and effect relation can be established

AMBIGUITY – Mixed meaning of conditions and inexactness in expression

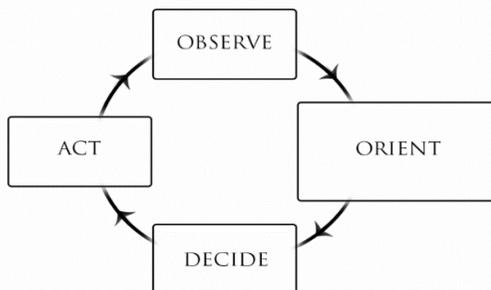
An effective leader creates an opportunity where employees are motivated to accept the dynamics and understand the need to adhere to the VUCA world of business.

The acronym VUCA translates the complexities that any business/institution may encounter that might affect the survival and growth of the same. The role of leader at this point of time involves enrolling and training his/her team to embrace the challenges and lead the organisation into the path of success. The major focus of a leader in this scenario is to enable personnel to:

- Understand the need to accept the dynamics of environment.
- Train them in order to equip themselves with required knowledge and abilities.
- Motivate the employees to take up innovative challenges in an optimistic way and address the complexities.
- Critically guide and direct the teams towards goal accomplishment as they are consistently projected to challenges in an ambiguous environment.

Participative decision making is an effective way that helps leaders to design the business strategies which play a pivotal role in success of today's organisations. Mutual understanding and clarity of communication in the system is more beneficial along with the support of user-friendly technologies. Several advanced tools like OODA loop frame work are recommended to be used that would result in increased ability of the organisation to foresee the agility and effective plans can be drafted accordingly.

THE OODA LOOP



This loop from the orientation of managers helps in the assessment of existing systems and intrude the peer accepted decisions that result in identifying appropriate methods of achieving the goals. Another significant area where leader's role remains indispensable is to enhance the customer value by working on the areas of product and service availability and providing better value for money spent, thus harnessing the trust and reliance of customers. Management strategies in adding value to areas like customer satisfaction, employee performance and product management will result in organisational prosperity.

Seamless growth of technology and innovations

The arena of business development can be analysed based on the speed with which technological developments are overtaking and building competitive edge.

As per the recent survey by wisdomjobs.com IT, Retails, Hospitality, FMCG, Healthcare, Infrastructure are few of the sectors where the growth was phenomenal, the reason being the organisations in these industries are adapting to agility and accepted the notion that innovation is a tool to attain the most anticipated growth and share in the market. Companies in the said sectors are focussing significantly to curb attraction rates through higher salary hikes with matching hiring rates.

5 years' salary hike trends as per wisdomjobs.com

2019	9.8
2018	9.6
2017	9.4
2016	10.3
2015	10.5

The survey found that digitalization and technology upgradation have resulted in upskilling of workforces and this has in turn contributed to salary hikes in most industries and sectors.

Strategic entrepreneurship-A value adding tool:

One more scholarly question that arises in this context is how firms can create value, that might result in greater sustainability and help in creating new opportunities. Most of the organisation rely on strategic entrepreneurship as a tool of obtaining the desired behaviour and enhance the value for organisation. This involves leadership strategies and actions taken to explore the new facets that create value across time. Strategic entrepreneurship is relatively a new area of interest for business organisations in the 21st century that brings cohesiveness of dynamic forces.

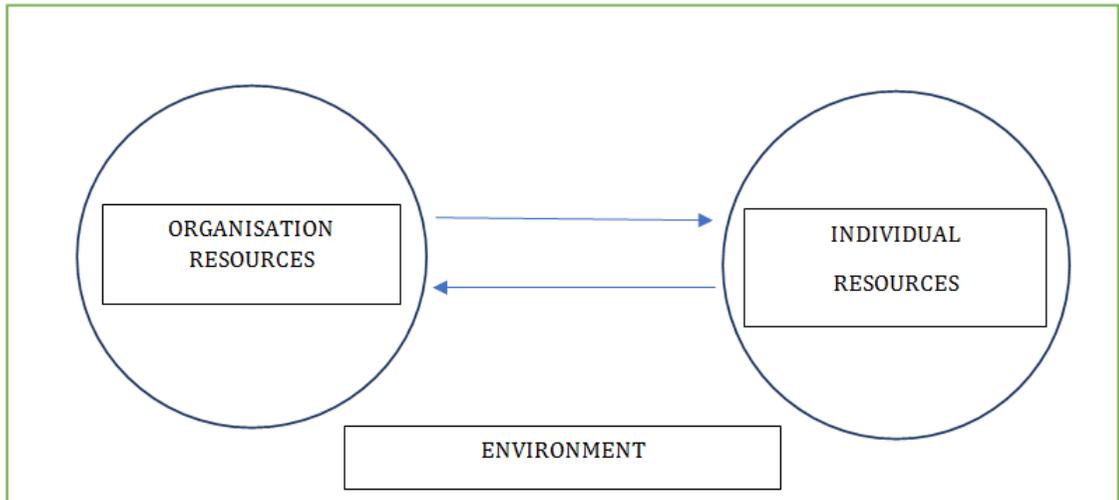
Changing generations and changing views

Apart from several other challenges like changing regulations, work structures and relationships it is the changing generations (Generation Z) and their perspective towards business procedures that is igniting the complexities.

The positive aspect of new generation in relation business process is their ability to handle bigger tasks and flexible working styles. The flipside being unstable, complex and volatile behaviour that is creating huge amount of crisis at workplace.

Environmental factors have an impact on the long-term survival of the organisation as well as the ability to exploit hidden opportunities. Staying interconnected with the environmental factors and establishing a network helps in building firm's strengths and capabilities.

Organisational resources and individual resources complement each other with the help of the environmental factors that results in effective utilisation of resources.



A combination of individual and organisational resources result in adding value resulting in customer satisfaction as well as growth and stability in the organisation.

Changing role of HR in VUCA Environment:

The role of HR department in aligning the factors in the external environment and organisation atmosphere is indispensable.

- Most of the challenges which are posed due to volatility, uncertainty, complexity that remain unaddressed may hamper the organisational existence
- The leader in this challenging environment must prepare the organisations for disruptive problems and opportunities
- This is possible when a leader engages in hiring employees who can effectively work in the unpredictable situations.
- Once people grooming is done, the next is process grooming where managers create the process which remains adaptable to the requirements and challenges posed due to VUCA.

A blend of systems and synchronisation to the dynamism by being agile will attain competitive edge over another organisation. The management has another critical role to play where they train the system and plan to self-obsolete and replace with more effective system absorbing ones. This results in completion of the vicious circle- observe-orient-decide and act.

CONCLUSION

“There’s not a lot of training to be a good leader. There’s tons of training about how to be a great manager”

- Maria Giudice

Aforesaid article throws light on the contemporary business scenario that highlights a leader’s ability to lead a company to its success path. Leader’s agility plays a vital role in adding value to the organisation and head to become more effective in term of adaptive to latest technology upgradation and innovativeness.

Everyone employed in an organisation is affected by management principles, policies and practices. This is where understanding VUCA of the business environment plays a significant role.

Managers need to mould and cultivate innovation mindset. The new thoughts generated through synergy of several variables result in identifying more effective ways of designing organisation by answering and addressing all possible challenges.

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“DO NIFTY INDEX PRICE FOLLOW RANDOM WALK- AN EMPERICAL TEST USING WEAK FORM OF EFFICIENT MARKET HYPOTHESIS ON NATIONAL STOCK EXCHANGE”

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ABSTRACT: Markets are important channels for the transfer of the money from household investors to business. Stock markets are considered as economic barometer, if markets are efficient no one can beat the market. Efficient market ensures that shares are traded at their fair value. This paper attempts to test the efficiency of the stock prices especially Nifty index to reflect all available information in its price. To test the randomness, runs test is used on nifty index for a period of 5 years i.e. from 2014 to 2019 by taking closing prices on daily, weekly and monthly basis. The study provides evidence that the market behaviour is different in different time period. i.e market are efficient when analysed considering daily price change and not efficient for weekly and monthly price change data.

Keywords: Stock Returns, Efficient market hypothesis, Run test, Nifty Index

Introduction:

The Efficient Market Hypothesis (EMH) is considered has one of the important financial theory and hence lot of research is done from 1970 till date to test its validity, adaptability and the insights it present. Stock market plays a substantial role in the economic progress of a country. In fact global financial eco system is undergoing tremendous changes because of development of technology and increase in the interdependent economies. This change in the eco system has opened up lot of opportunities for researchers, since stock market is one of important investment avenues for investor as well as important sources of funds for the business. However, the ability of the stock market to present itself as an effective financial intermediary and assure investors of fair returns is contingent on efficiency.

Well-organized market is one, in which the stockprice reflects all available information. Further market to be efficient, successive price changes must be independent i.e. it follows a random walk. Naturally an efficient market prevents undue profits and passive portfolio strategy is as good as active portfolio strategy. These insights created a curiosity and inquest to test how efficient Indian stock markets, is it possible to out beat the market.

Purpose of this research is to extend the prior research on weak-form of EMH theory on NIFTY index and test its efficiency in different time intervals in the last five years.

Literature review:

(Awiagah & Sup Brian Choi, 2018, p. 1) Their study examined the certainty of index returns on the Ghana stock exchange. Analysed weak-form EMH for a period of 28 years (1990-2017) using historical daily, weekly, monthly, and quarterly returns. Researcher used Ljung-Box autocorrelation, unit root, the runs, and variance ratio tests (such as Wright’s rank and sign and Lo-Mac Kinlay) to analyse randomness. Outcome is GSE is inefficient at weak form.

(Chaudhuri, 1991) Author selected 93 actively traded shares from January 1988 to April 1990, to scrutinize the serial independence of share daily price changes. He applied the serial correlation and the runs test to daily price changes. The results not appeared to support the hypothesis of weak form of market efficient.

(Durusu-Ciftci, Ispir, & Kok, 2018) This paper analyse market efficiency by considering cross-sectional dependency, structural breaks and panel unit root tests. They used 33 countries stock price indexes for the period 1992 to 2018. Results indicate that cross-sectional dependency and structural breaks plays and major role for understanding the behaviour of the stock market indices, Panel unit root testing methodologies which consider both structural shifts and cross-sectional dependency provide a strong evidence for the Weak form of stock markets.

(Jain & Jain, 2013) Scholar considered parametric and non-parametric test to check BSE SENSEX index efficiency. Auto correlation test suggest non randomness in index values but Runs test and Dickey Fuller test support randomness.

(Khan, Ikram, & Mehtab, n.d.)Run test is used in this article to measures efficiency of both the NSE & BSE market. Historical returns over a period of 10 years is studied which resulted in the rejection on alternative hypothesis i.e. both markets don't follow random walk theory.

(N. Gupta & Gedam, 2014)this article studies the efficiency of stock prices of selected companies listed in the NSE markets using filter rule, runs test and serial correlation test. Research concludes that prices are independent at 5% significance level and hence stock prices are efficient in weak form.

(Malafeyev, Awasthi, Kambekar, & Kupinskaya, 2019)paper investigate impact of global financial crisis of 2008 and Chinese crisis of 2015 on the efficiency of Chinese (SSE) and Indian stock market (BSE). 20 year's data is measured by dividing into four sub-periods. The evidence from all these tests supports that both the Indian and Chinese stock markets do not display weak form.

(Srinivasan, 2010) scholar determines the rationality of weak-form for NIFTY AND SENSEX INDEX through 3244 observations. Hypothesis examined using ADF and PP test.It resulted in rejection of null hypothesis i.e. Indian stock markets do not indicate random walk pattern and as such past information are not fully reflected in the stock prices

(Worthington & Higgs, n.d.) in this article researcher exams the weak form market efficient of 10 emerging Asian equity marketsand five developedmarketsbyparametric and non-parametric test. Each test gives conflicting results.

Research Methodology:

Objectives of the study:

1. To study whether the successive price changes is independent to one another
2. To assessNIFTY index for weak-form of Efficient Market Hypothesis.

Data sampling:

1. Daily, weekly, monthly Closing price of NIFTY index is utilized for researcher
2. Historical data for a period of 5 years from 01/02/2014 to 01/02/2019 is considered for study
3. Research is based on secondary data collected from NSE websites.

Hypothesis testing:

H_0 = successive price changes are independent to one another

H_a = successive price changes are dependent to one another

Analysis tools:

Used non parametric test called the Wald–Wolfowitz runs test to analyse random walk.

Analysis:

Table: Runs test for Nifty Index closing price

PARAMETERS	DAILY	WEEKLY	MONTHLY
No of Runs	12.00	6.00	2.00
No of Observations	1234.00	261.00	61.00
Index closing price above mean	489.00	102.00	24.00
Index closing price below mean	745.00	159.00	37.00
Mean Run(μ)	590.45	125.28	30.11
Var(R)	282.27	58.92	13.64
StDev(R)	16.80	7.68	3.69
Z	-34.43	-15.54	-7.61
P-Value(2-tailed)	0.0000	0.0000	0.0000
Conclusion	Non-randomness	Non-randomness	Non-randomness

Z-statistics in different time period considered under study were all negative, indicating that number of runs is less than the expected runs, and the test value of Z in all the cases is below 1.95 at 5% level, confirming absence of randomness in the index prices. Which concludes that the null hypothesis is rejected confirming that successive price changes are dependent to one another and henceweak-form of Efficient Market Hypothesis doesn't holds goods on NIFTY index for the period considered under study.

Conclusion:

The validation crystallized in this study does not support the null hypothesis of serial independence of daily, weekly & monthly price lag of nifty index. The market is not efficient in its weak form. The investors can out beat the market or it is possible to generate better returns than the market return. Further, the issue of market efficiency or inefficiency needs to be investigated from different time frame. However, our findings are constrained by limited sample size and somewhat shorter time period.

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MARKETING STRATEGY OF EDUCATIONAL INSTITUTIONS IN VUCA WORLD

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ABSTRACT: *The paper is an attempt to identify marketing strategies of educational institutions. Where the key consumers and customers are students, parents, employer, alumina and faculty. The decision of selection undergoes Volatile, uncertain complex and ambiguous stages due to various internal and external environmental factors. The paper is based on an extensive research conducted on previous work done in the aligning areas of marketing and educational institutions. The prime outcome of the paper is to provide guideline related to marketing strategies for educational institutions looking into the preferences of millennials.*

Introduction

The prerequisite of economic growth is human capital development through education and training. The market for education services has increased tremendously, worldwide. The native system of education experiences the epoch of changes and demands highly competitive especially in the developing countries. The marketing application in education is known as the educational marketing. Kotler and Fox (1995) believes that educational marketing involves designing institutions to effectively meeting the identified needs and wants and use market price, communication and distribution to inform, motivate and serve the market. The particularities of marketing in higher education is needed as in most of the countries primary goal of higher educational institutions is not for profit making, and is a social needs, social marketing and marketing of services apply to higher education (Nicolescu, 2009). Therefore, educational marketing needs to deploy 7P's of marketing mix-4 Ps -Product, Price, Place, Promotion and 3 more components that can be a competitive advantage which includes variables: "people", "physical evidence" and "process". They could be employed in the distribution, but as it assumes a special importance in this area, it is appropriate to give them a place in the marketing mix classic. Educational marketing involves designing educational institutions to effectively meet identified needs. A deeper understanding of each elements of VUCA serves to enhance the strategic significance, foresight and insight as well as the behaviour of groups and individuals. V = Volatility, U = Uncertainty, C = Complexity, A = Ambiguity. These elements present the context in which educational institutions view their current and future state. They present boundaries for planning and policy management. They come together in ways that either confound decisions or sharpen the capacity to look ahead, plan ahead and move ahead. VUCA sets the stage for managing and leading. VUCA relates to how people view the conditions under which they make decisions, plan forward, manage risks, foster change and solve problems. VUCA is a practical code for awareness and readiness. Beyond the simple acronym is a body of knowledge that deals with learning models for VUCA preparedness, anticipation, evolution and intervention. A marketing strategy is a plan course of action designed to promote and sell any product/service. It is the detailed plan for achieving marketing objectives of any organisation. It provides a road map for achieving marketing objectives of any organisation. It is foundation of any marketing plan. A detailed research is required for adequate designing. A marketing strategy helps an organization to focus on its limited resources on the best possible opportunities to increase the sales. Marketing strategy design involves the following sequential steps -Selecting target market to whom the organization wants to sell its products/services. Not all the market segments are fruitful for an in-depth market research of an organization. Selecting these market segments which guarantee quick profits. There are certain segments which may be having great potential but there may be high barriers to entry. A careful choice must be made by the organization. An in-depth marketing research will help to identify the traits of the buyers and the needs of the buyers in the target market. **Gathering the marketing mix:** By marketing mix we mean how the organization is planning to sell its products/services. The organization has to gather the four P's of marketing in appropriate combination. Gathering the marketing mix is a crucial part of marketing task. Various decisions have to be made such as -What is the most appropriate mix of the four/seven P's in a

given situation. What distribution channels are available, and which one should be used. What developmental strategy should be used in the target market. How should the price structure be designed? Well defines marketing strategy provides an organization an edge over its competitors. A well framed marketing strategy helps in developing goods and services with best profit-making potentials. Marketing strategy helps in creating an organizational plan to cater the customer needs. It helps in fixing the right price for organization's goods and services based on information collected by market research. Moreover, it helps organisation to fix the advertisement budget in advance. The marketing strategies adopted by service company – 1. Market research 2. Niche Strategy 3. High performance website 4. Search engine optimisation 5. Social media 6. Advertising 7. Referral services marketing 8. Marketing Automation 9. CRM 10. Lead Nurturing.

Literature review

A trend towards a more competitive educational system which is obvious in several countries is expected to increase the rates at which schools, colleges, and universities respond to their environments and to enhance their creativity and innovativeness. To achieve these objectives, various strategies, such as open-boundary admission policies, have been adopted. Consequently, educational institutions are beginning to adopt marketing strategies to attract students, staff, and funds. This adoption of marketing has several implications. These include harmonising a marketing philosophy with the institutional mission, creating appropriate organisational structures, and implementing marketing strategies. (Steve O Michael, 1990). Creating marketing strategies for higher education institution is a three-dimensional notion of marketing. The first dimension lies in the theoretical notions of the essence of marketing, including the transactional marketing (1.0), relationship marketing (2.0) and spiritual marketing (3.0). The second dimension is formed by methods of marketing research and accurate notions of marketing, while the third are channels of marketing information. Harmonizing these three dimensions is a precondition for effective marketing (Lidia Bialon, 2015). Social media marketing is a relatively new terrain increasingly attracting the attention of field marketers and researchers. Higher education institutions are already experimenting with social media marketing. However, the number of studies on social media marketing and their effectiveness are still limited, and very little is known about the suitability of the social media as tools for higher education marketing (Efthymios Constantinides, Marc C. Zinck Stagno, 2012). In general, the educational marketing, marketing research is to identify the needs of potential customers in order to provide appropriate educational programs. Analysis of the perception that students have towards the services offered by the university which is leading to improve or develop new programs. Educational institutions aim to develop bases of a society by influencing the ideas, attitudes and behaviours. Importance of marketing in universities is given by diversification of educational needs and also to increase competitiveness in this segment. Thus, every school must build its image in the market and to support the well-structured marketing plans. In relation to other educational institutions must choose a unique positioning based on a preliminary analysis of the marketing environment. With a distinctive positioning, the institution must communicate effectively only to the segment interested in his services. (Ionel Dumitru, 2013). The marketing mix variables application, it was realised that not all 7p's are used in sync and this has an impact on the institution's performance. The current competition in the tertiary education sector is driving institutions to turn to services marketing and look for unique selling proposition to promote and increase student inflow. Such marketing activities should consider education services itself which is intangible and build differentiating factors for the institution. marketing plans should be directed at building reputation and boosting student inflows.

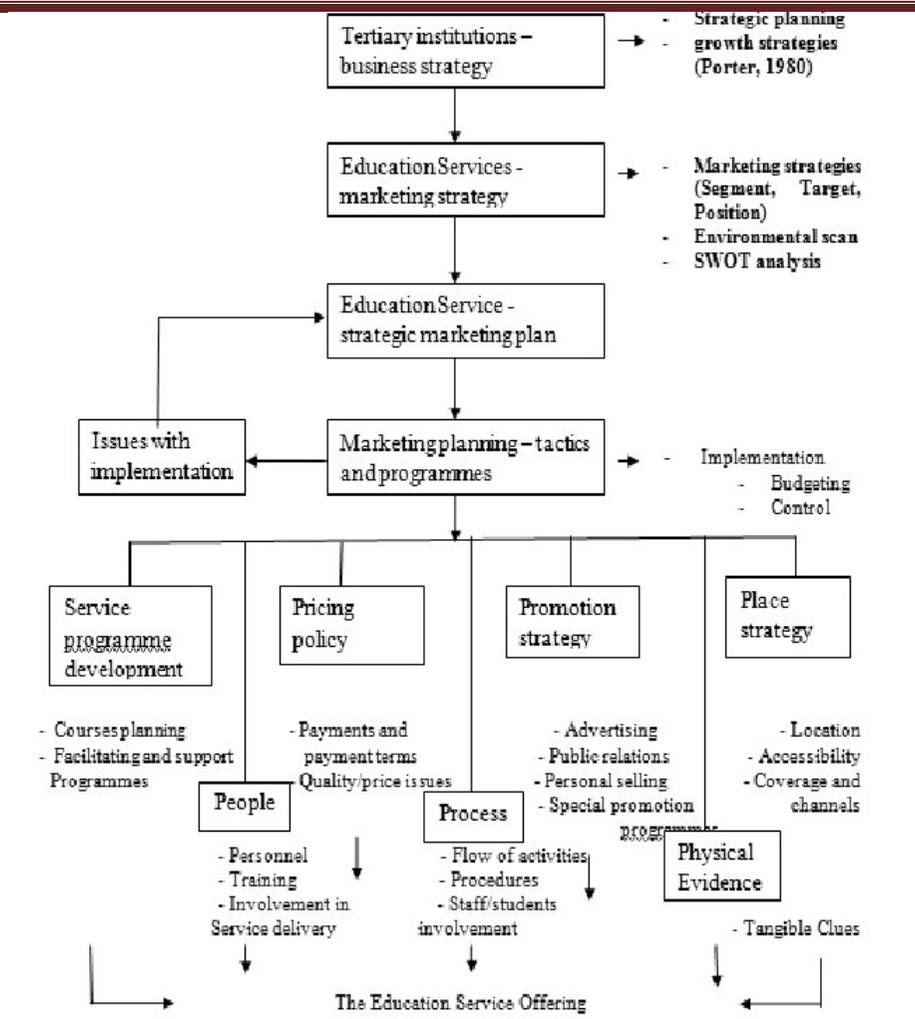
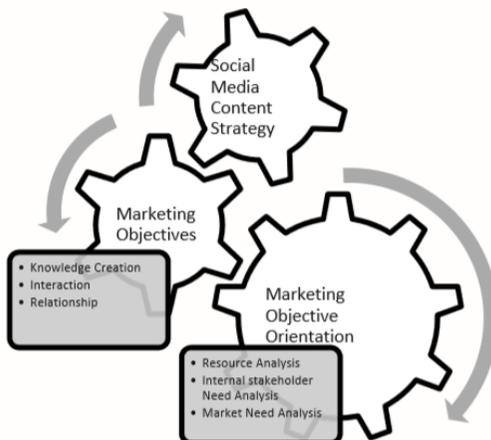


Figure 1: A variation of strategic marketing process and marketing mix

For an organisation to effectively market its activities it must holistically use and balance the mix variables to its advantage for the institution should propel its activities to overcome challenges in the industry. (Bulley, Cynthia A,2014).

The following discuss a process model development based on the GrNroos (2004) framework to work out a value creation process within these Higher Education institutions.



Gr Nroos (2004) describes three major elements in an effective Social Media strategy: Knowledge Creation, Interaction, and Relationship. The participants could find themselves involved in all these three aspects in order to take part in the Social Media interaction and start adding value to the marketing efforts of the institutions. These objectives are very contextual and need to be customized based on the institutions' internal stakeholder (shareholders, teachers and administrators) needs, market (students) needs. As well they are based on actual resource analysis where a practical analysis was carried out to establish the market readiness for a dynamic medium such as Social Media. If all these relationships are assessed in creating the marketing communications objectives the stakeholder participation should ensure the constant conformation of the Social Media contents which will help the choice of the right platform for the organization to communicate constantly with the prospective customers. universities are recognizing that students are also customers and the need to provide an excellent customer experience across the student lifecycle. In today's technology-centric world, student enrolment strategies must also incorporate the latest trends in technology, the importance of a multichannel marketing and communications strategy.

Result and Discussion

A comparative analysis of marketing strategies used by educational institutions 5years ago and now –(Handover research about trends in higher education marketing, enrolment, and technology)

- **Institutions dedicate far more attention to branding and marketing** -Many Educational institutions either hired external marketing professionals or companies and have invested significant time and money in creating strong institutional brands. Or recruited dedicated team inhouse to take care of marketing and branding.
- In recent years higher educational institutions have adopted online and digital platform for branding
- An effective website is the most important marketing tool in higher educational institutions.
- Many different channels are used for communication with prospective students.
- Automation tools and web analytics are used in order to get more data and personalised the communication with students.
- Colleges and universities use a variety of strategies to keep students engaged and enrolled, as retention is both a measure of quality and a financial concern.
- Institutions of higher education frequently promote alumni engagement by offering lifelong learning or continuing education benefits.
- Newer methods of online and technology-enhanced course delivery, such as Blended learning, “flipped classrooms” and gamification, have seen promising student outcomes.

Marketing strategy Plan

1. **Marketing and Brand Audit**– A Swot Analysis to understand the present position .
2. **Target Audience** – Who need to receive message, Their demographical characteristics Age, gender.
3. **Brand Differentiation** – Identify the various factors that helps to create brand differentiation.
4. **Brand Statement** - synthesize all of your brand distinctives with your corporate values and beliefs. From these, you create the promise you make to your target audiences.
5. **Unique Selling Proposition**

Marketing Strategy Framework

1. Social Media – Digital platform
2. Become a ‘page one’ search result on Google
3. Use multiple channels
4. Create Credibility

Develop an Institutional Marketing Plan that outlines key brand distinctions that can be applied across campus and exist. Align the university under a renewed website and email distribution system .Create cohesive campus-wide communications, leveraging current resources and collective communications efforts to achieve marketing, admission and fundraising goals. Create the next generation of undergraduate student recruitment, admission and enrolment communications tools. Develop communication strategies and plans for the graduate programs to create cohesive, integrated and unique experiences for prospective graduate students. Use effective media relation strategy. Develop and execute an institutional visibility and awareness

campaign. Develop a campus Welcome Centre that serves as a location where all campus visitors, prospective students, alumni and community members are greeted, oriented to campus, introduced to the university's rich history and are able to access

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MICROFINANCE – A PRAGMATIC APPROACH FOR FINANCIAL INCLUSION & SUSTAINABILITY

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ABSTRACT: An effective financial sector aims at integrating a system which is financially linked and emphasizes on regulating money borrowing and lending activities. The objective of the research paper is to illustrate the relationship between financial inclusion and microfinance and show its impact on the development and economic sustainability. Microfinance has evolved to be an effective tool in the struggle to combat poverty and in developing banking habits among the rural poor. The SHG(Self Help Group) based microfinance nurtured and aided by banks, NGOs and formal agencies have become an important alternative to traditional lending to groups often poor women without collateral and has become an acceptable feature of the rural finance. Against this brief backdrop the objective of this paper is to show the unbound importance of micro lending in the lives of the rural poverty stricken people. Thus in our study **firstly** we intend to explore the significance and need of group lending which can be an effective tool over informal lending for the underprivileged population. **Secondly** it aims at finding a positive correlation between the financial inclusion and microfinance outreach. **Lastly**, the study intends to investigate how micro-lending acts as a catalyst in financial sustainability of a country through the growth of GDP. The concluding remarks are indicated at the end of the paper.

Keywords: Micro-credit, Self-help Groups (SHGs), sustainability, financial inclusion, NABARD, PACs, SHG credit linkage, GDP

Introduction

“Money, says the proverb, makes money. When you have a little, it is often easier to get more. The great difficulty is to get that little.” - Adam Smith

Economic and social development of a country is primarily concerned with addressing the needs of the poor for sustainable economic development. The aim of financial inclusion and social empowerment can be achieved by identifying income-generating activities and generation of employment in rural and urban areas and making them aware of their socio-economic development. Even today most of the underprivileged population of our country depends on Indigenous Financial Agencies for their credit needs. These agencies are native in character and operate in unorganized money market. The broad category of these agencies is – 1) indigenous bankers and 2) indigenous moneylenders.

The rural poor not only need loan at subsidized rates but also the easy access to credit facilities like loans, savings and micro-insurance to promote agriculture production, establish small scale industries and encourage entrepreneurship. The poor face difficulties in accessing formal banking services. The main problem to get loans from formal financial institutions is the lack of collateral asked by these institutions. Moreover the process of acquiring a loan deals with various bureaucratic procedures, which lead to extra transaction costs for the poor. Thus the formal lenders like Government banks, commercial banks are unable to cater to the credit needs of the rural population and thus the credit gaps are increasing.

Therefore the informal arrangements enjoy an edge over the formal Institutional arrangements. Although majority of the rural poor acquire their loans from the informal financial sector in the developing countries; the sector has some basic limitations. In order to fight poverty, they need to borrow, save, and invest and ensure a sustainable way of earning for themselves. However, informal short-term credit may entail hidden costs. In addition to that, the explicit interest cost of informal credit appears to be too high particularly where entry is restricted and alternative financial services are lacking. Therefore the primary shortcoming of the two financial sectors in the developing countries is their inefficiency to meet the credit needs of the poor. Efforts have been made to repair the deficiencies of the economic system which finally led to the growth of microfinance. Therefore this ushered the need of making the poor socially aware of the micro-credit institutions.

There is a diversity of approaches to microfinance in India involving banks, government agencies and NGOs. SHGs form the basic constituent unit of microfinance revolution in India. An SHG group is generally an autonomous body comprising generally a group of unprivileged people. The savings are pooled into a fund

from which they can borrow as and when required. SHGs use part of their funds for lending to their members and another part for depositing in a bank to serve as the basis for reinforcing from the bank. Self – monitoring and peer pressure are the main instruments used by the microfinance lending institutes for loan repayment. Credit decisions for on-lending to members are taken collectively by the group. Such loans generally funded out of the savings generated by the group members themselves are called “*interloans*”.

Microfinance is expected to strengthen employment and financial sustainability through generation of new business opportunities, self-employment and by encouraging wage labour and Self-help groups (SHG's) which will reduce migration and accelerate development. It is only through the wider spread of the micro-credit units the population will be able to come under the umbrella of the formal financial system and financial inclusion will be successful.

Thus the main objective of this paper is to explore the acceptability of microfinance by the rural households and to study how social awareness of microfinance facilitates in financial inclusion, development and sustainability.

Rationale

The study focuses on the importance of the growth of microfinance which leads to financial inclusion and financial sustainably. The roadway towards the success of micro finance can be achieved with the help of financial inclusion as it is the basic tool to bridge the gap between the poor population and the access to formal financial institutions. Formal lending regulates the organized credit circulation in the economy which boosts the money market and leads to financial sustainability. Thus the growth of microfinance can expand the formal money market and curb the informal lending activities.

The study basically intends to show the relation between the financial inclusion through SHG growth and economic development of India. The paper gives the overview of the relevance and impact of micro lending on the Indian economy over informal lending and how it leads to increased banking habits among the poverty stricken leading to financial growth and sustainability in the country.

Objectives

The objectives of this paper are as follows –

- 1) To examine the issues of informal finance in the light of microfinance.
- 2) To show the relationship between the financial inclusion and microfinance outreach.
- 3) To analyze the positive correlation between the growth of SHG (Self Help Group) credit linkage and the financial growth of India through GDP growth rate thus leading to financial sustainability.
- 4) To analyze how far has it actually been successful in achieving its targets.

Literature review

Bharati D.B (2016) has observed that access to effective finance is a form of empowerment of the vulnerable groups which faces some credit challenges that requires to be addressed. Financial inclusion is only possible way out to cross these barriers and make them financially self sufficient and empowered. According to GOI (2008) financial inclusion is the process of ensuring availability and access to financial services and adequate credit where needed by the vulnerable groups such as low income groups at an affordable cost.

An inclusive credit system can reduce the growth of informal sources of finance like the money lenders which generally tends to be exploitative. Bell and Rousseau (2001) have empirically established with his researches that financial intermediaries have positively influenced India's economic performance. Beck et al (2009) has identified that a well-nurtured financial system which is accessible to all, reduces costs, influences savings rates, investment decisions, technological innovations and long run growth rates leading to financial sustainability.

The importance of Financial Inclusion for the nation is quite evident from the support extended by individual governments and international bodies around the world. (Frost & Sullivan Report, 2009) Access to banking services is being considered as a public good that needs to be made available to the entire population without discrimination and exclusion. The level of ‘publicness’ in financial inclusion may be different concept from a typical public good like ‘defense’. But being as significant like getting access to water or basic education, it does qualify to be coined as ‘quasi-public good’ (Mehtrotra et.al 2009). The policy makers have given this recognition to financial inclusion as a policy objective and an integral part of developmental activities.

Collins et al. (2009) studied more than 250 financial diaries of low income individuals in Bangladesh, India and South Africa. Their findings show that each household uses at least four types of informal financial instruments (such as interest free loans and informal savings clubs) in a year, with the average being just under ten. The cash turnover through these instruments (i.e. the gross amounts routed through them) was large (77 percent to 300 percent), relative to the net income of the households. This suggests that low income individuals do need access to financial services and that there are barriers that prevent their use of formal sector services. “The low income customers are more likely to borrow from institutions they see as financially viable” (Zeller et al., 2003).

The new mission of “financial inclusion” emphasizes savings, sending money, and insurance services but also suggests that poor people’s ubiquitous financial needs (such as housing, water, or consumption) should be served with credit. (Mader and Sabrow 2015)

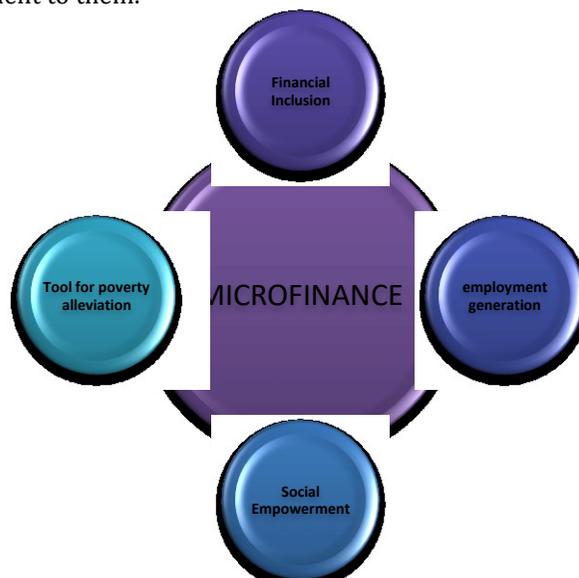
Methodology

The proposed research study is applied descriptive and experimental. The research study is developed from both quantitative and qualitative point of view. The analysis is discussed below.

Qualitative Analysis

Microfinance has evolved to be an effective tool in the struggle to combat poverty and in helping to develop banking habits among the rural poor. The SHG(Self Help Group) based microfinance nurtured and aided by banks , NGOs and formal agencies have become an important alternative to traditional lending to groups often poor women without collateral, has become an acceptable feature of the rural finance.

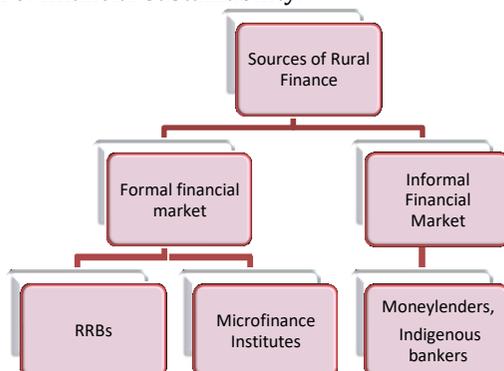
Microfinance is an effective tool used for achieving various objectives like social empowerment, employment generation, poverty alleviation and financial inclusion. Through **micro credit** i.e., the extension of very small loans (micro loans) to those in poverty can be designed to spur entrepreneurship thus generating more employment opportunities and income in the country. These people who don’t have sufficient collateral, steady employment and credibility therefore cannot meet even the most minimal qualifications to gain access to traditional credit fall under the web of informal moneylenders. Thus microfinance institutes helps to channelize such population into the mainstream formal money market thus providing social empowerment to them.



The financial needs of the SHGs are catered to by various financial institutions: the Commercial Banks, Co-operative Banks, Co-operative Credit Societies, Small Scale Industrial Developmental Bank and Regional Rural Banks (RRB). Thus the growth of microfinance directly makes them to join the formal financial market leading to financial inclusion of the poverty stricken people thus leading to transferring the flow of credit from the informal to the formal money market. This helps in credit creation and credit growth in the economy thus achieving financial sustainability in the country. It can be well observed as a key factor in the growth and development of the economy through the increase in the GDP.

The GDP growth rate is a key indicator of financial or economic growth of a country. The study analyzes

that SHG credit linkage through microfinance is positively related to GDP growth rate thus leading the country towards the higher goal of financial sustainability.



Quantitative Analysis

The primary aim of this study is to analyze the relation between the spread of microfinance through the growth of SHGs and financial inclusion thus leading to financial growth and sustainability. Importance of microfinance can be proved as an emerging tool for the growth in the financial market thus improving the GDP of a country.

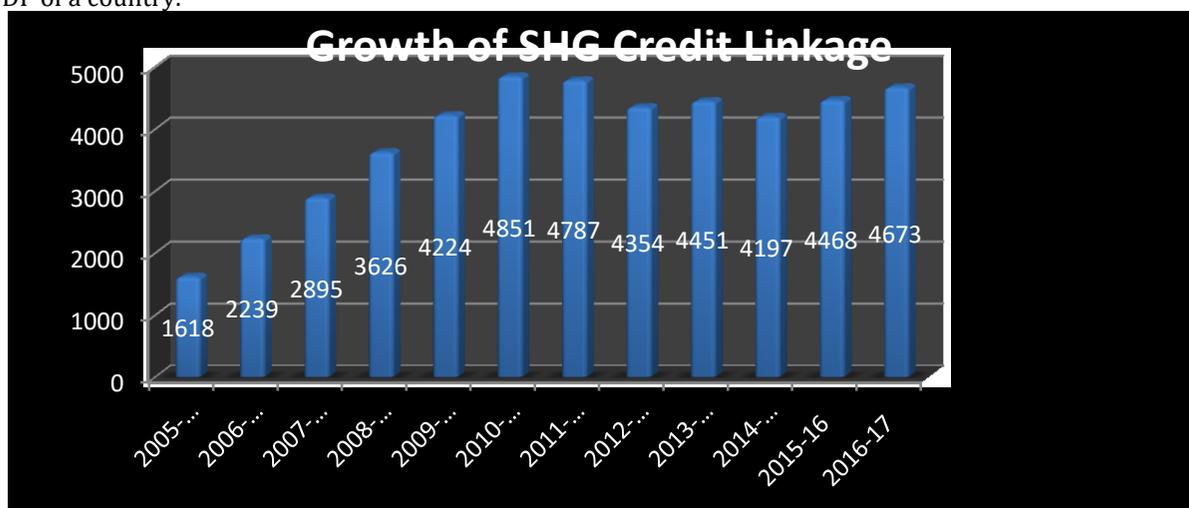


Figure 1.1

Figure 1.1 shows the increase in the SHG credit linkage over the years. The upward trend depicts the growth of microfinance credit in India over time.

Descriptive Statistics

MEAN	3865250
MEDIAN	4289000
STANDARD DEVIATION	1059643

Table 1.2

The mean value of the number of SHG credit linked is 38, 65,250 and seems to be an impressive effort towards fulfilling India’s target of financial inclusion.

Descriptive Statistics			
	Mean	Std. Deviation	N
GDP	8357672.4167	3964357.35477	12
SHG CREDIT LINKED	3865.2500	1059.64318	12

Table 1.3

Correlations			
		GDP	SHG
Pearson Correlation	GDP	1.000	.709
	SHG	.709	1.000
Sig. (1-tailed)	GDP		.005
	SHG	.005	
N	GDP	12	12
	SHG	12	12

Table 1.4

The result gives a highly positive correlation coefficient between the GDP of India and the no of SHG credit linkage. The strong degree of association between the two variables shows how financial inclusion directly leads to an increase in the GDP of the country thus leading to financial and economic growth.

Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.709 ^a	.503	.453	2930999.53347	.503	10.124	1	10	.010

a. Predictors: (Constant), SHG

Table 1.6

Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	86969838947408.500	1	86969838947408.500	10.124	.010 ^b
	Residual	85907582652212.300	10	8590758265221.230		
	Total	172877421599621.000	11			

a. Dependent Variable: GDP

b. Predictors: (Constant), SHG

Table 1.7

Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1898986.982	3332763.385		-.570	.581
	SHG	2653.557	833.988	.709	3.182	.010

a. Dependent Variable: GDP

Table 1.8

The above tables show the result of the regression analysis for financial inclusion through microfinance and its impact on economic or financial development and sustainability. The regression was run by taking the data of SHG credit linkage as the independent variable and GDP of India as the dependent variable for n =12 years. The regression coefficient or the r² value (r²=0.503) shows a high degree of linear dependence between the two variables. The economic growth of the country through financial market growth can be well explained positively through the growth of microfinance. Therefore in other words financial inclusion leads to financial sustainability and growth of a country.

Conclusion

The present study reveals that the microfinance industry in India has inculcated the strong banking habits among the rural poor through the extensive credit delivery mechanism of SHG-Bank linkage programs. The financial resources are sourced from the existing banking infrastructure of the country following various developed strategy. The SHG based microfinance has by now developed deep roots in many parts of the country. The various types of institutions which offer microfinance like credit unions, commercial banks, NGOs (Non-governmental Organizations), cooperatives, and sectors of government banks helps in the process of economic development and financial inclusion of a country through the spread of the financial instruments among the unprivileged population of the country.

The growth of microfinance through the increase in the number of SHG credit linkage contributes to social empowerment and credit infusion in the money market. The group lending channelizes the credit towards the formal financial market thus reducing the informal borrowing lending activities. The financial inclusion of the poor strata of the society helps to boost the economic growth of the country specially the financial market thus improving the GDP of India. Improvement of resource allocation and adoption of better technology through microfinance services can contribute to the economic growth and development of the nation.

Achievements

The MFIs and other financial institutions (OFIs) providing microfinance services have outreached over 10 million in the late 1990s. The developments in microfinance in the Region have set in motion a process of change from an activity that was entirely subsidy dependent to one that can be a viable business.

AWARENESS INDIA –MICROFINANCE PROGRAM - AWARENESS INDIA has strongly recognized the deep social concern of the poverty stricken population and is striving hard through various programmes to create a route to economic empowerment and development.

Starting its Micro Finance activities in few places of Orissa during 1998 AWARENESS INDIA has now spread its activities to all 30 districts, 314 blocks & 6234 Gram Panchayats and over 49000 villages. Also, its activity has extended to 4 neighboring states – Andhra Pradesh, West Bengal, Chhattisgarh and Jharkhand. Microfinance is believed to be bridging the gap between the formal and informal financial institutions and is emerging to be an significant credit provider for the poor. The **Self Help Group Bank Linkage Programme (SHG-BLP)** has touched milestones as it started with a mere 500 SHGs of rural poor two decades ago and crossed over 8 million groups. Currently in India over 95 million poor rural households are active participants of this world's largest micro credit initiative. The initiative of Pradhan Mantri Jan Dhan Yojana(2014) taken up by the central government to enhance the financial inclusion perspectives by linking up all the major weaker section of the society in the banking world has helped the less privileged to mobilize and channelize their savings.

According to the NABARD report (2017) there was a net addition of 6.73 lakh SHGs thereby increasing the number of SHGs having savings linkage to 85.76 lakh as on 31 March 2017. The savings outstanding of SHGs with banks has touched Rs.16114.22 crore as per the 2017 report.

Thus the roadway towards the success of micro finance can be achieved with the help of financial inclusion as it is the basic tool to bridge the gap between the poor population and formal financial institutions.

Some suggestive views –

- More skill-based trainings should be provided to groups to help the groups to help the group members undertake income generating activities.
- Finance often act as a constraint for training facilities due to which group members often lose interest and lack motivation . The role of PACs (Primary Agricultural Cooperative Society) or the cooperative banks is very important at this point because under certain circumstances PACs should finance certain training schemes to gain confidence of the group members.
- Proper marketing facilities should be provided and markets should be favorable for PACs for selling the products produced by the group members. Members should be given proper training to market their products and strategies to tap market should also be taught to them.
- Government involvement in SHG based microfinance is a welcome development but it should be free from the social ills. Government aid almost always brings with it its political interference and corruption. It is important to ensure that Government participation is free from all these evils.
- Careful monitoring should be done on the SHGs so that the credit is channelized properly into productive activities.

The main theme of the micro finance was to uplift the socio-economic conditions of the people who are discarded from the society in the saving, consumption and borrowing aspects from the financial institutions. Thus, we can say that the Social inclusion of all the people in the financial services will pave a way for the effective implementation of microfinance and Micro Financial Institutions. Microfinance services have definitely triggered a process toward broadening and deepening of rural financial markets .Thus it is a commendable effort towards Financial Inclusion and financial sustainability of the country.

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MOBILE BANKING - IT'S IMPACT ON CUSTOMER BANKING TRANSACTIONS

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ABSTRACT: *Mobile Banking refers to provision and availment of banking- and money services with the assistance of mobile telecommunication devices. The scope of offered services might embody facilities to conduct bank and exchange transactions, to administer accounts and to access custom info. According to this model mobile banking can be said to consist of three inter-related concepts:*

- *Mobile accounting*
- *Mobile brokerage*
- *Mobile financial information services*

Most services within the classes selected accounting and brokerage are transaction-based. The non-transaction-based services of Associate in Nursing informational nature are but essential for conducting transactions - for example, balance inquiries may well be required before committing a cash remittal. The accounting and brokerage services are thus offered invariably together with info services. info services, on the opposite hand, is also offered as Associate in Nursing freelance module. Mobile banking may also be used to help in business situations as well as financial services.

Transactions through mobile banking depend on the features of the mobile banking app provided and typically includes obtaining account balances and lists of latest transactions, electronic bill payments, remote check deposits, P2P payments, and funds transfers between a customer's or another's accounts. Some apps also enable copies of statements to be downloaded and sometimes printed at the customer's premises.

From the bank's point of view, mobile banking reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. Mobile banking does not handle transactions involving cash, and a customer needs to visit an ATM or bank branch for cash withdrawals or deposits. Many apps now have a remote deposit option; using the device's camera to digitally transmit cheques to their financial institution. Mobile banking differs from mobile payments, which involves the use of a mobile device to pay for goods or services either at the point of sale or remotely, analogously to the use of a debit or credit card to effect an EFTPOS payment.

BACKGROUND OF THE STUDY

The earliest mobile banking services used SMS, a service known as SMS banking. With the introduction of smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers.

Mobile banking before 2010 was most often performed via SMS or the mobile web. Apple's initial success with iPhone and the rapid growth of phones based on Google's Android (operating system) have led to increasing use of special mobile apps, downloaded to the mobile device. With that said, advancements in web technologies such as HTML5, CSS3 and JavaScript have seen more banks launching mobile web based services to complement native applications. These applications are consisted of a web application module in JSP such as J2EE and functions of another module J2ME.

A recent study (May 2012) by Mapa Research suggests that over a third of banks have mobile device detection upon visiting the banks' main website. A number of things can happen on mobile detection such as redirecting to an app store, redirection to a mobile banking specific website or providing a menu of mobile banking options for the user to choose from.

MOBILE BANKING SERVICES

Typical mobile banking services may include:

- **Account information**
 1. Mini-statements and checking of account history
 2. Alerts on account activity or passing of set thresholds
 3. Monitoring of term deposits
 4. Access to loan statements
 5. Access to card statements

6. Mutual funds / equity statements
7. Insurance policy management
- **Transaction**
 1. Funds transfers between the customer's linked accounts
 2. Paying third parties, including bill payments and third party fund transfers(see, e.g., FAST)
 3. Check Remote Deposit
- **Investments**
 1. Portfolio management services
 2. Real-time stock
- **Support**
 3. Status of requests for credit, including mortgage approval, and insurance coverage
 4. Check (cheque) book and card requests
 5. Exchange of data messages and email, including complaint submission and tracking
 6. ATM Location
- **Content services**
 1. General information such as weather updates, news
 2. Loyalty-related offers
 3. Location-based services

A report by the U.S.A. Fed (March 2012) found that twenty one % of mobile house owners had used mobile banking within the past twelve months supported a survey conducted by Forrester, mobile banking are going to be engaging chiefly to the younger, a lot of "tech-savvy" client section. A 3rd of mobile users say that they'll contemplateacting some quite monetary dealings through their mobile phone. however most of the users have an interest in acting basic transactions like querying for account balance and creating bill.

FUTURE FUNCTIONALITIES IN MOBILE BANKING

- Based on the 'International Review of Business **analysis** Papers' from World business Institute, Australia, following are the key **practical** trends **attainable** in world of Mobile Banking. With **the appearance** of technology and increasing use of smartphone and **pill based mostly** devices, **the employment** of Mobile Banking **practicality** would **alterclient** connect across entire customer life cycle **a lot of** comprehensively than before.
Illustration of objective **based mostly practicality** enrichment In Mobile Banking:
- **Communication enrichment:** - Video Interaction with agents, advisors.
- **Pervasive Transactions capabilities:** - Comprehensive “Mobile wallet”
- **Customer Education:** - “Test drive” for demos of banking services
- **Connect with new customer segment:** - Connect with Gen Y – Gen Z using games and social network ambushed to surrogate bank's offerings
- **Content monetization:** - Micro level revenue themes such as music, e-book download
- **Vertical positioning:** - Positioning offerings over mobile banking specific industries
- **Horizontal positioning:** - Positioning offerings over mobile banking across all the industries
- **Personalization of corporate banking services:** - Personalization experience for multiple roles and hierarchies in corporate banking as against the vanilla based segment based enhancements in the current context.
- **Build Brand:** - Built the bank's brand while enhancing the “Mobile real estate”.

CHALLENGES OF MOBILE BANKING ON CUSTOMER BANKING TRANSACTIONS

➤ **Handset accessibility**

There are a large number of different mobile phone devices and it is a big challenge for banks to offer a mobile banking solution on any type of device. Some of these devices support Java ME and others support SIM Application Toolkit, a WAP browser, or only SMS.

Initial interoperability issues however have been localized, with countries like India using portals like "R-World" to enable the limitations of low end java based phones, while focus on areas such as South Africa have defaulted to the USSD as a basis of communication achievable with any phone.

The desire for interoperability is largely dependent on the banks themselves, where installed applications (Java based or native) provide better security, are easier to use and allow development of more complex

capabilities similar to those of internet banking while SMS can provide the basics but becomes difficult to operate with more complex transactions.

There is a myth that there is a challenge of interoperability between mobile banking applications due to perceived lack of common technology standards for mobile banking. In practice it is too early in the service lifecycle for interoperability to be addressed within an individual country, as very few countries have more than one mobile banking service provider. In practice, banking interfaces are well defined and money movements between banks follow the ISO-8583 standard. As mobile banking matures, money movements between service providers will naturally adopt the same standards as in the banking world.

In January 2009, Mobile Marketing Association (MMA) Banking Sub-Committee, chaired by Cell Trust and VeriSign Inc., published the Mobile Banking Overview for financial institutions in which it discussed the advantages and disadvantages of Mobile Channel Platforms such as Short Message Services (SMS), Mobile Web, Mobile Client Applications, SMS with Mobile Web and Secure SMS.

➤ **Security**

As with most internet-connected devices, as well as mobile-telephony devices, cybercrime rates are escalating year-on-year. The types of cybercrimes which may affect mobile-banking might range from unauthorized use while the owner is using the mobile banking, to remote-hacking, or even jamming or interference via the internet or telephone network data streams. This is demonstrated by the malware called SMS Zombie. A, which infected Chinese Android devices. It was embedded in wallpaper apps and installed itself so it can exploit the weaknesses of China Mobile SMS Payment system, stealing banks credit card numbers and information linked to financial transactions. One of the most advanced malwares discovered recently was the Trojan called Bankbot. It went past Google's protections in its Android app marketplace and targeted Wells Fargo, Chase, and Citibank customers on Android devices worldwide before its removal by Google in September 2017. This malicious app was activated when users opened a banking app, overlaying it so it can steal banking credentials.

In the banking world, currency rates may change by the millisecond. Security of financial transactions, being executed from some remote location and transmission of financial information over the air, are the most complicated challenges that need to be addressed jointly by mobile application developers, wireless network service providers and the banks' IT departments.

The following aspects need to be addressed to offer a secure infrastructure for financial transaction over wireless network:

1. Physical part of the hand-held device. If the bank is offering smart-card based security, the physical security of the device is more important.
2. Security of any thick-client application running on the device. In case the device is stolen, the hacker should require at least an ID/Password to access the application.
3. Authentication of the device with service provider before initiating a transaction. This would ensure that unauthorized devices are not connected to perform financial transactions.
4. User ID / Password authentication of bank's customer.
5. Encryption of the data being transmitted over the air.
6. Encryption of the data that will be stored in device for later / off-line analysis by the customer.

One-time password (OTPs) are the latest tool used by financial and banking service providers in the fight against cyber fraud.[12] Instead of relying on traditional memorized passwords, OTPs are requested by consumers each time they want to perform transactions using the online or mobile banking interface. When the request is received the password is sent to the consumer's phone via SMS. The password is expired once it has been used or once its scheduled life-cycle has expired.

Because of the concerns made explicit above, it is extremely important that SMS gateway providers can provide a decent quality of service for banks and financial institutions in regards to SMS services. Therefore, the provision of service level agreements (SLAs) is a requirement for this industry; it is necessary to give the bank customer delivery guarantees of all messages, as well as measurements on the speed of delivery, throughput, etc. SLAs give the service parameters in which a messaging solution is guaranteed to perform.

➤ **Scalability and reliability**

Another challenge for the CIOs and CTOs of the banks is to scale-up the mobile banking infrastructure to handle exponential growth of the client base. With mobile banking, the client could also be sitting in any a part of the globe (true anytime, anyplace banking) and therefore banks must make sure that the systems are up and running in a very true twenty four x seven fashion. As customers will find mobile banking more and more useful, their expectations from the solution will increase. Banks unable to meet the performance and reliability expectations may lose customer confidence. There are systems such as Mobile Transaction

Platform which allow quick and secure mobile enabling of various banking services. Recently in India there has been a phenomenal growth in the use of Mobile Banking applications, with leading banks adopting Mobile Transaction Platform and the Central Bank publishing guidelines for mobile banking operations.

➤ **Application distribution**

Due to the nature of the connectivity between bank and its customers, it would be impractical to expect customers to regularly visit banks or connect to a web site for regular upgrade of their mobile banking application. It will be expected that the mobile application itself check the upgrades and updates and download necessary patches (so called "Over the Air" updates). However, there could be many issues to implement this approach such as upgrade / synchronization of other dependent components.

PERCENTAGE USAGE OF MOBILE BANKING ACROSS THE WORLD

Rank	Country/Territory	Usage in 2012
1	South Korea	47%
2	China	42%
3	Hong Kong	41%
4	Singapore	38%
5	India	37%
6	Spain	34%
7	United States	32%
8	Mexico	30%
9	Australia	27%
10	France	26%
11	United Kingdom	26%
12	Thailand	24%
13	Canada	22%
14	Germany	14%
15	Pakistan	9%

CONCLUSION - WHAT NEEDS TO BE REMEMBERED ABOUT MOBILE BANKING AND IT'S IMPACT ON CUSTOMER TRANSACTIONS

With the increasing use of Smart Phones and Emerging Technologies, Digitalization of Banking Sector is inevitable to escalate upto the increasing expectations of the world. It indeed reduced human errors and increased convenience of general public in Banking Operations. There is no doubt that the advantages of Digitalization are outweighing the disadvantages but the facts that cyber threats are also on the rise, banks must be very careful and should be prepared for any adverse cyber issues that may evolve in future. Around the world, banks are taking various of technology like mobile phones ensures their success and directly impact bank performance. To achieve growth, about mobile banking features and determines the impact of these features on consumer's usage rate of mobile banking. In this paper, we tried to identify customer's perception about mobile banking and also tried to analyze Around the world, banks are taking various technological initiatives to provide Financial Services and use of technology like mobile phones ensures their success and directly impact bank performance. To achieve growth, Banks must understand their customer's perception about mobile banking features and determines the impact of these features on consumer's usage rate of mobile banking for Effective, Efficient and Successful Operations of the Banks.

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“Business leadership in a VUCA world: case study of Nokia and Kodak”

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ABSTRACT: *In today's volatile environment, business environments change unpredictably, suddenly and in extreme directions, making businesses obsolete. Business leaders in the 21st century operate in a vastly different terrain than those who led their companies to success in the earlier decades.*

Historical trends suggest that companies that are agile, innovative, and offering the best insights into what challenges or opportunities are likely to happen next, generally survive and go on to thrive. Agility from a business perspective means being able to swiftly reposition a company's resources – human and otherwise – to respond to competition and changing market conditions. Agility and adaptability are non-negotiables for business leaders looking to build successful enterprises in VUCA environment.

A case study on leadership in VUCA world with respect to Nokia and Kodak was taken for the study and analysed. Organisations that can foster adaptability, innovation and agility in their leaders will see tangible rewards. In a VUCA environment it's vital to keep moving, or risk being left behind by more nimble competitors.

Keywords: *Agility, VUCA, Volatility, Leadership*

INTRODUCTION:

The US Army War College introduced the term VUCA to define the environment that is more volatile, uncertain, complex, and ambiguous, multilateral world which resulted from the end of the Cold War (Kinsinger & Walch, 2012; Horney et al, 2010). Until the late 1990s, the abbreviation VUCA was not created, and also it was not until the September 11, 2001 terrorist attack, that notion and acronym really took grip, but really gained currency in the private sector with the onset of the financial crisis in 2008-2009, when companies and organizations all over the world suddenly found themselves faced with similar turbulence in their business environments and, subsequently, in their business models (Lawrence, 2013; Kinsinger & Walch, 2012). The strategic business leaders adopted the VUCA to describe the frenzied, stormy, and rapidly changing business environment that has become the -new standard (Lawrence, 2013). Day by day, the business environment is getting more and more complex. Customers are demanding products/services anytime, anywhere, anyway and in any form. Companies like Nokia, Kodak, Blackberry and many others have gone astray just because of their inability to embark upon the VUCA environment. In the last few decades, the high-tech corporates who were experienced, failed to navigate the rapid changes brought about in their marketplace cautioned all the businesses, institutions and nation states who are now facing unavoidable, even foreseeable, changes but lack the leadership, flexibility and imagination to adapt—not because they are not smart or aware, but because the pace of change is merely devastating them (Lawrence, 2013). VUCA is compared to organizations throughout the world which were lurched into stormy environments alike to those confronted by the military. Technological and global disasters in the world are observed with growing and disrupt in business and economies of the world. VUCA is an acid test that any business needs to pass today to survive. The days of SWOT analysis are gone. To understand the positioning and the future prospects of the company it is necessary to understand how the VUCA elements are affecting them and how the company is countering the same.

VUCA and Leadership

The continuous swings in person, technology, method, and leadership structure that requires flexibility and rapidity in decision making is needed in order to succeed was given by Horney, Pasmore, and O'Shea in their book -A Business Imperative for a VUCA World. Owen Jacobs, in his book -Strategic Leadership: The Competitive Edge, describes the external environment as filled with Volatility, Uncertainty, Complexity and Ambiguity, hence the acronym -VUCA. Organization today must shift their business models and their leadership skills to become -adaptive firms according to BCG study. Adaptive firms can adjust and learn better, faster, and more economically than their peers, giving them an -adaptive advantage. Adaptive firms, the study notes, include Apple, Google, 3M, Target, and Amazon. Leaders need more complex and adaptive thinking abilities in today's VUCA environment according to the report given by the Center for Creative Leadership (Petrie, 2011) . It also notes that the methods used to

develop these new skill requirements (like on- the-jobtraining, coaching, and mentoring) have not changed much, and as a result, leaders are not developing fast enough or in the right ways to keep up with the -new normal for business VUCA. V represents Volatility in VUCA that defines the nature and speed of change in the industry and also refers to demand fluctuations. U in VUCA refers to Uncertainty meaning uncertain environments that doesn't allow the predictions. C in VUCA represents to Complexity which defines the factors and causes for mitigating the problem. This complexity leads to A in VUCA meaning Ambiguity. It means the lack of clarity about a particular event or situation which leads to inaccurate decisions. In practical business environment, these four are interrelated. The more volatile and complex the industry or the company is, predictions become more uncertain and drawing conclusions become even tougher. All the four represent distinctive elements which makes the business environment very hard to grasp and control.

Adaptive Performance in the Context of Leadership

In an ever changing (VUCA) environment organizations will need to develop more adaptive and responsive leadership skills across the organization. Leadership is no longer simply the domain of our senior management teams, in which our employees too will need to be equipped to relate, connect and respond to challenges and opportunities. The need for new leadership approaches for leading an organization in complex and uncertain times implies an ability to understand the patterns of cause and effect and connects the dots to uncover opportunities that are not yet clear. However, it involves the ability to perceive what is over the horizon of our current field of view accessing deep intuition and using imagination to envision the future point (www.innovationpeople.co.in). The leaders vision and the development of adaptive and pre-emptive performance of leaders is explained from the longitudinal perspective in a study which was conducted by Griffin and et.al. (2010)

In one of the Harvard Business Review, a study showed a strong association between leadership skills and the bottom line sighting to those companies who can attract the best people, who can lead and problem solve consistently outgrow their competitors. Yet many organizations fail to recognize the talent needed in the organization, struggle to identify potential, or mismanage the development needs of high-potential people. Bassie, L. & McMurrer, D. (2007) also mentioned that leadership in context with adaptive performance, need to be able to learn rapidly, continuously communicate and involve, and be flexible in their responses and develop –just-in-time solutions rather than waiting for perfect solutions.

OBJECTIVES OF THE STUDY

- To understand the term VUCA in the current business context.
- To analyze the VUCA environment with respect to Nokia and Kodak.
- To identify the keys to success in the VUCA environment.
- To study the role of Leadership in a VUCA environment.

METHODOLOGY

The study is descriptive in nature. Both primary and secondary data has been used in it. Primary data was collected using case study method. The object of the case study method is to locate the factors that account for the behaviour-patterns of the given unit as an integrated totality. The secondary data consist of the books, internet articles, surveys and research journals.

ANALYSIS AND DISCUSSION ANALYSIS

Case Study 1: Nokia

Nokia emerged from Finland to lead the mobile phone revolution in the last decade. It rapidly grew to have one of the most recognizable and valuable brands in the world. At the height Nokia commanded a global market share in mobile phone of over 40 percent. While the journey of Nokia to the top was swift, its decline was equally so, concluding in the sale of its mobile phone business in 2013 to Microsoft. Nokia's early success was primarily the result of visionary and courageous management choices that leveraged the firm's innovative technologies as digitisation and deregulation of telecom networks quickly spread across Europe with the help of very young, energetic and united leadership team. Nokia supply chain was collapsed in mid-1990s on the precipice of being a victim of its success. Nokia became extremely efficient and scaled up production and sales much faster than its competitors because of its disciplined systems and processes. The headcount at Nokia Mobile Phones (NMP) increased 150 percent to 27,353, while revenues over the period were up 503 percent amid 1996 and 2000. This rapid growth came at a cost. And that cost was that managers at Nokia's main development centres found themselves under ever increasing short-term

performance pressure and were unable to dedicate time and resources to innovation. Nokia's core business was to focus on incremental improvements, with relatively small data group taking up the innovation mantle. The world's first smartphone, the Communicator was launched in 1996, and Nokia's first camera phone in 2001 and its second-generation smartphone, the innovative 7650. The management team was struggling to find a response to a changing environment when Nokia displayed its best financial results in late 2000s. Software was taking superiority over hardware which was the critical competitive feature in the industry. The importance of application ecosystems was becoming apparent, but as dominant industry leader Nokia lacked the skills, and inclination to engage with this new way of working at the same time.

Case Study 2: Kodak

An iconic example of a company that failed to clench the significance of a technological evolution which threatened its business was Eastman Kodak Co. Kodak built the first digital camera back in 1975 after being an undeniable world leader in film photography in later decades. But then, the company couldn't see the ultimate shift (from analog to digital technology) that was happening right under its muzzle. The big problem with this Eastman Kodak Co version of events is that it's erroneous. Moreover, it obfuscates some important lessons that other companies can acquire from. Senior leaders at Kodak were intensely aware of the forthcoming storm. Management was constantly trailing the rate at which digital media was supplanting film. But several other factors made it outstandingly difficult for Kodak to shift gears and emerge with a consumer franchise that would be justifiable over the long term. Not only was a major technological change upending our competitive landscape; challenges were also affecting the ecosystem which were operated in the organizational model. Eventually, redeploying the business with so many forces in motion proved to be incredible.

DISCUSSIONS : Learning's from Failures

Management decisions, dysfunctional organisational structures, growing officialdom and deep internal enmities all played a part in preventing Nokia from characterising the shift from product-based competition to one based on platforms.

A collective attribute which we can see in mature, successful companies was embodied by Nokia in mobile phones. Success breeds conservatism and hubris which, over time, results in a decline of the strategy processes that leads to poor strategic results. Where once companies contained new ideas and experimentation to outgrowth, with success they become risk wary and less innovative. Such kind of considerations will be critical for companies that want to grow and avoid one of the biggest disorderly threats to their future and their own success.

The ability to see digital photography as a disruptive technology, even as its researchers stretched the boundaries of the technology, would continue for decades as a result of inability of Kodak's management. A Kodak marketing video felt the need to proclaim that

-Kodak is back and that Kodak -wasn't going to play grab ass anymore! with digital in late 2007. Kodak failure show cased how violently hard it is to get transformation right. Kodak's core film business actually was growing whereas the lack of urgency allows a company to treat new growth efforts as science try-outs that are academically interesting but not essential. Kodak used Ofoto to try to get more people to print digital images which was vey unfortunate. Kodak created a digital camera, capitalized in the technology, and even understood that photos would be shared online. Where they failed was in realizing that online photo sharing was the new business, not just way to expand the printing business.

SUGGESTIONS

Even an insightful company can go wrong if it doesn't push far enough, fast enough into uncomfortable territory. Companies often see the disruptive forces affecting their industry. They frequently divert sufficient resources to participate in emerging markets. Their failure is usually an inability to truly embrace the new business models the disruptive change opens up.

Grooming leaders of tomorrow for VUCA Environment

To navigate in a VUCA world, it is necessary to focus on three aspects as the ABC of Leadership:

Attitude: by having a winning attitude, respecting others, being adapting and being entrepreneurial

Behaviour: being a role model to employees, inspiring and motivating them

Competency: to have self-awareness and reflection, excellent communication skills, people management,

business insight, and the ability to accept and initiate change.

The other suggestion include On-the-job training, job assignments, coaching, and mentoring which is a part of training and development of employees, but it should be noted that to develop VUCA leaders, HR and talent development professionals should chiefly pay attention on programs that develops agility, adaptability, innovation, collaboration, communication, openness to change, and other, higher-order critical thinking skills. These can also be delivered faster by social media and other technology. So the future leader must keep up with the pace of change. HR and talent management professionals should engage in scenario planning about possible futures when developing leadership programs as recommended by Horney, Pasmore, and O'Shea .The Scenario planning about futures helps in bringing possible situations and future predictability an organization would react and would not react. Scenario planning helps to identify the knowledge, skills, and attributes leaders may in case need in future business environments. Simulations are also one of the powerful learning tools where the participants can practice and anticipate when developing VUCA leaders. Here they have a chance to practice skills in a safe, non-threatening environment. Simulations can be in classroom role plays, to day-in-the life assessment centers, to virtual simulations. Simulations can also help leaders assess their strengths and weaknesses, making them more aware of their own skills and gaps (Lanik andEurick, 2012). Video games are a perfect example to learn and anticipate future threatened condition and ways to deal in such an environment .This is very appealing to the young mass who can be the future leaders as they has learned many of the desired VUCA leadership skills by playing video games. The disruptive factors that firms deal with lead to the shift in talent management like planning management and forecasting.

CONCLUSION

The world has changed dramatically and in all dimensions. Volatility, uncertainty, complexity and ambiguity characterize the economic, social, political and technological environments. The age of certainty and fixed environment is moving into uncertainty, flexible environment, disruptions and chaos. Firms that were synonymous with their product categories just a decade ago are now no longer in existence. While considering complexity dimension of VUCA framework, business leaders have to adopt a non-linear approach to problem solving and must think out of the box. We may not be able to transform the wind, but we can regulate the sails. In a nutshell, the VUCA model is a wonderful metaphor for leaders who have to lead from the front and have to steer their firms through turbulent and troubled waters. The leadership role becomes increasingly one of creating moments of clarity and focus, whilst at the same time keeping an eye on what is shifting and preparing to react to it. VUCA becomes a prospect for development and greater alliance, rather than a risk to be alleviated.

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THE IMPACT OF CRM (CUSTOMER'S SATISFACTION, TRUST AND COMMITMENT) ON CUSTOMER LOYALTY

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ABSTRACT: *Customer Relationship management enhances profitability, guest satisfaction and loyalty in service industry. The main purpose of CRM is to seek, gather, store the right information and to validate and share it throughout the organization. Hospitality industry is in its best phase and is most sought after market for today's businesses. In a highly competitive market the hotels in particular should focus on maintaining good relationship with customers and satisfy their needs. To achieve this goal hotels are implementing Customer relationship Management (CRM) to enhance the sales and revenues. This in return is helping in customer retention and loyalty. The study focuses on these aspects and practices in hotels in Mysuru City. The main purpose is to determine the impact of CRM on customer loyalty. The study objectives is to determine the impact of CRM on loyalty, satisfaction and if the services provided by hotels meets the needs and wants of the customers. In the findings most of employees showed a positive attitude towards CRM practices and the preferred activities undertaken were analyzing existing database of the customers and personal counseling. It also emerged that benefits of CRM are increased customer satisfaction and customer retention.*

Keywords: CRM, Satisfaction, Attitude, Loyalty, Customer Retention

1.0: Introduction

Customer retention is what every organization is striving for to gain competitive edge. High customer retention ensures repeat purchase, and it is an assurance to the company that they will not buy any other company's product or service. Customer retention starts with the first contact an organization has with a customer and continues throughout the entire lifetime of a relationship and successful retention efforts take this entire lifecycle into account. The servicing aspect is of at most importance to retain customers. Good service creates value in the minds of customers, generates reliability and accountability. A good product or service will enhance the reputation of the brand or the company within and across the marketplace. Successful customer retention involves giving more than what the customer expects. Generating loyal advocates of the brand might mean exceeding customer expectations. Research by John Fleming and Jim Asplund indicates that engaged customers generate 1.7 times more revenue than normal customers, while having engaged employees and engaged customers return a revenue gain of 3.4 times the norm.

Customer relationship management (CRM) is an approach to manage a company's interaction with current and potential customers. There is evidence that the high aims of the organizations can be achieved by implementing CRM whose result is which will be a profitable relationship between organizations and customers.

1.1: Objective

- To know the impact of CRM on Trust
- To understand the relationship between customer satisfaction and CRM
- To identify the role of CRM in customer retention

1.2: Scope of the study

The issue emphasized in the present research/study concerning customer satisfaction is of great importance today and expected to be even more important in the future. The research has a practical and economic significance as the growth of service in the world's developed economies continues to dominate. Today companies need to excel in both customer satisfaction and employee satisfaction in order to gain business growth, a positive reputation, an increase in the company's overall profitability image, work atmosphere, positive employee attitudes and behaviors. Due to increasing competition among the hotel chains, the issue of customer satisfaction becomes relevant both for research and practice.

1.3: Statement of the Problem

In any industry for the matter of fact and especially hospitality industry , customer is vying for quality products and services. Building good relationship with customers is a strategic decision that the professionals are making. Considering this aspect , there can be positive relationship created with taking good care of customers and in return can receive higher commitment and return rate. This is very important for long term profitability , financial gains, loyalty, satisfaction.

1.4: Methodology

Primary data is collected using structured questionnaire and was given to employees of the hotel. The variable analysis tool, analysis of variance (ANOVA), was used to determine the impact of customer relationship management. To analyse characteristics, including demographic information, such as age, gender; Descriptive statistics was applied.

1.5: Limitations of the study

- The results of this study may be generalized to only customers and employees of a small portion of the lodging industry.
- Customer satisfaction data were provided by the outside consulting organization to the resort, and may not include all factors of customer satisfaction.

2.0: Literature Review

Nicholls, Gilbert, and Roslow (1998) concentrated their research on measurements of customer satisfaction. Their research adds to the developed knowledge base in hospitality industry by examining the service satisfaction in 15 various industries. Nicholls, Gilbert, and Roslow identify viewpoint differences between supporters of the notion of service quality and proponents of the alternative of service satisfaction. Their research explores the relationship between satisfaction and quality. It also points out the instrument of measurement of customer satisfaction. The results from the responses outline the domain elements of the service experience that contributed to customer satisfaction.

Anderson, Fornell, and Rust (1997) emphasized the leading role of customer satisfaction and productivity for the company's success. Their research stresses that companies need to excel in both customer satisfaction and productivity, in other words in “quality” and “quantity,” in order to gain business growth, positive word of mouth about the company and as an increase in the company's overall profitability and image.

A. R. Aryasri (2008) This empirical study investigated the impact of relational marketing comer stones namely trust, commitment, communication and customer satisfaction on relationship quality and loyalty in food and grocery retail outlets. The study found that by nurturing quality relationship with the customers, retail outlets likely to attract and retain them ever loyal. Relationship marketing philosophy, which advocates cultivating quality relationship with the customer is an indispensable determinant of customer loyalty.

Aradhana Chadha , the focus of the study was to determine ineffective CRM has an impact on customer loyalty, a long or short term financial impact on the organization, whether managing customer relationship effectively builds customer trust in the organization and if the customer value benefits in making another purchase. In the process, relevant theoretical literatures were reviewed and it was discovered that CRM is an enterprise approach to understanding and influencing customer behavior through meaningful communications in order to improve customer acquisition, customer retention, customer loyalty, and customer profitability.

3.0: Research methodology

The methodology was based on the development of a self-administered questionnaire using a computed sample size. The study is descriptive in nature. The study is based on primary data collected through survey research. Structured questionnaire is used as the research instrument which is administered through personal interview to 100 respondents from the different regions of Mysore.

3.1: Data Collection

Data were collected through survey using a structured questionnaire having 23 questions covering all the factors along with the demographics. Totally 100 samples were collected. Sample for the study consisted of all the age group.

3.2: Hypothesis

1. Factor name: Trust

H0: There is no significance difference between loyalty and trust

H1: There is significance difference between loyalty and trust

F value \leq alpha

0.047 < 0.05

Therefore, Null hypothesis accepted

There is no significance difference between loyalty and trust

2. Factor name: Commitment

H0: There is no significance difference between loyalty and commitment

H1: There is significance difference between loyalty and commitment

F value \leq alpha

0.098 < 0.05

Therefore, Null hypothesis accepted

There is no significance difference between loyalty and commitment

3. Factor name: Satisfaction

H0: There is no significance difference between loyalty and satisfaction

H1: There is significance difference between loyalty and satisfaction

F value \leq alpha

0.13 < 0.05

Therefore, Null hypothesis rejected

There is significance difference between loyalty and satisfaction

3.3: Sampling

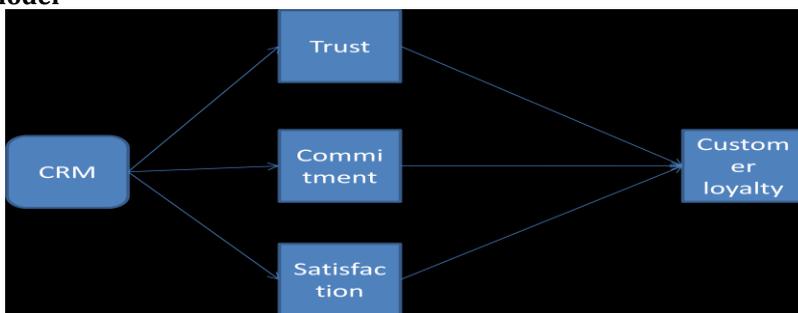
The sample size is computed using a formula shown below. Substitution of value of p is 50%. q as 50% e as 10 and z as 1.96 is made. P is the probability of occurrence and q is probability of non-occurrence. E is the standard error and z is the confidence level. The sample size 80 thought to be adequate one, out of 100 respondents were valid due to the invalid responses therefore sample size lasted to 100

$$N = Z^2 * pq / e^2$$

3.4: Questionnaire Design

The independent variables are trust, communication, satisfaction and commitment. The dependent variables are customer loyalty and relationship quality. Demographics were considered as age, gender and marital status.

3.5: Conceptual Model



4.0: Data Analysis

Data were subject to statistical analysis such as descriptive statistical analysis including range, mean, standard deviation, standard error, variance, skewness and kurtosis along with frequency distribution. This was done to check the accuracy of N. Factor analysis is applied to extract the variables the most used tool for exploratory data analysis. Reliability was done with a view to identify inconsistencies in the data set. To form the hypothesis and to compare the independent factors with dependent factors anova test was done.

Table1 Descriptive Statistics Mean and Standard Deviation

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Q1	100	4.00	1.00	5.00	3.5400	.12982	1.29817
Q2	100	4.00	1.00	5.00	3.5300	.10489	1.04886
Q3	100	4.00	1.00	5.00	3.5100	.10871	1.08707
Q4	100	4.00	1.00	5.00	3.4000	.13027	1.30268
Q5	100	4.00	1.00	5.00	3.1900	.15022	1.50215
Q6	100	4.00	1.00	5.00	3.2900	.15129	1.51287
Q7	100	4.00	1.00	5.00	3.4300	.13945	1.39447
Q8	100	4.00	1.00	5.00	3.6100	.12784	1.27837
Q9	100	4.00	1.00	5.00	3.5100	.11763	1.17632
Q10	100	4.00	1.00	5.00	3.3300	.12796	1.27964
Q11	100	4.00	1.00	5.00	3.4000	.12309	1.23091
Q12	100	4.00	1.00	5.00	3.5000	.12102	1.21023
Q13	100	4.00	1.00	5.00	3.4300	.13353	1.33526
Q14	100	4.00	1.00	5.00	3.3300	.13337	1.33375
Q15	100	4.00	1.00	5.00	3.4900	.12268	1.22676
Q16	100	4.00	1.00	5.00	3.4800	.12430	1.24300
Q17	100	4.00	1.00	5.00	3.3300	.12148	1.21485
Q18	100	4.00	1.00	5.00	4.0800	.10218	1.02178
Q19	100	4.00	1.00	5.00	3.6100	.10908	1.09078
Q20	100	4.00	1.00	5.00	3.6300	.10314	1.03138
Q21	100	4.00	1.00	5.00	3.3700	.11862	1.18624
Q22	100	4.00	1.00	5.00	3.4100	.12641	1.26407
Q23	100	4.00	1.00	5.00	3.1400	.14976	1.49761
Valid N (listwise)	100						

N=the responses collected were 100 .The Likert was used to measure the response of the respondent. Descriptive statistics was done using SPSS software as shown in the table. Descriptive included Range, mean standard deviation, variance, kurtosis, skewness. Range=the range of the scale of the dependent and independent variable is most of 4 and 3 as in the table Range = H-L. Mean=Mean the average of the variables is also ranging from 4 and 3. Standard error=The deviation between the sample mean and population is measured using standard error. Stand error the test made to check the accuracy; it should be least in number. As the sample size increases the standard error decreases. Standard deviation=The statistical measure to measure the dispersion of the set of data values. Whereas the variance is square root of it.

Table2 Descriptive Statistics Skewness and Kurtosis

Descriptive Statistics						
	Variance	Skewness		Kurtosis		
	Statistic	Statistic	Std. Error	Statistic	Std. Error	
Q1	1.685	-.443	.241	-.952	.478	
Q2	1.100	-.349	.241	-.501	.478	
Q3	1.182	-.219	.241	-.532	.478	
Q4	1.697	-.280	.241	-1.050	.478	
Q5	2.256	-.131	.241	-1.459	.478	
Q6	2.289	-.276	.241	-1.374	.478	
Q7	1.945	-.218	.241	-1.332	.478	
Q8	1.634	-.561	.241	-.756	.478	
Q9	1.384	-.214	.241	-.943	.478	
Q10	1.637	-.350	.241	-.917	.478	
Q11	1.515	-.378	.241	-.752	.478	

Q12	1.465	-.384	.241	-.841	.478
Q13	1.783	-.522	.241	-.786	.478
Q14	1.779	-.369	.241	-.926	.478
Q15	1.505	-.345	.241	-.924	.478
Q16	1.545	-.436	.241	-.794	.478
Q17	1.476	-.111	.241	-1.015	.478
Q18	1.044	-1.264	.241	1.494	.478
Q19	1.190	-.407	.241	-.248	.478
Q20	1.064	-.273	.241	-.593	.478
Q21	1.407	-.091	.241	-1.085	.478
Q22	1.598	-.176	.241	-1.138	.478
Q23	2.243	-.115	.241	-1.423	.478
Valid N (listwise)					

Skewness: values of skewness should be near to 1. It measures the degree and direction of asymmetry. From the above table the factors Types, service, price, brand, are negatively skewed. Hence the data is skewed to left. This means the mean is less than mode, median is less than mode.

Kurtosis: The kurtosis of 2.96 is near the expected value of 3. The closer the kurtosis value to zero, the more normal the distribution of scores. A distribution is more leptokurtic (peaked) when the kurtosis value is a large positive value as the item from the table has (1.494 Q18) as the value of kurtosis, and a distribution is more platykurtic (flat) when the kurtosis value is a large negative value (1.459 Q5)

FACTOR ANALYSIS
FACTOR ANALYSIS OF INDEPENDENT VARIABLE

Table3 KMO for Independent Variable

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.715
Approx. Chi-Square	306.622
Bartlett's Test of Sphericity Df	78
Sig.	.000

KMO test measures sampling adequacy for each variable calculated as 0.715 as the above table. The sampling size to be adequate the KMO value should be greater than 0.5. Values ranging from 0.70 to 0.79 says that the adequacy is above average. Hence the sampling adequacy for items of Independent variable is above average. Stating it is acceptable.

Table4 Toatl Variance for Independent Variable
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.786	29.123	29.123	3.786	29.123	29.123
2	1.438	11.059	40.182	1.438	11.059	40.182
3	1.176	9.048	49.230	1.176	9.048	49.230
4	1.144	8.802	58.032	1.144	8.802	58.032
5	1.070	8.232	66.264	1.070	8.232	66.264
6	.881	6.775	73.038			
7	.786	6.049	79.087			
8	.623	4.795	83.882			
9	.528	4.062	87.944			
10	.488	3.753	91.697			
11	.434	3.340	95.037			
12	.381	2.933	97.970			
13	.264	2.030	100.000			

	z				
	Component				
	1	2	3	4	5
Q2	.850				
Q15	.712				
Q3	.653				
Q20	.571				
Q14		.750			
Q8		.660			
Q13		.597			
Q18			.897		
Q19			.732		
Q7				.830	
Q6				.632	
Q11					.819
Q12					.534

The **23** items of 4 variables are taken into factor analysis using the screen plot. Resulting to a table below. Which shows the **23** items is condensed to **13** items 5 different variables suppressed by the value 100. The variables which have more significance are **trust,satisfaction and commitment**

ANOVA

A method for assessing the contribution of an independent variable or controllable factor to the observed variation in an experimentally observed dependent variable To determine whether any of the differences between the means are statistically significant, compare the p-value to your significance level to assess the null hypothesis. The null hypothesis states that the population means are all equal. Usually, a significance level (denoted as α or alpha) of **0.05** works well.

Table 5 ANOVA TEST FOR INDEPENDENT VARIABLE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524 ^a	.275	.236	1.11851

Table 6 ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	44.511	5	8.902	7.116	.000 ^b
1 Residual	117.599	94	1.251		
Total	162.110	99			

Table 7 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	3.330	.112		29.772
1 REGR factor score 1 for analysis 1	.401	.112	.314	3.569
REGR factor score 2 for analysis 1	.226	.112	.177	2.012
REGR factor score 3 for analysis 1	.188	.112	.147	1.673
REGR factor score 4 for analysis 1	-.286	.112	-.224	-2.545
REGR factor score 5 for analysis 1	.347	.112	.271	3.085

Coefficients^a

Model	Sig.
(Constant)	.000
REGR factor score 1 for analysis 1	.001
REGR factor score 2 for analysis 1	.047
REGR factor score 3 for analysis 1	.098
REGR factor score 4 for analysis 1	.013
REGR factor score 5 for analysis 1	.003

Here the anova test is conducted by taking one dependent variable that is primary preference and all the independent variable

5.0: Suggestions

1. The hotels in the city must identify the present and future needs of the consumers so that the level of quality of service can be raised.
2. Qualified and trained staff needs to be deployed for the same.
3. The hotels through their well designed services should develop trust and credibility among customers.

5.1: Conclusion

The study focused on understanding the impact of effective CRM on customer loyalty. Study emphasizes that in a service industry like hospitality the main aspect of the success is customer satisfaction. This can be achieved through strong commitment from hotel staff and management to serve te customer and bridge the gap between adequate and expected service. When customer’s satisfaction is met , customer trust is gained. All the above factors leads to customer loyalty.

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Selected Factors Influencing International Financial Integration – Special reference to Indian Economy with Australia and Brazil

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ABSTRACT: *International Financial Integration is one among those major factors that influences the country's economic development. However, global financial crisis has created an effective impact on cross border investment with respect to investment decision making and giving rise towards arbitrage possibilities. The impact of exchange rate on interest and inflation rate together leading to major factor of International Financial Integration has been professionally reviewed and empirically proved as a necessary factor by various authors in different areas of study. Few of the selected factors such as Interest rate parity, Purchasing power parity, Forward Premium / Discount have been considered to analyse the financial integration - a special reference to Indian Economy with Australia and Brazil. The study argues about selected crucial factors governing International financial integration of Indian economy along with Australia and Brazil for a period of 4 years (2010 – 2013). The study is carried out by ex post – Facto type research design in order to identify the Inflation rate and Interest rate of India along with Australia and Srilanka with the help of Purchasing power parity, Interest rate parity and Fishers effect Index. The study uses Trend analysis as a statistical tool and Hypothesis testing to prove the financial integration on Indian Economy with respect to selected countries. The findings will act as a catalyst towards promoting the International Financial Integration effectively.*

Keywords: *Forward premium / discount, Exchange Rate, Inflation rate, Interest rate parity, Purchasing power parity, and Fishers Index.*

Introduction:

The Interest rate concept has been into practice from the past several decades. The importance interest rate is used in different areas and considered to be very crucial and creates a major impact on country's economic development. Subsequently country's inflation rate which is equally considered important factor with respect to cross border investment needs a special focus / attention. The VUCA conflates Financial Integration when domestic financial markets become part of the world through synchronizing interest rate movements, savings and investment activities and the accumulation of physical capital stocks, which gives rise to free movement of capital across countries whenever interest rate differential emerges, because the marginal product of capital will be different, thus implying an arbitrage opportunity. This movement of capital ensures the availability of capital in economies where the domestic savings are not adequate for domestic investments. Financial integration is more interrelated with respect to volatility, uncertainty, complexity and ambiguity whenever there is a cross border investment opportunities.

Exchange rate determination

The exchange rate depends upon the forces of demand and supply that in turn depend upon the macroeconomic variables, such as interest rate, rate of inflation, etc. The uncertainty of day-to-day exchange rate determination does not arise in a fixed-rate regime but in a system of floating exchange this seem to be important. In case of managed floating, the intervention by monetary authorities looks forward to stabilize to stabilize the exchange rate under foreign exchange market.

The global financial crises is more complex, perhaps highly disruptive and ambiguous compared to past. They also propagate more rapidly. Economists apply supply-demand conditions of price theory in the foreign exchange market, as it is related to price. As a result of this the currency value depends on another currency due to demand and supply of foreign exchange.

Purchasing Power Parity (PPP)

Purchasing power parity may be understood to compare the income levels of different countries. Thus it makes it easy to understand and interpret the data of each country. A fall in either currency's purchasing power would lead to a proportional decrease in that currency's valuation on the foreign exchange market.

PPP is a neo classical economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power. An economic theory estimates amount of adjustment needed on the exchange rate among countries in order for the exchange to be equivalent to each currency's purchasing power. The concept of purchasing power parity allows one to estimate what the exchange rate between two currencies would have to be in order for the exchange to be at par with the purchasing power of the two countries' currencies. Using that PPP rate for hypothetical currency conversions, a given amount of one currency thus has the same purchasing power whether used directly to purchase a market basket of goods or used to convert at the PPP rate to the other currency and then purchase the market basket using that currency. Observed exchange rate deviations from purchasing power parity are measured through deviations of the real exchange rate from its PPP value of 1.

Interest Rate Parity [IRP]

IRP refers to the fundamental equation which governs between interest rates and currency exchange rates. Interest rate parity is a non-arbitrage condition representing an equilibrium state under which investors will be indifferent to interest rates available on bank deposits in two countries. Interest rate parity plays an essential role in foreign exchange markets, connecting interest rates, spot exchange rates and foreign exchange rates. This condition does not always hold, but allows for potential opportunities to earn profits with less risk from covered interest arbitrage. Interest rate parity comprise of two distinctive forms, firstly uncovered interest rate parity, which refers to the parity condition in where exposure to foreign exchange risk is uninhibited, on the other hand *covered* interest rate parity refers to the condition in which a contract has been used to cover (eliminate exposure to) exchange rate risk.

Fisher Effect

In the late 1930s, U.S. economist Irving Fisher wrote a paper which posited that a country's interest rate level rises and falls in direct relation to its inflation rates. Fisher effect describes the inter relationship among inflation and with real and nominal interest rates. The Fisher effect states that the real interest rate equals the nominal interest rate minus the expected inflation rate. Therefore, real interest rates fall as inflation increases, unless nominal rates increase at the same rate as inflation. Fisher mathematically expressed this theory in the following way:

$$R_{\text{Nominal}} = R_{\text{Real}} + R_{\text{Inflation}}$$

In this sense, Fisher conceived of interest rates, as the prices of lending, being adjusted for inflation in the same manner that prices of goods and services are adjusted for inflation. For instance, if a country's nominal interest rate is eight percent and its inflation rate is six percent, the country's real interest rate is two percent ($8\% - 6\% = 2\%$). The *Fisher effect* is an important tool by which lenders can gauge whether or not they are making money on a granted loan. Unless the rate charged is above and beyond the economy's inflation rate, a lender will not profit from the interest. Moreover, according to Fisher's theory, even if a loan is granted at no interest, a lending party would need to charge at least the inflation rate in order to retain purchasing power upon repayment.

The Fisher effect can be seen each time you go to the bank; the interest rate an investor has on a savings account is nominal. For example, if the NIR on a savings account is 4% and the expected rate of inflation is 3%, then money in the savings account is really growing at 1%. The smaller the real interest rate the longer it will take for savings deposits to grow substantially when observed from a purchasing power perspective.

Review of Literature and Research Methodology

Review of Literature

Hirschman (1958) warned that in the absence of linkages, foreign investments can have negative effects on the economy. More generally researchers have argued that international capital mobility can increase the likelihood of financial crisis during the presence of weak institutional settings and pre-existing distortions, higher volatility and risk can reduce entrepreneurship and innovation efforts in a country.

Financial integration is believed to date back to the 1690s and was briefly interrupted at the start of the French revolution (**Neal, 1990**). At the end of the 17th century, the world's dominant commercial empire was the Dutch Republic with the most important financial center located in Amsterdam where Banking, foreign exchange trading, stock trading and bullion trading were situated. It was also in this period that London and Amsterdam were closely integrated financially (**Eagly and Smith, 1976; Neal, 1990⁽⁴⁾**); Amsterdam assumed the role as the senior partner in acting as the stabilizing force for London during times

of English financial crisis.

Varma (1997), in the Indian context, has carried out an exploration of the covered interest parity. He posits a structural break in the money market in India in September 1995, with CIP become effective from that point on for the first time in the Indian money market. The structural break itself is attributed to interplay in the money market and FOREX market. The period after 1995 witnesses to several deviations from the CIP. Varma has used rates on Treasury bills, certificates of deposit and commercial paper and call money rate to analyze the Indian money market. For the foreign rate, he has calculated an implicit euro-rupee rate for six, three and overnight maturity. Thus, he uses a mix of actual and constructed rates of different maturity. A rigorous test requires use of interest rates on identical instruments (e.g. maturity, risk) and a consistent forward rate (period of forwards should be identical to that of instruments).

Lothian and Simaan (1998) used time averaged long horizon data to obtain evidence in favor of UIP for 1974- 1994. Cheung et.al (2005) also notes more evidence of UIP at long, rather than at short horizons.

Levine (2001) shows that financial integration helps strengthen domestic financial sector allowing for more efficient capital allocation and greater investment and growth opportunities. As a result of financial integration, efficiency gains can also be generated among domestic firms. Financial integration can also have adverse effects. For example, a higher degree of financial integration can generate a severe financial contagion in neighboring, regional and/or global economies.

Chinn and Meredith (2004) use data from 1980-2000 at 3, 6 and 12 month horizons for 6 major currencies and find an average coefficient also of -0.8, with the estimated coefficients showing negative sign and being significantly different from unity. Another important finding is that estimates from the arbitrage equations tend to be highly unclear, so even where one cannot reject the null of unity coefficient, one can often also not reject the null of zero coefficient. Several explanations have been forwarded for this failure of unbiasedness to hold at horizons less than a year and more than a few hours.

Bhatt and Virmani (2005) have tested for UIP and CIP in India using regression. They conducted a regression of 3 month forward premium on 3 month TB rate differential between Indian TB rate and the US TB rate, for the period covering April 1993 to March 2003, to calculate CIP. They found that the coefficient was 0.65 and accepted the null hypothesis at 55% level of significance. Hence they concluded that CIP holds for that period.

Sharma and Mitra (2006) studied the factors that drive the forward premium in India. They observed a peculiar phenomenon in the forward market in the year 2003-04. The Indian premium which was usually positive became negative during that period. They considered this period as peculiar, since according to theory in a country where inflation and interest rates are higher than that of the other country that country's currency should be at a discount.

Research Methodology

Statement of the problem: The study is carried out to analyze how crucial and selected factors contribute towards international financial integration, a failure of which would create a negative impact on country's economic development with respect to multinational investments and analyzed with special reference to Australia and Brazil with India.

Objectives of the study:

a) Primary objective - To analyze the selected factors that govern international financial integration for the Indian Economy along with Australia and Brazil.

b) Secondary objectives –

1. To ascertain the impact of purchasing power parity on the home country currency and its reflection on Australia and Brazil.
2. To ascertain the impact of interest rate parity on the home country currency and its reflection on Australia and Brazil.
3. To compare the Expected Spot rate with the realized spot rate and to determine whether the exchange rates fall under Forward Premium (or) Forward Discount.

Research Design: Ex-post- Facto type of research design has been adopted in this study.

Research Findings

Purchasing power parity:

- **Australia:** As the realized spot rate is greater than expected rate the resultant is forward discount for the calendar year 2010, 2011 & 2012 & as the realized spot rate is lesser than expected spot rate

the resultant is forward premium for the calendar year 2013.

- **Brazil:** As the realized rate is lesser compared to expected rate the resultant is premium for the calendar year 2010, 2011, 2012 & 2013.

Interest rate parity:

- **Australia:** Since the spot quotation is greater compared to expect spot rate the result is discount for the calendar year 2010, 2011, 2012 & 2013.
- **Brazil:** Since the realized spot rate is lesser than the expected spot rate the resultant is forward discount for the calendar year 2010 & 2011 and forward premium for the calendar year 2012 & 2013.

Fisher Effect:

- **Australia:** It is inferred that the fisher effect records the highest for the year 2013 and it records the lowest for the year 2010.
- **Brazil:** It is inferred that the fisher effect records the highest for the year 2011 and it records the lowest for the year 2012.

Conclusion

The study reveals that the variables namely PPP and IRP are the crucial variables which bring in an imbalance between developing vs. developed economy. The study further reveals that inflation and interest rate are the crucial variables in bringing the imbalance between developing vs. developed economy. Thus it becomes necessary to bring the common platform where these economies can be made into one and the crucial variables which acts as common platform is non-other than the purchasing power and interest rate differentials. In order to bridge these gaps the principles of one price theory should be applied and the interest rate offered should be comparatively higher thus the domestic country can drive in more number of investors. If these two factors have been traded off the concept of integration of the economy will be in existence.

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Data Analysis

Financial Analysis

Computation of Purchasing power parity

a) Nature of the Economy: Developed (Australia)

Table 1.1. Table showing the expected spot rate Vs. realized spot rate for the calendar year 2010 - 2013 with a special reference to Indian Rupee to AUSTRALIAN \$

YEAR	RSR	ESR	REMARKS
2010	45.7225	43.0351	FD
2011	53.7884	47.0948	FD
2012	56.9266	55.0546	FD
2013	54.8567	58.4110	FP

TABLE NO: 1.1

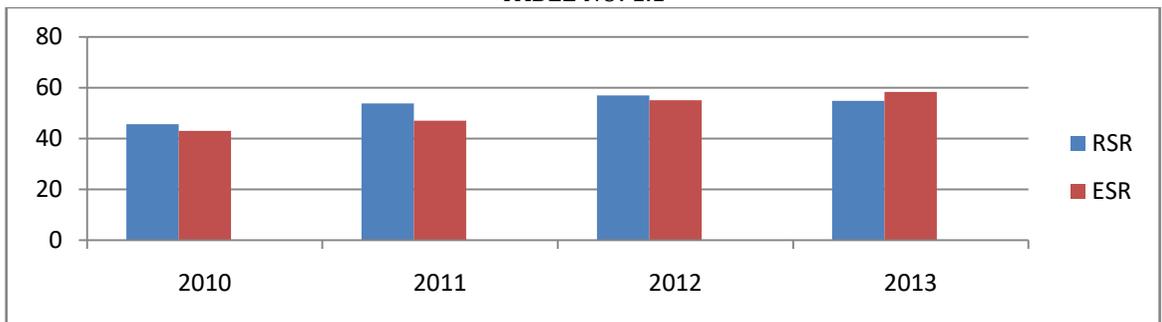


Fig No 1.1

INFERENCE: From the above table it is inferred that the Indian Counterpart will incur an additional expense of Rupees 2.68 P, 6.70 P and 1.88 P per Australian \$ as the Value of the Australian \$ has been appreciated for the calendar year 2010, 2011 and 2012, whereas Australian Counterpart will incur an additional expense of Rupees 3.55 P per Indian Rupee as the Value of the Indian Rupee has been appreciated for the calendar year 2013.

b) Nature of the Economy: Developing (Brazil)

Table showing the expected spot rate vs. Realized spot rate for the calendar year 2010 - 2013 with a special reference to Indian Rupee to BRAZILIAN REAL

YEAR	RSR	ESR	REMARKS
2010	26.6441	27.3059	FP
2011	28.6277	28.9010	FP
2012	26.2974	30.2036	FP
2013	26.3800	28.2314	FP

TABLE NO 1.2

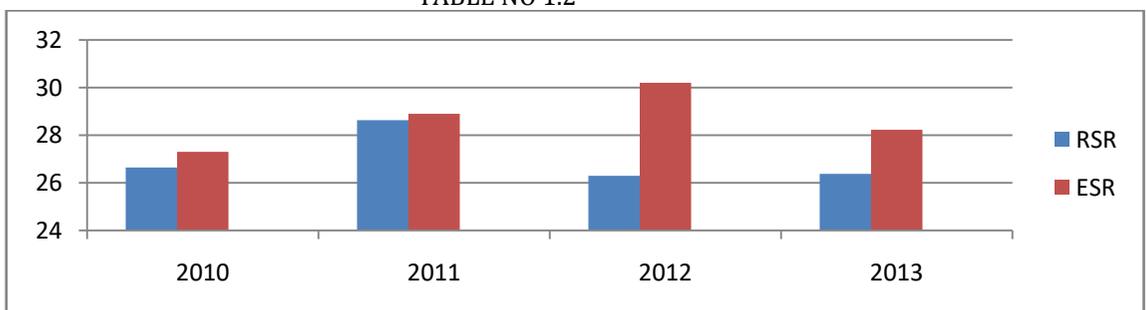


Fig No 1.2

INFERENCE: From the above table it is inferred that the Brazilian Counterpart will incur an additional expense of Rupees 0.67 P, 0.27 P, 3.90 P and 1.85 P per Indian Rupee as the Value of the Indian Rupee has been appreciated for the calendar year 2010, 2011, 2012 and 2013.

Computation of Interest Rate Parity

a) Nature of the Economy: Developed (Australia)

Table showing the expected spot rate Vs. realized spot rate for the calendar year 2010 - 2013 with a special reference to Indian Rupee to AUSTRALIA \$

YEAR	RSR	ESR	REMARKS
2010	45.7225	41.3888	FD
2011	53.7884	44.4383	FD
2012	56.9266	51.9518	FD
2013	54.8567	54.5033	FD

TABLE NO 1.3

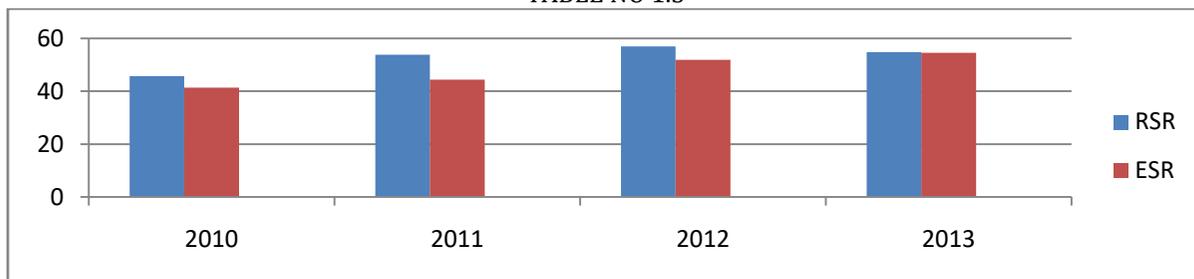


Fig No 1.3

INFERENCE:

From the above table it is inferred that the Indian Counterpart will incur an additional expense of Rupees 4.33 P, 9.33 P, 4.98 and 0.33 P per Australian \$ as the Value of the Australian \$ has been appreciated for the calendar year 2010, 2011, 2012 and 2013.

b) Nature of the Economy: Developing (Brazil)

Table showing the expected spot rate Vs. realized spot rate for the calendar year 2010 - 2013 with a special reference to Indian Rupee to BRAZILIAN REAL

YEAR	RSR	ESR	REMARKS
2010	26.6441	24.7199	FD
2011	28.6277	26.1004	FD
2012	26.2974	28.5036	FP
2013	26.3800	26.5078	FP

TABLE NO 1.4

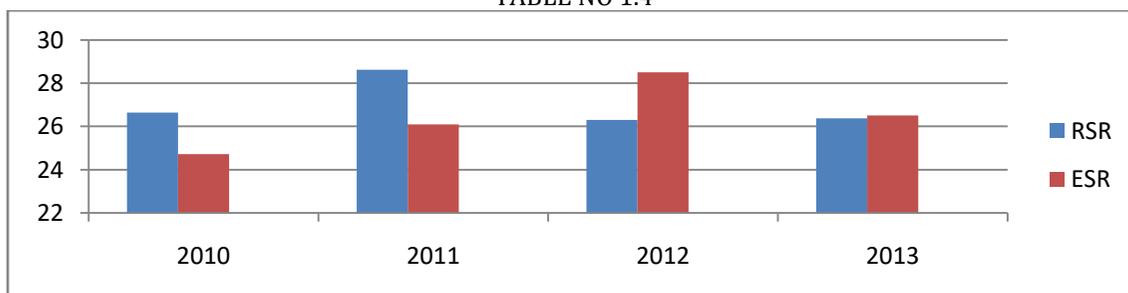


Fig No 1.4

INFERENCE: From the above table it is inferred that the Indian Counterpart will incur an additional expense of Rupees 1.92 P and 2.57 P per Brazilian Real as the Value of the Brazilian real has been appreciated for the calendar year 2010 and 2011, whereas the Brazilian Counterpart will incur an additional expense of Rupees 2.20 P and 0.13 P per Indian Rupee as the Value of the Indian Rupee has been appreciated for the calendar year 2012 and 2013.

Computation of Fishers effect as per PPP & IRP

a) Nature of economy: Developed (Australia)

Table showing the fishers effect status with a special reference to AUSTRALIAN \$ for the calendar year 2010-2013

YEAR	FISHER EFFECT
2010	1.0398
2011	1.0598
2012	1.0597
2013	1.0717

TABLE NO 1.5

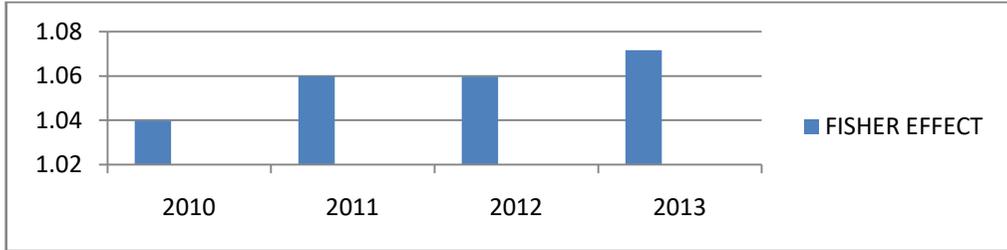


Fig No 1.5

INFERENCE:- From the above table it is inferred that the fisher effect records the highest for the calendar year 2013 and it records the lowest for the calendar year 2010.

b) Nature of economy: Developing (Brazil)

Table showing the fishers effect status with a special reference to SRILANKA RUPEE for the calendar year 2010-2013

YEAR	FISHER EFFECT
2010	1.1046
2011	1.1073
2012	1.0596
2013	1.0650

TABLE NO 1.6

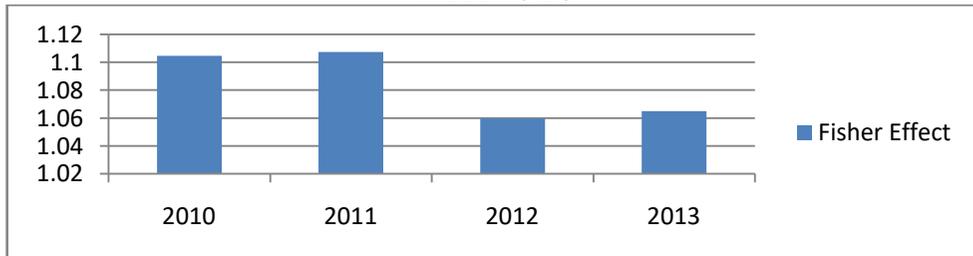


Fig No 1.6

INFERENCE:- From the above table it is inferred that the fisher effect records the highest for the calendar year 2011 and it records the lowest for the calendar year 2012.

Trend Analysis

1. Nature of the Economy: Developed Country (Australia)

Name of the Parameter: Inflation Rate

Let 'X' represents the Number of Years

'Y' represents the Inflation rate

Table No 1.7

X	Year	2010	2011	2012	2013
Y	Inflation rate	2.9	3.3	1.7	2.5

$Y = a + bx$

$\sum Y = na + b \sum x$

$\sum XY = a \sum x + b \sum x^2$

$a = 3.3$

$b = -0.28$

$Y = 3.3 + (-0.28) [5]$

$Y = 3.3 + (-0.28) [6]$

$Y = 3.3 + (-1.4)$

$Y = 3.3 + (-1.68)$

$Y = 1.9$

$Y = 1.62$

Inference: The projected Inflation rate for the year 2014 will be 1.9 and for 2015 will be 1.62.

2. Nature of the Economy: Developing Country (Brazil)

Name of the Parameter: Inflation Rate

Let 'X' represents the Number of Years

'Y' represents the Inflation rate

Table No 1.8

X	Year	2010	2011	2012	2013
Y	Inflation rate	5.91	6.50	5.84	5.91

$a = 6.205$

$Y = 6.205 + (-0.066) (5)$

$Y = 6.205 - 0.33$

$Y = 5.875$

$b = -0.066$

$Y = 6.205 + (-0.066) (6)$

$Y = 6.205 - 0.396$

$Y = 5.809$

Inference: The projected Interest rate for the year 2014 is 5.875 and for 2015 it is 5.809.

3. Nature of the Economy: Developed Country (Australia)

Name of the Parameter: Interest Rate

Let 'X' represents the Number of Years

'Y' represents the Interest rate

Table No 1.9

X	Year	2010	2011	2012	2013
Y	Interest rate	3.97	4.68	3.63	2.66

$a = 4.98$

$Y = a + bx$

$Y = 4.98 + (-0.498) [5]$

$Y = 4.98 - 2.49$

$Y = 2.49$

$b = -0.498$

$Y = 4.98 + (-0.498) [6]$

$Y = 4.98 - 2.9$

$Y = 1.992$

Inference: The projected Inflation rate for the year 2014 is 2.49 and for 2015 it is 1.992.

4. Nature of the Economy: Developing Country (Brazil)

Name of the Parameter: Interest Rate

Let 'X' represents the Number of Years

'Y' represents the Interest rate

Table No 1.10

X	Year	2010	2011	2012	2013
Y	Interest rate	9.89	11.77	8.57	8.29

$a = 11.63$

$Y = 11.63 - 0.8(5)$

$Y = 11.63 - 4$

$Y = 7.63$

$b = -0.8$

$Y = 11.63 - 0.8(6)$

$Y = 11.63 - 4.8$

$Y = 6.83$

Inference: The projected Interest rate for the year 2014 is 7.63 and for 2015 it is 6.83.

Hypothesis Testing (T - Test)

1. Nature of the Economy: Developed Country (Australia)

- **Name of the Parameter: Inflation Rate**

H0: The Inflation rate is independent to that of the time period [$\mu = 2.7$]

H1: The Inflation rate is dependent to that of the time period [$\mu \neq 2.7$]

Table No 1.11

Year	2010	2011	2012	2013
Inflation rate	2.9	3.3	1.7	2.5

Arrange in ascending order 1.7,2.5,2.9 and 3.3

$\mu = 2.7$

$\bar{X} = 2.6$

$\sigma = 0.6832$

$T = \bar{X} - \mu / \sigma$

$= 2.6 - 2.7 / 0.6832$

$= -0.1 / 0.6832$

$= -0.1464$

At 5% significant level the degree of freedom is given by $(n-1) = (4-1) = 3$

CV = -0.1464 TV = 2.353

Inference: As the calculated value is less than the table value H_0 is accepted and hence it is concluded that Inflation rate is independent to that of the time period.

2. Nature of the Economy: Developed Country (Brazil)

• **Name of the Parameter: Inflation Rate**

H_0 : The Inflation rate is independent to that of the time period [$\mu = 5.91$]

H_1 : The Inflation rate is dependent to that of the time period [$\mu \neq 5.91$]

Table No 1.12

Year	2010	2011	2012	2013
Inflation rate	5.91	6.50	5.84	5.91

Arrange in ascending order 5.84,5.91,5.91and 6.50

$\mu = 5.91$ $\bar{X} = 6.04$

$= 6.04 - 5.91 / 0.3431$

$\sigma = 0.3431$

$= 0.13 / 0.3431$

$T = \bar{X} - \mu / \sigma$

$= 0.3789$

At 5% significant level the degree of freedom is given by $(n-1) = (4-1) = 3$

CV = 0.3789 TV = 2.353

Inference: As the calculated value is less than the table value H_0 is accepted and hence it is concluded that Inflation rate is independent to that of the time period.

VUCA APPROACH TOWARDS SUPPLY CHAIN

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Volatility Uncertainty Complexity and Ambiguity are the words increasingly used in supply chain in the current business environment, and the impact it has on the supply chain business performances.

The term VUCA became increasingly important to the leaders to seek the business to operate efficiently and effectively in supply chain.

Supply chain is predictable and today the global market is full of volatile uncertainty and ambiguous, as organization have to be carefully strategized and be ready for changes in market and keep moving forward.

Volatility: is the rise in material price, unexpected margin in sales, which are curtailed, and there is disaster in supply of material, product, and the supply chain is one of the most vulnerable function to these risks, and the volatile environment regarding risks and demand fluctuations, since able to use the volatility supply chain risk for their advantage.

Volatility refers to the nature of change including speed at which it happens; as it creates sudden and profound instability with organizations to create uncertainty and anxiety.

Fluctuations in demand for goods in many a situation is not caused by genuine, discontinuities in consumption or usage of these goods may cause disruption in supply, real or imputed, and may cause demand volatility with consequence of unwanted price fluctuation.

Uncertainty: is the functioning of the risks, that links to the lead toward delays, and the bottleneck of supply that may happen during the performance of the output of the supply chain, and it becomes necessary to control the various factors which are responsible for supply chain, with proper planning and dealing with uncertainties will lead to better schedules, and cope with products, and timely delivery an ultimate customer satisfaction.

Uncertainty is the inability to predict behavior about demand, and stock needs, and uncertainty of the future of entering new business, competition, market, new market policies, which needs clarity and this obstructs the management ability to value the threats and challenges facing the supply chain.

Complexity: in supply chain is the value, and the costs that have enabled supply chain to make, and optimize decision. Globalization has introduced complexity in supply chain in transportation, logistic, and has modified the product in order to meet the culture of different markets. Some organizations require customer process with specialized suppliers which can restrict options, and make supply chain less responsive.

Complexity needs to be managed in order to improve supply chain, performance. Complexity in inbound and outbound logistic sales process, production, engineering design, new products development, can face downstream complexity (customer needs, life cycle of the product, and product and variability in demand) and upstream complexity (industrial facilities regarding demand, reliability of supply, and delivery) which includes internal manufacturing in supply chain.

Ambiguity : is viewed as unknown is possible outcomes, lack of understanding the fundamental principle that drive, risk, lack of clarity, about any material, product, and the reliability to conceptualize threats, and opportunities . Ambiguity also lacks the knowledge of the decision that is made and the lack of information, and capturing the unwanted aspect of the behavior of supply chain in an environment.

Ambiguity in supply chain has to be handled in the way with the help of co-coordinators who are aware of the situation in supply chain, and the system, the process, with a common interpreter of supply chain, activities, through a proposed frame work decisions, and verifying and achieving clarity in an ambiguous situation implementing, planning, forecasting, and coordination in the process that challenges supply chain activities.

Managing ambiguity requires sharing accurate and correct knowledge across supply chain. Some of the key responses to tackle ambiguity is through the information system, coordination, are some of the complex

problems in supply chain which have to be jointly reviewed, common interpretation of events and achieving clarity in an ambiguous situation, and implement them jointly with coordination that are challenges in supply chain.

VUCA environment may leave us in with frustration from volatility, uncertainty and complexity, and may have the feeling of overwhelmed and exhausted, as ambiguity normally leads to primarily inefficiency, and opportunities missed in supply chain, and for being tolerant is the best remedy for survival in supply chain, which may lead the supply chain organization to thrive.

Changes to strategy in inventory policy, and bringing in good decision in the policy of inventory, by taking up necessary action, before and when the recession starts coming up, out of which the difficulty in procuring material or product, so as to empower the team of procuring, the right material or product, and to make decisions about complications of good inventory system or policy, in supply chain can recommend VUCA by building up skills and deploying appropriate actions in managing supply chain .

The supply chain organization have increasingly affected by level of economic volatility, and wide range of factors, have contributed to such disruption occurring, in placing unnecessary, unexpected pressure by the way of sourcing, manufacturing, and distribution of products. These factors include rapid changes in the availability of price commodities, currency fluctuation, and disruptive geographical or political events in supply chain, and continual development in globalization.

Global organization traditional used to maintain high levels of buffer inventory, in order to meet the fluctuation in demand, but things are no longer feasible as high level of inventory would drain supply chain resources. If Organization decides to follow the strategy of high inventory they have to maintain good relationship with suppliers or vendors to supply just-in-time in supply chain.

Globalization is the driving force of demand volatility, which in turns drives to product complexity, which is coupled with outsourcing, and driving supply chain complexity. By product complexity is meant that organization should meet the demand of the product specific to market requirement, assuming that there is less demand for each variant of product produced, and this leads to a great demand uncertainty. On supply chain multi-sourcing, and outsourcing had led to longer and variable lead time, and added costs. Ambiguity arises for not having appropriate responses, process, and systems in place of responses to profitably to actual demand. An organization can deal rationally with VUCA without having excellent supply chain, visibility, and risk management strategies:

Reduction in cycle time in supply chain is necessary to increase the flow of information in supply chain, and this is necessary to respond to faster changes to bring VUCA in supply chain.

Total supply chain is the cumulative effort of physical cycle time, which includes production, transportation, planning across supply chain time. Postponement of strategy applied in organization in inventory policy can reduce inventory, and improve customer service, and this entitles the organization to shift over from Make or Buy or Make or Stock, to Assemble to Order in production bringing in VUCA in supply chain.

Collaboration strategy aims to stretch with fluctuations, and cope with demand, and also lead to information sharing with supply chain, organization. The ability to respond quickly, and effectively to continuous changes in demand, requires accurate and good flow of information among the supply chain, and this can be attained through good visibility and the most important is the supplier and customer relationship and bring in VUCA in supply chain.

The organization approach of using the past to predict the future though statistical methods, and forecasting is not found to be accurate, and at the same time business organization, and consumer expectation is high, and are changing, and the organization are concentrating on wide production, and disruption in supply chain, and would like the supply chain move quickly, and efficiently than ever before, since there is very little room for failure in VUCA in supply chain

In fact manufacturer are operating, and moving under pressure of increasing the functions in supply chain, as initiative, and innovation, are non-essential for organization, to meet these challenges and evolve commercial strategies, in time with the new operations in supply chain.

The importance of digital era in supply chain allows opportunities, and risks to be shared across the various supply chain. The importance of internet of things, machine building, block chain, robotics and e-commerce, has been changing the supply chain, and managing expectations with many organizations. The consumer habits are changing in supply chain, and demand is coming from unexpected areas, and this has led to many unofficial secondary sources of buying in one location, but selling the product in another location or region of demand, and supply chain has made VUCA difficult.

The management principle of planning executing and controlling are accommodated in Enterprise Resource Planning, system and this covers the flow of products, materials, resources, through a value chain, which

allows clear visibility, and providing relevant critical information for business in a real-time aspect of the organizational process. Enterprise Resource Planning system clearly, a good system clicked by VUCA, and offers a clear and unambiguous view of processing, and allowing system flexibility and effective management in the most changeable times in supply chain. Enterprise Resource Planning offers justification in spite of VUCA offering 1. Improved information visibility: 2. Improved alignment in business operations and strategy: improved management and corporate governance: 3. Reduced business risk.

Cycle planning: To reduce inventory, and increase capital intensive manufacturing assets of the organization, rely on inventory replenishment, making planning possible to be efficient in order to plan a variety of products, based on the availability of stock, and at the same time finding a way for capacity load to avoid VUCA costly production.

End to end synchronization of supply chain: since the value are spread against various process, and is often spread over several organization, but the reliability of the supply chain is the highest principle, but the stable supply of products guarantees whenever the products are needed in a VUCA supply chain.

Effective variability management: High inventories poor utilization are the results duet insufficient variability in management. When the approach is two parts of the demand variability is actively managed in manufacturing capacity, and inventory, and this brings reduction in working capital, through proper supply chain or analytics on variability and risk allocation of stock, across end to end supply chain in VUCA network.

PERCEPTION AND ATTITUDES TOWARDS EDUCATION LOAN REPAYMENT; BORROWERS AND BANK EMPLOYEES PERSPECTIVES

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ABSTRACT: *Non-Performing Assets has been a serious problem in the Indian banking sector. They are the major concerns of the commercial banks. Profitability of the bank is affected by the increase in NPA. The increase in NPA has a direct impact on the profitability of the banks. Performance of the bank is reflected through the NPA. The non-performing assets have been constantly increasing. An endeavour is made in this paper to understand the perception, expectation, repayment intention of the customer and the bank employees through primary research by using questionnaire. The study was conducted using correlation, regression analysis and chi-square test. It is concluded from the study that there is no significant impact of banker's perception on payback intention of the customers but there is significant impact of customer perception on payback intention. Also there is no relation between the gender and the repayment intention of the loan borrowers. Majority of the education loan borrowers in the sample are not aware of the government subsidy available but they expect subsidy from the government if provided. The bank employee's perspective regarding increase in default in repayment of education loan is due to sanctioning of loan without collateral, the loans sanctioned with the security of collateral do not have much default in repayment. Though the bank employees agree that there is increase in NPA due to default in repayment of education loan, they do not agree that not providing education loan would reduce NPA.*

Keywords: *Non-performing assets, repayment intention, banker perception, customer perception, education loan.*

INTRODUCTION

Higher education gives an edge to India in becoming one of the promising economies in the world economy and is clear since it avails skilled workforce and intellectuals who work abroad. Availability of funds for education loan is abundance as there is escalation in banking sector. Various banks offer education loan and are easily available irrespective of the student's financial stability, which enables students to pursue higher education and is a motivating factor. Though illiteracy, unemployment and poverty are the major factors for default in repayment of the loan which causes increase in NPA in the banks. The reasons for NPA can be an internal or external component. The major factors responsible for increase in NPAs in India are due to lack of proper framework in legal aspect in collecting the due loans, even supposing loans are taken with collateral as security but in practise the exact value of collateral security might not be equivalent with the amount of loan taken. Widely accepted fact is that NPAs cannot altogether be eliminated. Education loans have started having a negative impact on the banking sector since the default in repayment has increased from 5.7 percent to 7.67 percent.

LITERATURE REVIEW

The literature review conducted in this study is to understand the current knowledge and findings available in banking sector. This includes analysing theoretical and methodological review made by various authors over the past few years. The model of research emphasised is conceptual and empirical in nature. Enormous number of published articles are available on NPA and its issue in the banking sector. (Singh V. R., March 2016) In his study on NPA has said that NPA have always created a huge problems to Indian banks and Indian economy. They are dependent on the income arising from the interest NPA. Public sector banks have high NPA when compared to other commercial banks. Bank management has to speed up the recovery process. Initiative should be taken from the government to reduce lending to priority sector. (Puttaswamaiah, December 2010) In his study has stated that there has been an increasing demand for education loans especially in public sector banks. (Singh D. J., 2011) In his study has stated that there is a requirement of skilled labour force and educated people who can drive our economy to make India a developed nation, when we are capable of providing such skilled work force to the outside world, we can easily encourage higher education and make our nation a developed nation. (Sethi, 2013) in her study states

that the problem of NPAs destroy the healthy financial conditions of the banks. If the situation remains the same then the people would not keep faith in the banks anymore. The problem of NPA should be handled well so as to not cause harm to the bank's image and its financial condition. (Kumar, March 2014) in his study on NPA an Indian perspective has stated that due to increase in NPA banks have less liquidity to deal with daily operations and also discusses about the reason causing increase in NPA and measures that can be taken to reduce default in repayment. (Vadivalagan, 2013) In his study confers that debts has not taken seriously in India, the reason being lack of monitoring of loans from the lending banks. He also emphasizes on politics being an influential factor for lending loans to priority sector. (Sulagna Das, November 2014) In her study expresses controlling and managing NPA is a very important aspect in banking industry, she also attempts to find the root cause of increase in NPA and the impact of NPA in banking operations. (Miyan, February 2017) in his study highlights key findings using percentage of gross NPA, net NPA, return on assets and growth of return on assets. It is said that there is a downward trend in NPA of private sector banks but increase in the trend of NPA in PSB. (Samir, June 2013) In their study on a comparative analysis of NPA of selected commercial banks in India points out the importance of NPA's impact on banks profitability, solvency and liquidity. They also suggest few strategies to tackle NPA reviewing certain existing policies.

I. OBJECTIVES OF THE STUDY

The objective of the study is to understand the perception, expectation, repayment intention of the customer and the bank employees.

The study includes the sub-objectives that are as follows:

1. To analyse the association of gender and repayment intention of the customers.
2. To analyse the association of expectation of government subsidy of the customers and repayment intention of the customers.
3. To find out the impact of perception and attitude of borrower e on intention to repay the loan.

Hypothesis of the study

To find out the significance of the result

H₀₁: There is no significant impact of banker perception on payback intention of the customers.

H'₁: There is significant impact of banker perception on payback intention of the customers.

H₀₂: There is no significant impact of customer perception on payback intention.

H'₁₂: There is significant impact of customer perception on payback intention

H₀₃: The variables gender and repayment intention of customers are independent.

H'₁₃: The variables gender and repayment intention of customers are dependent.

H₀₄: The variables expectation of government subsidy and repayment intention of customers are independent.

H'₁₄: The variables expectation of government subsidy and repayment intention of customers are dependent.

II. METHODOLOGY

A. Data:

The study required the payback intention and other default in repayment perspectives of the borrowers and bank employees in the present scenario irrespective of PSB's, private banks and foreign banks.

B. Source of data:

The data that is selected is through the primary source from the questionnaires. Two different set of questionnaires were provided. One for the loan borrowers to understand their perspective and the other for the bank employees to understand the lenders perspective.

C. Statistical tools for analysis of data:

The test has been carried out using a SPSS tool for statistical analysis and interpretation of the data. The test used for analysis is chi square test, correlation and regression.

i. Chi square

Chi square independent test is used to test the relation between two variables of different category. The test is short for Pearson's chi squared test, it is used to determine the significant difference between the observed frequencies and the expected frequencies of different categories.

Chi square is represented as χ^2

ii. Correlation

Correlation of co efficient measures the statistical linear relationship between two variables in the

given sample. Pearson’s correlation coefficient is represented as r or R.

The values range from -1 to +1, where 0 is the strongest possible disagreement and ±1 represents the strongest possible agreement.

In other words if the value of r lies between +1 to -1 it represents a stronger linear relationship among the two given variables. If value of r is -0.97, it is said to have a strong negative correlation and if value of correlation is 0.10 then it is said to have a weak positive correlation.

iii. Regression

Regression measures the relationship with one dependent variable and its impact on the other variable. It helps to predict the dependent variable when the independent variable is known.

The equation of linear regression is $Y = a + bX$. There are different types of regression analysis which differ in terms of types of dependent and independent variables and distribution.

D. Basis of selection:

The basis of the selection of education loan and its NPA is to understand the perspectives of the loan borrowers and lenders regarding the payback intention and expectations from the government regarding subsidies.

E. Analytical tools, data analysis and interpretation:

Table (1): showing the descriptive statistics of the variable

Descriptive Statistics

	Mean	Std. Deviation	N
Payback_intention	1.45	.555	38
Bankerper	2.8105	.66405	38

Table (2): showing the correlation between payback intention of the customers and bank employee’s perception.

		Payback_intention	Bankerper
Pearson Correlation	Payback_intention	1.000	-.028
	Bankerper	-.028	1.000
Sig. (1-tailed)	Payback_intention	.	.434
	Bankerper	.434	.
N	Payback_intention	38	38
	Bankerper	38	38

Interpretation

From table (2) we can observe that there is a negative correlation in the banker’s perception regarding the payback intention of the customers.

Table (3): showing the results of model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.028 ^a	.001	-.027	.562	1.494

Table (4) : showing the coefficient of correlation analysis

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics		
					B	Std. Error	Tolerance
1	(Constant)	1.513	.402	3.765	.001		
	Bankerper	-.023	.139	-.028	.868	1.000	1.000

Interpretation

From the table (4) we can interpret that the significance value of bankers perception is 0.868 ($p > 0.05$) hence we accept H_0 i.e there is no significant impact of bankers perception on payback intention of the customers.

Table (5): showing the results of model summary of regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.566 ^a	.320	.316	.735	1.623

Table (6): showing the coefficient of regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.108	.216		-.500	.618		
	PerceptionsCust	.890	.098	.566	9.054	.000	1.000	1.000

Interpretation

From the above table (6) we observe that the significant value of customer perception is 0.000 ($p < 0.05$) hence we reject H_0 i.e there is a significant impact of customer perception on payback intention of the customers. Hence if there is 1 unit change in customer perception then the payback intention changes by 89%

Table (7): showing the cross tabulation between gender and payback intention

		Payback_intention					Total
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Gender	Female	30	38	5	0	4	77
	Male	42	48	4	3	2	99
Total		72	86	9	3	6	176

Table (8): showing the results of chi square test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square (PCS)	4.257 ^a	4	.372
Likelihood Ratio (LR)	5.367	4	.252
Linear-by-Linear Association (LLA)	.482	1	.488
N of Valid Cases (NVC)	176		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is 1.31.

Interpretation

From table (8) we observe that the significant value of customer repayment intention is 0.372 ($p > 0.05$) hence we accept H_0 i.e the variables gender and repayment intention of customers are independent.

Table (9): showing the cross tabulation between expectation of government subsidy and payback intention

		Payback_intention					Total
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
expect_subsidy	Strongly agree	39	33	1	0	3	76
	Agree	21	41	4	2	0	68
	Neutral	9	8	3	0	0	20
	Disagree	3	4	1	0	3	11
	Strongly disagree	0	0	0	1	0	1
Total		72	86	9	3	6	176

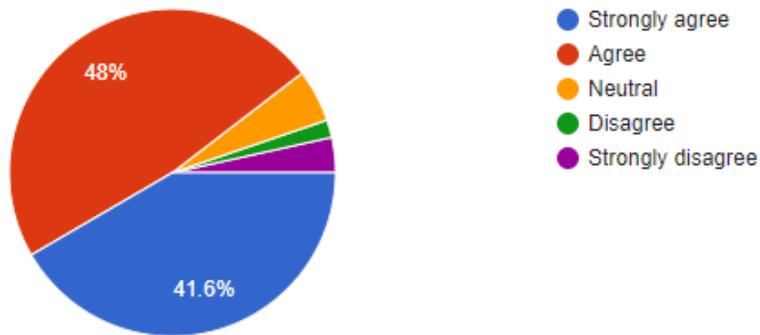
Table (10): showing the results of chi square test

	Value	df	Asymp. Sig. (2-sided)
PCS	95.143 ^a	16	.000
LR	38.724	16	.001
LLA	11.503	1	.001
NVC	176		

Interpretation

From table (10) we observe that the significant value of customer repayment intention is 0.000 ($p < 0.05$) hence we reject H_0 i.e the variables expectation of government subsidy and repayment intention of customers are independent

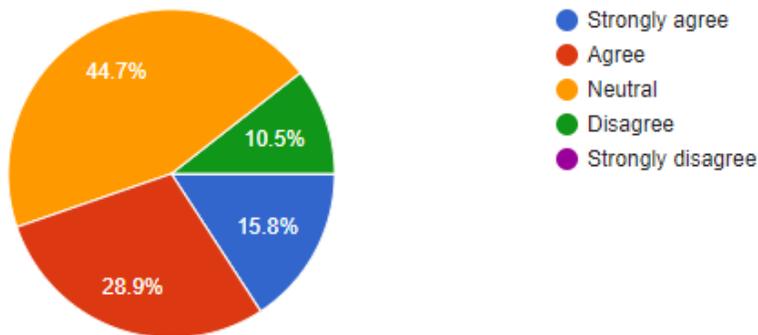
Chart (1): Chart showing the repayment intention on the customer



Interpretation

From chart (1) it is determined that most of the customers who lend loan for education purpose have an intention to payback the loan taken.

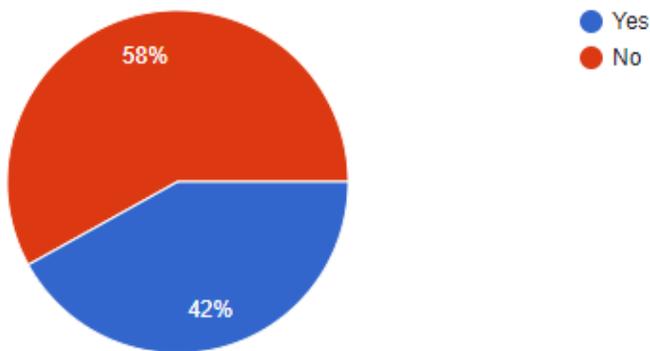
Chart (2) : Chart showing the bank employees perspective regarding the repayment intention of the customers.



Interpretation

From chart (2) it is understood that the bank employees opinion about the customers repayment intention of not paying back the loan taken is moderate and some of the employees agree that the customers tend to borrow education loan with an intention of nor repaying them. But the analysis in table 4, clearly states that the bankers opinion about the customers default in repayment is wrong.

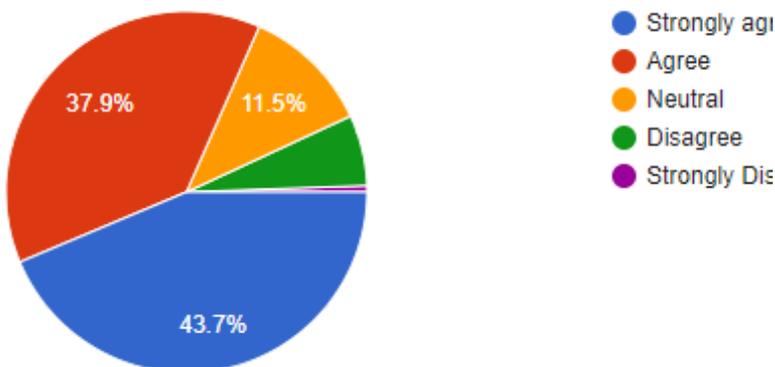
Chart (3) : Chart showing the awareness among the customers regarding the Government subsidy



Interpretation

From chart (3) it is understood that more than 50% of the loan borrowers are not aware of the availability of the government subsidies. Lack of awareness exists among the customers. Financial literacy among the customers is very less.

Chart (4): Chart showing the percentage of education loan borrowers expecting government subsidy



Interpretation

From chart (4) it can be determined that nearly 44% of the loan borrowers strongly require government subsidies and 38% of them are in need of the subsidies. In total around 82% of the loan borrowers expect government subsidies to be given to them though there are not aware of the subsidies available.

VI. CONCLUSION

The reasearch was conducted to understand the perception, expectation, repayment intention of the customer and the bank employees through primary research by using questionnaire. The study was conducted using chi-square test, correlation and regression analysis. It is concluded from the study that there is no significant impact of banker’s perception on payback intention of the customers but there is significant impact of customer perception on payback intention. Also it is found out that the gender variable has no impact on the pay back intention of the customers but the expectation of customers regarding the availability of the government subsidy has an impact on the payback intention of the customers. The increase in NPA has a direct impact on the profitability of the banks. Priority lending sectors include education loan as one of the important source and yet education loan without collateral end up being default.

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“STUDY ON BUYING BEHAVIOUR OF USERS OF ORGANIC FOOD WITH REFERENCE TO THEIR RATIONAL AND EMOTION”

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ABSTRACT: *Consumer buying behaviour is the study of the habits of buying and usage of goods, services, ideas or experiences by the individuals, groups and organizations in order to satisfy their needs and wants. This paper attempts to understand factors that influences buying behaviour of consumers emotionally and rationally of organic food products. The sample size of 100 organic food users has been selected by using convenience sampling in Bangalore south region. Survey method was employed using the structured questionnaire with 5-point likert scale to collect data required for study. Total eight independent variables and one dependent variable were chosen for the study. Information, knowledge and attitude for rational factors; and factors like trust, ecological facts, interaction with sales executives, subjective norms were considered for emotional factors. SPSS software is in use to analyse the data. Descriptive study, factor analysis, reliability test, regression linear test are the statistical tools used in the study. It also finds the inter variables of consumers buying behaviour. From the study it was found that the consumer confers inclination to the features like information, knowledge, attitude, trust, ecological facts, health/nutrition, sales executive interaction. All the variables considered during the study has considerable influence on the consumers who are using food products which are organic during the point while they have to make purchase decision. The result of the present study indicates that the consumers of organic food products are influenced emotionally and rationally.*

Keywords: *organic products, organic food products, consumer behaviour, buying behaviour, emotion, rational.*

Introduction:

Consumer buying behaviour is the study of habits of trading and disposing of produce, services, facts or know-how by the individuals, groups and organizations in order to satisfy their desires & wishes. This focuses on how individuals formulate decisions to pay out their on-hand resources on consumption-related stuff that comprise what, why, where, when & how often they buy & use it, how they evaluate it after the purchase and the impact of such evaluations on future purchases & how they dispose of it. There are four major factors that influence consumer's buying behaviour. They are Cultural, Social, Personal & Psychological. Organic food is produced by technique that complies with standards of organic farming. Standards diverge worldwide, but organic cultivation features practices that strive to cycle resources, encourage ecological balance & conserve biodiversity. Organizations regulating organic products may confine the use of certain pesticides and fertilizers in farming. In general, organic foods are also usually not processed by means of irradiation industrial solvents or synthetic food additives. A rational behaviour decision creation process is based on doing preference which result in mostly mainly favourable stage of advantage or efficacy for individual. Largely conservative fiscal theories are formed and used with assumption all persons taking part in action/activity are acting realistically. When buyer purchases things vital by him from a particular shop devoid of applying his mind or without reasoning, he is said to have been influenced by emotional buying. Emotional buying motives include appearance of shop, display of goods in shop, recommendation of others, simulation, prestige etc.

Literature review:

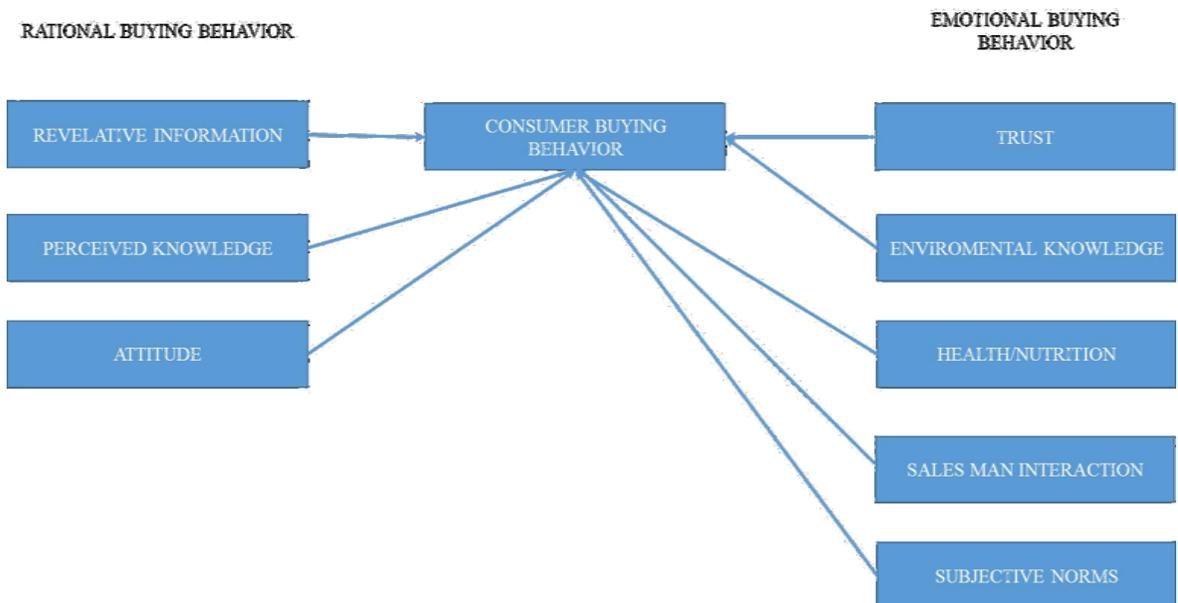
Understanding consumer purchase factors is to comprehend the way information exposed on organic foodstuff labels & apparent organic acquaintance force buyer belief & outlook in direction of organic foods, which jointly among biased standard ultimately pressure succeeding buying intent (VanHuylbroeck, 2009). Revealed Information admittance to lucid & consistent data is crucial to procure verdict method. Perceived acquaintance aspects are chief influence on purchaser hope & behavioural intent while majority consumers evidently don't actually appreciate the connotation of organic. Approach en route for organic foods is unequalled initial indicate for stimulus of organic food utilization (Chang,R.C.Y 2014). Trust have been seen as “condition of professed susceptibility or jeopardy that is copied from personage vagueness

concerning object, target, & latent needs of others whom they depend” envisage conviction exist whilst single party has poise in steadfastness & honesty of swap associate. Environmental Knowledge is correlated to “all-purpose acquaintance of reality, notion, & affairs relating to normal surroundings and ecology” (Ajzen, I.1985). Health/ nutrition is measured connected to vigorous food regularize biological body, physiological role otherwise uphold well being of individual body. Clients are anxious regarding food alternative that are healthy or rather hop opportunity to consume. Sales Man Interaction is related to the sales man interaction with the consumers which influences the consumers to obtain organic food goods at stores where organic food Products are Available (Beharrell, B. and MacFie, J.H. 1991). Subjective Norm is characterized as professed community force for person to connect or shun say that prejudiced standard is resolute by whole set of available normative viewpoint concerning outlook of significant referents for entity concerned (Aygen, F. G. 2012). As communal drift have stimulated to improve consumption & augmented person accountability for private welfare, these tendencies have sturdily predisposed shopper choice to acquire organic foods (Aggeri, F. 1999). Undeniably, prejudiced standard has been documented as a decisive determinant of force of societal pressure on behavioural intent. Earlier learning too recognized appreciably optimistic affiliation amid shopper subjective average & organic food procure intent (Zietsman, L.2007).

Research Methodology:

Sample size of 100 organic food users has been selected by using convenience sampling in Bangalore south region. The sample size is computed using a formula shown below. Substitution of value of p as standard deviation 0.25, e as 0.05, and z as 1.96 is made. P is the probability of occurrence and q is probability of non-occurrence. E is standard error and z is confidence level. The sample size is 96 respondents. In order have better accuracy sample size is considered as 100. Survey method was employed using the structured questionnaire with 5 point likert scale to collect data required for study. Total eight independent variables and one dependent variable were chosen for the study. Information, knowledge and attitude for rational factors; and factors like trust, ecological facts, interaction with sales executives, subjective norms were considered for emotional factors. SPSS software is in use to analyse the data. Descriptive study, factor analysis, reliability test, regression linear test are the statistical tools used in the study. The conceptual model is proposed and the same has been tested during the study. Objective of the study is to analyse the Emotional and Rational Buying Behaviour of Organic Food Products users and to determine the factors influencing them to purchase the organic products. Hypothesis of the study is H1: There is no significance difference between information, knowledge, Attitude towards consumer buying behavior. H2: There is no significance difference between trust, environmental knowledge, Nutrition, Sales Man Interaction, and Subjective Norms towards consumer buying behavior.

Conceptual Model:



Analysis:

Demographics:

Age In Years	Frequency	%	Cumulative
Below 20	33	33	33
21-30	35	35	68
30-40	20	20	88
Above 40	12	12	100

Gender	Frequency	%	Cumulative
Male	71	71	71
Female	29	29	100

Education	Frequency	%	Cumulative
PUC	31	31	31
Graduation	35	35	66
PG	27	27	93
Others	7	7	100

Total Variance for Independent Variable

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	Cumulative %	% of Variance	Total	Cumulative %	% of Variance
1	5.69	21.061	21.061	5.69	21.061	21.061
2	3.63	13.454	34.515	3.63	13.454	34.515
3	2.85	10.564	45.079	2.85	10.564	45.079
4	2.47	9.149	54.228	2.47	9.149	54.228
5	2.11	7.829	62.058	2.11	7.829	62.058
6	1.85	6.836	68.894	1.85	6.836	68.894
7	1.55	5.741	74.635	1.55	5.741	74.635
8	1.18	4.359	78.994	1.18	4.359	78.994
9	0.84	3.108	82.102			
10	0.76	2.8	84.902			
11	0.7	2.583	87.485			
12	0.52	1.932	89.417			
13	0.47	1.726	91.143			
14	0.43	1.586	92.729			
15	0.37	1.356	94.085			
16	0.31	1.153	95.238			
17	0.29	1.083	96.321			
18	0.2	0.742	97.062			
19	0.17	0.631	97.694			
20	0.15	0.548	98.241			
21	0.14	0.505	98.747			
22	0.09	0.332	99.078			
23	0.08	0.286	99.364			
24	0.07	0.248	99.612			
25	0.05	0.17	99.781			
26	0.04	0.129	99.91			
27	0.02	0.09	100			

Total Variance for dependent Variable

Component	Initial Eigen value			Extraction Sums of Squared Loadings		
	Total	Cumulative %	% Variance	Total	Cumulative %	% Variance
1	2.16	30.92	30.92	2.16	30.92	30.92
2	1.3	18.589	49.51	1.3	18.589	49.51
3	1.16	16.615	66.125			
4	0.77	10.973	77.098			
5	0.66	9.437	86.534			
6	0.49	7.009	93.544			
7	0.45	6.456	100			

Total variance for independent variables: The first part of the above table shows the variance of all 27 items of the 4-independent variable forming the cumulating up to 100. This depicts that the all 27 items play a significance role in their respective percentages. The later part of the table shows after the extraction of 8 fixed items where 21.06% of 1st factor, 13.45% of 2nd factor, 10.56% of 3rd factor, 9.14% 4th factor, 7.82% 5th factor, 6.83% 6th factor, 5.71% 7th factor, 4.35% 8th factor, depicting that the 8 factors is replicating or signifying only by 78.994%.

Total variance for dependent variables: The first part of the above table shows the variance of all 7 items of the 1-dependent variable forming the cumulating up to 100. This depicts that the all 7 items play a significance role in their respective percentages. The later part of the table shows after the extraction of 2 fixed items fewer than 3 iterations formed 2 factors where 30.920% of 1st factor, 18.589 of 2nd factor depicting that the 2 factors is replicating or signifying only by 49.510%.

Factor Analysis of Independent and dependent Variable

KMO for Independent Variable

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.517
Bartlett's Test of Sphericity	Approx. Chi- Square	2198.68
	Df	351
	Sig.	0.000

KMO test measures sampling adequacy for each variable calculated as 0.517, sampling size to be adequate the KMO value should be greater than 0.5. Values ranging from 0.50 to 0.59 say that the adequacy is mediocre. Stating it is acceptable.

KMO for dependent Variable

Kaiser_Meyer_Olkin Measure of Sampling Adequacy		.622
Bartlett's Test of Sphericity	Apprx. Chi Square	95.658
	Df	21
	Sig.	0.000

KMO test measures sampling adequacy for each variable calculated as 0.622. Values ranging from 0.60 to 0.69 say that the adequacy is mediocre. Hence the sampling adequacy for items of dependent variable is mediocre. Stating it is acceptable.

ANOVA:

A method for assessing the contribution of an independent variable or controllable factor to the observed variation in an experimentally observed dependent variable. To conclude whether some of disparities between means are statistically considerable, compare the p value with significance plane to consider null hypothesis. Null hypothesis declare that population means are all identical. Usually, significance level (denoted as α) of .05 work fine.

Anova Test of Independent Variables with Dependent Variable Consumer Buying Behaviour

Model Summary Consumer Buying Behaviour

Model synopsis				
Model	R	R Square	Adjusted R Square	Std Error of Estimate
1	.806 ^a	0.65	0.619	0.6168781

Anova for Consumer Buying Behaviour

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	64.371	8	8.046	21.145	.000 ^b
	Residual	34.629	91	0.381		
	Total	99	99			

Here the anova test is conducted by taking one dependent variable that is consumer buying behavior and all the independent variable.

HYPOTHESIS

Factor F value <= alpha: Attitude 0.000 < 0.05, Health 0.000 < 0.05, Subjective Norms 0.000 < 0.05, Perceived Knowledge 0.000 < 0.05, Revealed Information 0.000 < 0.05, Trust 0.000 < 0.05,

Therefore, Null hypothesis accepted

There is no significance difference of Attitude, Health, Subjective norms, Perceived Knowledge, Revealed information and trust and towards consumer buying behavior

Anova Test of Independent Variables with Dependent Variable purchasing decision

Model Summary Consumer Buying Behaviour

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.657 ^a	.431	.381	.78659628

Anova for purchasing decision:

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	42.695	8	5.337	8.626	.000 ^b
	Residual	56.305	91	0.619		
	Total	99.00	99			

Here the Anova test is conducted by taking one dependent variable that is purchasing behavior and all the independent variable.

HYPOTHESIS

Factor F value <= alpha: Attitude 0.000 < 0.05, Health 0.000 < 0.05, Subjective Norms 0.000 < 0.05, Perceived Knowledge 0.000 < 0.05, Revealed Information 0.000 < 0.05, Trust 0.000 < 0.05,

Therefore, Null hypothesis accepted

There is no significance difference of Attitude, Health, Subjective norms, Perceived Knowledge, Revealed information and trust and towards consumer Purchase behaviour

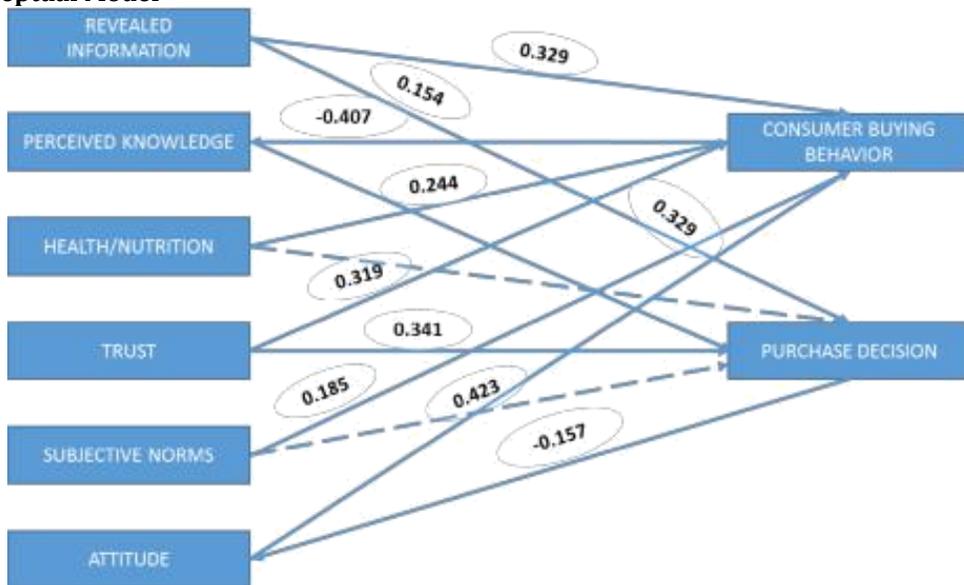
Coefficient of Consumer Buying Behavior

Model		Unstandardized Co-efficient		Standardized Co-efficient	t	Sig
		B	Std Error	Beta		
1	Constant	1.00E-13	0.062		0	1
	Attitude	0.423	0.062	0.423	6.827	0
	Health	0.244	0.062	0.244	3.938	0
	Subjective Norm	0.185	0.062	0.185	2.989	0.004
	Perceived Knowledge	-0.407	0.062	-0.407	-6.571	0
	Revealed Information	0.329	0.062	0.329	5.313	0
	Health	0.005	0.062	0.005	0.089	0.93
	Trust	0.319	0.062	0.319	5.147	0
	Brand	-0.027	0.062	-0.027	-0.436	0.664

Coefficient of Consumer Purchase decision

Model	Unstandardized Co-efficient		Standardized Co-efficient	t	Sig	
	B	Std Error	Beta			
1	Constant	1.00E-13	0.79		0	1
	Attitude	0.096	0.79	0.096	1.216	0.227
	Health	-0.014	0.79	-0.014	-0.172	0.864
	Subjective Norm	-0.157	0.79	-0.157	-1.99	0.05
	Perceived Knowledge	0.49	0.79	0.49	6.194	0
	Revealed Information	0.154	0.79	0.154	1.946	0.055
	Health	-0.107	0.79	-0.107	-1.353	0.179
	Trust	0.341	0.79	0.341	4.309	0
	Brand	-0.078	0.79	-0.078	-0.992	0.324

Final Conceptual Model



Results:

After the application of all the statistical tools such as Descriptive, Frequency, Factor Analysis, Reliability and Regression the above conceptual model is obtained. The above figure is the final conceptual model which says that the consumer considers six factors that are Attitude, health, subjective norms, perceived knowledge, revealed information and trust which are all the primary and secondary preferences of consumers for buying organic food products, the primary preference is consumer buying behavior & secondary preference is purchase decision to which the factors health, subjective norms, revealed information and trust are all positively correlated with their respective beta values. When consumers buying behavior is considered the factors perceived knowledge is negatively correlated with a beta value of -0.407, and when purchase decision is considered the factor attitude is negatively correlated with a beta value of -0.157 .

Conclusion:

Respondents consider the factors revealed information, perceived knowledge, health, attitude, trust and subjective norms for buying the organic food products. The factors revealed information, perceived knowledge; attitude is based on the rational buying behavior. The other factors trust, environmental knowledge, health and subjective norms are emotional buying behavior. Consumers will not consider the factors environmental knowledge and sales man interaction which are the emotionally influencing factors

for buying the organic food product and also their buying behavior and purchase decision don't prefer the brand as variable for buying organic food products. Customers buy organic food products based both rational and emotional buying behavior. The two preferences which consumers prefer are consumer buying and purchase decision. While considering the consumer buying the factors which are considered are revealed information, perceived knowledge, health, attitude, trust and subjective norms, these factors are all influencing the consumer's rationally and emotionally for buying the organic food products. When purchase decision is considered, the factors are trust, revealed information, perceived knowledge and subjective norms are also the factors that influence the consumers rationally and emotionally to buy the organic food products. Hence, the consumers are both rationally and emotionally influenced to buy the organic food products.

Suggestions:

The study can be used to know rational and emotional buying behavior of organic food products. This study can be further extended by increasing the sample size and conduct the survey in more cities to know the consumer mind-set about the organic food products. The resulted information will be useful for the retailers to know about the organic food consumers and the factors that influence them rationally and emotionally to buy organic food products. Study must be carried out to educate the consumers of organic food products.

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PREDICTORS OF STARTUP GROWTH IN A VUCA WORLD: PROACTIVE PERSONALITY AND PROACTIVE ENVIRONMENTAL STRATEGY (PES)

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ABSTRACT: *This study aims to postulate a conceptual model for ensuring the success of start ups in the scale up phase in a VUCA World. Traditional strategies for navigating success of startup may not be replicable in a VUCA world. In order to identify the success formula for such a volatile environment, it is essential to analyze newer dimensions. A start up needs to handle lot of uncertainty on the growth phase. At the scale up phase, a proactive approach is needed for effectively managing the operations as well as channelizing positive aspects of environmental factors. The Authors analyzed previous research in the area of performance of startups and identified need of managing the uncertainty involved. Two variables such as proactive personality and proactive environmental strategy (PES) were identified as predictors of startup growth in the scale up phase in a VUCA world.*

Keywords: *Proactive Personality, Start up growth, Proactive Environmental Strategy(PES)*

Objective of the study and Summary

This study purports to analyze the possibilities for ensuring the success of startups especially in the scale up phase. The study is concentrating on the characteristics of the individual behind the start up. An ingenious idea generated by an individual may be appropriate for small scale operations. When the start up stake holder is planning to scale up the commercial operations, they need to overcome lot of hurdles. Success formula at the start up phase may not replicate at the scale up phase. There may be inhibiting factors such as competition, environmental factors, low financial growth etc. Individual decision making is a key driver at the scale up level.

Individual's personality characteristics play a role on scale up path. A start up needs to handle lot of uncertainty on the growth phase. At the scale up phase, a proactive approach is needed for effectively managing the operations as well as channelizing positive aspects of environmental factors. This study aims to develop a conceptual model for ascertaining factors which promote the growth of start ups. Two variables such as proactive personality and proactive environmental strategy (PES) were identified as predictors of startup growth in the scale up phase. Based on the previous findings, authors have detected the possibility of selecting less proactive individuals by startup owners with proactive personality. This limitation of proactive start up owners needs to be managed positively and building a key team of individuals with proactive personality is essential for startup growth in the scale up phase.

Research Gap and Research Problem

Researchers in the area of startup performance dominantly focus on sagas of successful start ups. Schramm (2018) explored the possibility of replicable practices in the domain of entrepreneurship. Successful entrepreneurs don't maintain chronological details of their operational plans. In the case of failed start ups, documentation is rarer than the successful ones. He also pointed out that business schools teach those models of successful entrepreneurs as formula of entrepreneurial success. Absence of empirical evidence is a handicap of such formulas. Gross (2015) detected that timing is the single largest predictor of startup success than factors such as 'quality of idea, business plan, team, execution and funding'. He has arrived at the findings after analyzing 200 start ups including iconic success stories like You Tube, Uber and lot of failures never proclaimed. Even after spending time and money for studying entrepreneurship courses, when they actually start their ambitious start ups, they implement success formulas learned from class rooms. Those who are venturing without formal entrepreneurship education may depend on famous success stories.

In the case of ingenuities ideas developed by individuals may derail due to the absence of elaborate exploration of possibilities of right path for commercialization. Competitors in the similar line may conquer the space only because of their smartness in execution (Ganset.al. 2018). There may be lot of

reasons for startup failure. Successful start up owners might have progressed on a unique path of their own. That may not be replicable in other cases. It is ideal to think that entrepreneurship literature is centred around models behind successful and failed cases. Developing success formulas for startup success is a difficult task. This issue is not adequately explored in the literature. It is realistic to explore the possibility of exploring other unraveled reasons for startup success. This study is an attempt to put light on this unexplained gap in the literature.

Methodology

Development of a conceptual model with predictors of startup success with theoretical back up. The model was developed based on the findings of previous researches in the area of entrepreneurship. The proposed model is conceptualized by way of critical review of the literature with empirical support.

Proactive Personality

An innovative thinking of an individual can act as a triggering force behind a start up. Individual's personality may play an influence on his or her thinking. Analyzing the feasibility of a business idea may depend on the capacity of foreseeing future. Proactive thinking is required for visualizing future situations. Proactive personality is an enduring personality characteristic of an individual in initiating actions with a proactive mindset (Bateman and Crant 1993; Crant 2000). Researchers highlighted that individuals rated with high proactive personality actively engage in extra role work behaviors (Bateman and Crant 1993, Parker 1998). Proactive personality is one of the predictors of operating efficiency (Walz and Niehoff 2000) and organizational success (Thomas et al 2010). The possibility of a successful start up is high in the case of an initiative promoted by an individual with proactive personality. Proactive personality of individuals working in an organization is a key driver of various domains of their career outcomes and also enhances the competitive advantage of the organization (Fuller and Maller 2009). In order to survive in current corporate world, start ups need to build their competitive advantage in all domains of business. Presence of proactive individuals can have a positive influence on the success of an organization. When an individual is continuously involving in doing more and more tasks, the possibility of success and failure also will follow. Individuals with proactive personality will indulge in doing more task behaviour (Parker et al. 2010). Proactive individuals are capable of anticipating the future opportunities and changing the environmental conditions for their benefits (Frese & Fay, 2001). From the above referred studies, it is possible to postulate a relationship between proactive personality and start up growth

Proactive Environmental Strategy (PES) and firm's performance.

Several authors have identified positive relationship between Proactive Environmental Strategy (PES) and firm's performance. PES is an organizational tool to reduce environmental after effects of its operations for reasons other than for legislative compliance of environmental laws (Sharma, 2000) Specifically, PES can be effectively used for enhancing firm's competitive advantage by leveraging the cost (Majumdar & Marcus, 2001) and differentiation (Hart 1995) advantages. Managers can establish an enduring sustainable organization by effectively channelizing PES (Aragón-Correa & Sharma, 2003). Core determinants of an organization such as sales growth and profit enhancement can be maintained by utilizing the power of PES (Menguc et al 2010). He has also highlighted that PES can act as a positive catalyst in ensuring future growth opportunities and identifying the potential of unexplored markets. From the above studies, it can be inferred that by utilizing the potential of PES, a start up can ensure its growth in the Scale up Phase.

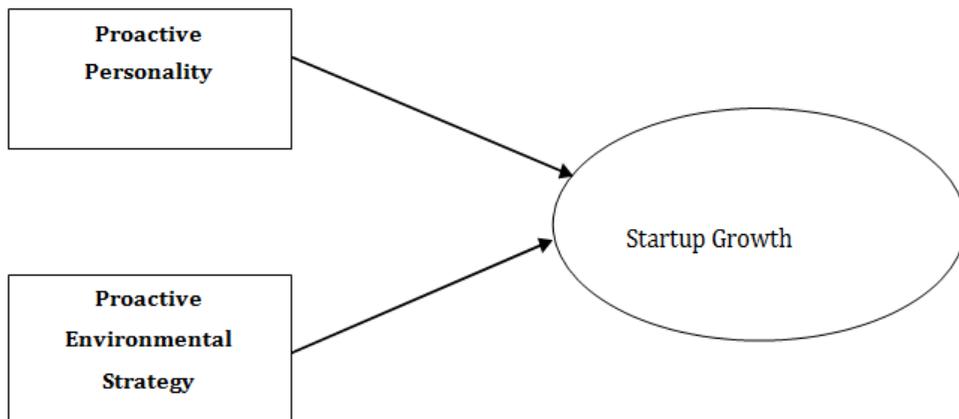
Conceptual Model

World has witnessed the phenomenal growth curves of lot of small start ups. On the others hand lot of start-ups got perished during the inception or scale up phase. Success of a start up venture depends on the characteristics of the entrepreneur. The possibility of success of a start up is dependent on the ingenuity, creativity and proactive dimensions of ideas behind that. When a start up is planning to increase its operations, upsizing of human resources is an inevitable requirement. During the transition phase of growth, efficacy of decisions also likely to influence the success of the upsized venture. By analyzing previous research findings, it is plausible to connect proactive personality of individuals and the performance of startups founded by them. The proactive personality of the entrepreneur has got an influence on ideas transformed into ventures. An ingenious idea formulated by a proactive person can be the key driver of success of a start up. Scale up of a start up necessitates more resources including key

decision makers. Lee et.al (2014) found that there is a tendency for proactive individuals to establish tie ups with less proactive individuals. In the case of a start up, selection of employees needs to be performed in a cautious way. Presence of proactive individuals is essential for creating strategies for leading the change process in the scale up phase. A less proactive team may not have the potential to visualize the success of a start up in the scaled upstage.

The authors propose a conceptual model for increasing the possibility of growth of the start up in the scale up phase. Based on the findings of several previous research studies, the authors have configured a conceptual model (Fig 1).

Fig.1



Findings

Individuals with Proactive Personality can navigate the performance of a start up in a better way than others. Presence of proactive personality can act as a hindrance for selecting individuals for the requirements of a start up. This handicap of proactive individual need to be managed appropriately for building a pool of proactive teams within the start up for channelizing the growth of the start up in the scale up phase. Growth of a start up can be accelerated by utilizing the potential of PES. A team of proactive individuals can lead the growth of a start up in a better way than others. Proactive personality and PES can influence the growth of a start up in the scale up phase.

Implications

Startups can use the proposed model for ensuring the growth process in the scale up phase. Start ups can use the proposed model as an HR tool while developing partner networks or selecting employees for infusing proactive personality. Start ups and other firms also can use PES as a technique for promoting long term growth.

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LEADING IN A VUCA WORLD: ROLE OF LEADERSHIP COMPETENCIES AND SKILLS

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ABSTRACT: *Generations at workplace are changing and new generations bring different values, expectations and mindsets at work. Rise in automation is resulting in heavy disruption. Changing business environment and globalization are putting more challenges before the business leaders than ever before. The rate of change in the business world today is greater than our ability to respond. In a world that is often described as VUCA (Volatile, Uncertain, Complex and ambiguous), there are major tectonic shifts that demand a new mindset and critical competencies of leadership. Leadership is the process of influencing people to achieve results and prepare for the future. Effective leaders have always made the difference between success and failure. Leadership that is both tough-minded and tender-hearted is what will survive VUCA. In the context of leadership, the following competencies and skills will help you stand out in the crowd and survive in a VUCA world.*

Introduction:

VUCA is an acronym that stands for volatility, uncertainty, complexity and ambiguity, a combination of qualities that, taken together, characterize the nature of some difficult conditions and situations. The term VUCA originated with the United States Army War College to describe conditions resulting from the Cold War. The VUCA concept has since been adopted throughout businesses and organizations in many industries and sectors to guide leadership and strategy planning. An awareness of the forces represented in the VUCA model and strategies to mitigate the harm they might cause are integral to crisis management and disaster recovery planning.

Volatility: This refers to the different situational social-categorization of people due to specific traits or reactions that stand out during that particular situation. When people react/act based on a specific situation, there is a possibility that the public categorizes them into a different group than they were in a previous situation. These people might respond differently to individual situations due to social or environmental cues. The idea that situational occurrences because certain social categorization is known as volatility and is one of the main aspects of the self-categorization theory. Sociologists use volatility to understand better how stereotypes and social-categorization is impacted based on the situation at hand as well as any outside forces that may lead people to perceive others differently. Volatility is the changing dynamic of social-categorization in a set of environmental situations. The dynamic can change due to any shift in a situation, whether it is social, technical, biological or anything of the like. Studies have been conducted, but it has proven difficult to find the specific component that causes the change in situational social-categorization.

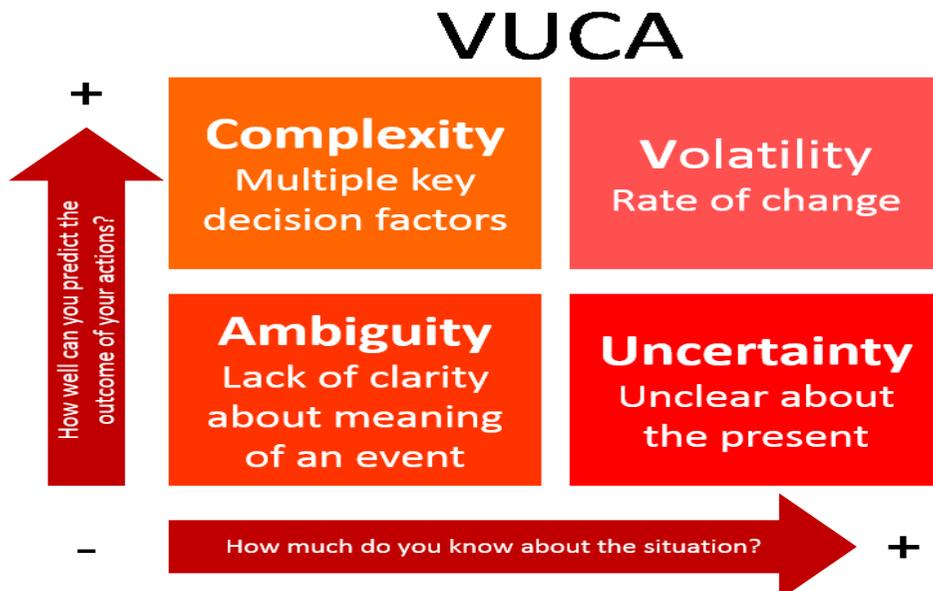
Uncertainty: Uncertainty often occurs in volatile environments that are complex in structure involving unanticipated interactions that are significant in uncertainty. Uncertainty may occur in the intention to imply causation or correlation between the events of a social perceiver and a target. Situations where there is either a lack of information to prove why a perception is in occurrence or informational availability but lack of causation are where uncertainty is salient.

Complexity: It refers to the interconnectivity and interdependence of multiple components in a system. When conducting research, complexity is a component that scholars have to keep in mind. The results of a deliberately controlled environment are unexpected because of the non-linear interaction and interdependencies within different groups and categories.

Ambiguity: This refers to when the general meaning of something is unclear even when an appropriate amount of information is provided. Many get confused about the meaning of ambiguity. It is similar to the idea of uncertainty but they have different factors. Uncertainty is when relevant information is unavailable and unknown, and ambiguity where relevant information is available but the overall meaning is still unknown. Both uncertainty and ambiguity exist in our culture today. Sociologists use ambiguity to determine how and why an answer has been developed. Sociologists focus on details such as if there was enough information present, and did the subject have the full amount of knowledge necessary to make a

decision.

VUCA concept has originated with the United States Army War College



The complexity in VUCA is centered on dynamic relationships in which similar inputs may yield vastly different outputs. It is critical to know which forces are positive, which are negative, and which could go either way. Continually asking questions will help you see patterns and make more accurate predictions. In this connection author wants to explore the skills and competencies required for a leader managing business in the VUCA world.

Challenges in Business:

Just a few of the challenges one can see businesses facing are:

Uncertainty about the future: Being able to predict customer trends, market trends, etc. is vital to a changing economic climate.

Regulation and compliance: As markets and technologies shift, so do rules and regulations. Depending on the industry, it will be a challenge to adopt new regulations and compliance.

Competencies and recruiting the right talent: Identifying and recruiting the right talent in the right position is very important and challenging task as human capital can affect the business.

Technology: As technologies change practically at the speed of light, it's vital for companies to innovate or be left behind. Technological changes always impact the business in terms of prospects and growth.

Exploding data: Maintaining data base, using data warehousing and data mining techniques to provide customized services to the customers is important.

Customer service: In a world of instant gratification, customers expect instant customer service and can take to the web to share their displeasure at less than satisfactory service just as quickly.

Maintaining reputation: In a similar vein, because customers can voice any displeasure so much more publicly and loudly than ever before, businesses have to monitor and maintain reputations.

Knowing when to embrace change: We are living in an era of constant change for the foreseeable future: change is the new normal. Preparing for and embracing that change by investing in the right way is the best way to meet these challenges head on.

Globalization: Globalization is the tendency of investment funds and businesses to move beyond domestic and national markets to other markets around the globe, thereby increasing the interconnection of the world. Globalization has had the effect of markedly increasing international trade and cultural exchange.

Digitalization: The digital economy is the new productivity platform that some experts regard as the third industrial revolution. Digital revolution, also known as 'The Internet Economy' or Internet of Everything (IoE), is expected to generate new market growth opportunities, jobs and become the biggest business opportunity of mankind in the next 30 to 40 years.

Success Factors in the face of VUCA world:

Following are some key success factors – each of which comes with a warning that they are “simple, not easy,” meaning that they sound simple but fall apart without rigorous discipline and dedicated attention:

Don't lose sight of the big picture: Be ready to flex and respond to rapidly unfolding scenarios while also retaining a clear vision over which judgments should be made. Make sure your employees understand the company's vision. This will equip them to handle unpredictable and/or violent shifts in your business environment. ,,

Set up incremental milestones and develop consistent messaging and clear direction: The path itself may not be clear, but having tangible milestones in place – and achieving them – will help assure that the organization is moving in the right direction.

Carve out open space on your calendar to think: Many construction leaders seem to embody the admonition, “Don't just sit there, DO something!” when sometimes the best advice may be, “Don't just do something, sit there and think”. ,,

Uncertain times bring opportunities for bold moves. Find ways to challenge the appropriateness of your company's mental models, both individually and collectively. Develop processes and concepts to test new ideas and challenge existing ones.

Don't be paralyzed out of fear of making the wrong move. Always stay open to new opportunities without losing sight of the longer-term goals. ,,

Encourage networks rather than hierarchies. Develop interdisciplinary, collaborative teams and avoid “silo-like” problem-solving approaches. Ensure that employees across the company communicate openly with each other. ,,

Develop independent thinkers. Employees who can think for themselves and make the right decisions in the right moments will help your firm effectively tackle new, complex projects. Be deliberate with your training and development campaigns. ,,

Focus on how the company can improve in the future, rather than looking to the past. The past is not necessarily an indicator of the future; moreover, it is highly unlikely that things will return to the way they used to be.

Leadership Principles make that leads successfully:

Today's business leaders must have an appetite to embrace VUCA. We don't have a choice. We either prepare ourselves to lead effectively in the midst of chaos or we simply fall prey and become victims. Here are three leadership principles that will help us lead successfully in times of uncertainty: Futurist and philosopher Alvin Toffler once wrote: “The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

a) **Have an unquenchable appetite to learn (Principle # 1):** Knowledge is power. However, there are also cycles of knowledge relevance. Knowledge that is vital today may very well be irrelevant tomorrow. Hence, in a VUCA world, leaders need to have: 1) The desire to learn 2) The humility to unlearn and 3) The urgency to relearn. When it comes to surviving and even thriving in a VUCA environment, timeliness in taking the right action is of utmost importance. This can only happen when leaders and their teams have a sense of urgency to quickly gain new knowledge and skills to address the new realities. Effective leaders need to have learning agility. Simply put, learning agility is having the ability to remain open to new ways of thinking and to continuously learn new skills.

b) **Have a resolute mindset to embrace change (Principle #2):** A VUCA environment is all about change. Very often these changes are forced upon us whether we like them or not. Effective leaders don't resist change. When change does happen, good leaders are neither surprised by it nor reject it. Good leaders embrace change.

c) **Have an unwavering commitment to not compromise values (Principle #3):** As much as change is necessary when leading in a VUCA environment, good leaders also know what must not be changed. In fact, it can be said that knowing what not to change is as important as knowing what needs to change.

Leadership Skills for VUCA World:

In his new book, *Leaders Make the Future: Ten New Leadership Skills for an Uncertain World*, Johansen says that leaders increasingly will face challenges that have no solutions. Of course, they will have to make decisions anyway. Leaders must do more than just respond to the whirl of events, though respond they must. They must be positive change agents in the midst of chaos, creating the future. Some things can get

better, even as other things get worse.”To make a better future, leaders must seek out experiences and opportunities to learn and apply 10 new skills:

1. **Maker instinct.** Ability to exploit your inner drive to build and grow things, as well as connect with others in the making.
2. **Clarity.** Ability to see through messes and contradictions to a future that others cannot yet see.
3. **Dilemma flipping.** Ability to turn dilemmas — which, unlike problems, cannot be solved — into advantages and opportunities.
4. **Immersive learning ability.** Ability to immerse yourself in unfamiliar environments and to learn from them in a first-person way.
5. **Bio-empathy.** Ability to see things from nature’s point of view — to understand, respect and learn from nature’s patterns.
6. **Constructive depolarizing.** Ability to calm tense situations where differences dominate and communication has broken down — and bring people from divergent cultures toward constructive engagement.
7. **Quiet transparency.** Ability to be open and authentic about what matters to you — without advertising yourself.
8. **Rapid prototyping.** Ability to create quick early versions of innovations, with the expectation that later success will require early failures.
9. **Smart mob organizing.** Ability to create, engage with and nurture purposeful business or social change networks through intelligent use of electronic or other media.
10. **Commons creating.** Ability to seed, nurture and grow shared assets that can benefit other players — and sometimes allow competition at a higher level.

Leadership competencies:

In the Harvard Business Review article, *The Most Important Leadership Competencies, According to Leaders around the World*, Researcher Sunnie Giles shares the results of “the first round of a study of 195 leaders in 15 countries over 30 global organizations. Participants were asked to choose the 15 most important leadership competencies from a list of 74.”The top 10 competencies were then grouped into 5 themes:

1. Strong ethics and safety
2. Self-organizing
3. Efficient learning
4. Nurtures growth
5. Connection and belonging

In 2015, The World Economic Forum report, *The Future of Jobs*, shared the top 10 competencies needed in 2020.

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

Leadership competencies that focus on people continue to be crucial to business success. Leaders in the future will need to have Vision, Understanding, Clarity and Agility. Consider how negative VUCA can be turned around to positive VUCA with effective leadership, suggests Bob Johansen:

- Volatility leads to Vision.
- Uncertainty yields to Understanding.
- Complexity yields to Clarity.
- Ambiguity yields to Agility.

Conclusion:

Leaders must learn how to make the future in the midst of volatility, uncertainty, complexity, and ambiguity. The discipline of foresight can help leaders make better decisions today. We need not passively accept the future. Leaders can and must make a better future. That is what this book is all about. It is hard to even think about the future if you are overwhelmed by the present, yet that is exactly the time when foresight can be most practical. A global futures perspective can help leaders make sense out of the chaotic patterns of change in the external world. Looking to distant possibilities can provide new insight for the present. Leaders are already experiencing volatility, uncertainty, complexity, and ambiguity (VUCA), but many of their responses are not constructive and the prospects for leadership in the future are not secure.

Some leaders will judge too soon and draw simplistic conclusions while others will decide too late and pay a price for their lack of courage or inaction. Some will be overwhelmed by a sense of help- while others will become cynical and question everything around them. Some will react with anger. Some will pick a side and start to fight. And some leaders will deny the crisis or truly believe that the chaos will just go away. Such leadership responses are both understandable and dysfunctional. Leaders need not be overwhelmed and pummeled by the world of VUCA. The future will also be loaded with opportunities.

Leaders must have the skills to take advantage of those opportunities, as well as the agility to sidestep the dangers. Leadership must change because of the external future forces. The global rich/poor gap is the most basic and the most extreme future force. People who are poor already experience the VUCA world: their lives are volatile, uncertain, complex, and ambiguous every day. Realistically and sadly, it is hard to forecast a narrowing of this gap, but easy to imagine it getting wider.

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ROLE OF SOCIAL MEDIA IN TOURISM

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ABSTRACT: *The overall objective of this study is to examine the role of social media in the travel and tourism industry. This paper focuses on human psychology influenced by social media and its impact on the development of the tourism industry.*

Social media such as Facebook, WhatsApp, Twitter, and Instagram has become one of the most powerful and popular online networking media and has become a part and parcel of our social life. This paper highlights the fact that people under the influence of social media are much more interested in exploring new and unexplored places, in addition to famous tourist hotspots such as Taj Mahal, Golden temple, Gateway of India and so on. Social media plays a very vital role in promoting such unexplored places. In this digital era, people are much more influenced by others' life activities that are being publicized by using social media. For example, if a group of friends explore an unknown place and post the photos on Facebook, then other members in their profiles get notified. By looking at those photos, the other members also develop a desire to visit the place. The main objective of this paper is to demonstrate the positive impact of social media on the tourism industry.

Introduction

Facebook, Instagram, and WhatsApp are the most powerful social networking media that are being used by everyone across the world. These media have influenced our lives in either way- positive or negative. So, the topic of this paper is the study of social media in the tourism industry.

The tourism industry is a smokeless industry and most happening industry in this world. In primitive age, people used to travel only for food and shelter. Gradually the reasons for travel have changed to many factors like spiritual, religious, trade and business, rest and relaxation purposes. These changes are due to the influence of technology, changing lifestyle, and trends. The impact of social media is more in present times. For example, if anyone uploads photos of unknown places, it immediately goes viral and other people come to know about some unexplored places.

Review literature

Social networking encompasses networking in society. It deals with social relations and association among people with similar interest. People form groups in order to pursue common objectives and interest. In the context of tourism, people organize tours, explore places, experiment food, and upload their photos. The use of information technology such as the internet, mobile, social media sites enables travelers to share their experience with the global audience.

The rise of social media usage has been attributed to the spread of the internet and this has benefited the tourism industry. People are using social media as information sources. Collecting data from various people connected through social media is now possible. Social media are increasingly relevant as part of tourism practices affecting destination and business. Information Communication Technologies (ICT) plays a major role in tourism, travel, and hospitality sectors. Tourism industries use social media as their promotional tool but at the same time, they should be ready for immediate action for any problem that may arise due to the negative side of social media.

Objectives

The purpose of the study is to promote tourism through social media and to find out the advantages of using social media for the development of tourism. Many people promote tourism knowingly or unknowingly by using social media. And the main objective of this paper is to throw light on this behavior.

How social media helps to promote tourism?

Tourism is one of the fastest growing industries in the world. Countries that are rich in tourism are adopting many ways to promote tourism. In the past, traveling was very difficult, especially in developing countries. But now with the growth of technology, everything has become very easy and time efficient. Now we can

book all the components of traveling from our home by sitting on a couch. Traveling agencies are also providing much more facilities to travelers.

With the growth of technologies and globalization, society has changed. People have become too busy in their work and daily activities. As a result, one's time for relaxation and refreshment has reduced. So, whenever we get time, we want to venture out of our busy lives and get some refreshment. People are more interested in visiting a place in the lap of nature where they can find some fresh air and calmness. Here social media is playing a vital role in promoting tourism.

Facebook, WhatsApp, Instagram, and similar social media platforms are helping people to find such places directly or indirectly. Directly by delivering and promoting such destination on their webpage and indirectly by uploading photos by people on their Facebook, Instagram or WhatsApp status. Through these advertisements and photos, many people who are connected through social media are made aware of the places that they can visit. In this way, social media is developing and promoting tourism sector.

The craziness of using social media and uploading photos in various social media platforms help the tourism industries by promoting unexplored places, hotels, restaurants, markets and so on. Social media has a major psychological impact on the human mind and help in promoting and developing tourism. For example, if in social media, a person who sees that their friends have visited some places and uploaded the photos in Facebook and WhatsApp, then the person also develop an unconscious desire to visit such places in near future.

Nowadays competition is everywhere and the same applies to the tourism sector also. And because of this competition, many unexplored places are being added to the tourism map and tourist bucket list. These trends are growing and thanks to social media, selfie mania, and groupie-mania. Wherever people go whether famous or small places, they like to take a selfie and upload in social media. In this way, many unknown places are now being explored and becoming popular. These are the activities through which social media helps to promote tourism.

Some other activities that help to promote tourism are the advertisements of resorts, hotels, tourism destinations, introducing low-cost packages on Facebook by travel agencies and service providers of the tourism product. As everyone uses Facebook, advertisement spread very fast through social media. Any events that are popular becomes viral quickly through social media. In this way, social media helps the service providers of the tourism industry to boost and promote the tourism sector.

Methodology

The study is based on secondary data and self-observation. Few data were collected from some international journals and websites.

Conclusion

The overall study of this paper has shown that social media plays a significant role in developing and promoting tourism. Social media helps people to find information, make a decision and risk assessment about a planned tour. Social media also helps to promote tourism as well as the accommodation industry. Social media is one of the best media to promote tourism.

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“A study on level of awareness about green non-durable products among consumers in Bengaluru”

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ABSTRACT: *Purchaser's mindfulness about green items is critical in controlling the green customer buying conduct. The examination brings out green item mindfulness among the buyers in Bangalore. The primary target of this examination is to know the purchaser mindfulness about green items. The information was gathered from 111 respondents. Auxiliary information was gathered from the accessible writing sources. The center thought of green advertising is to make mindfulness among individuals on the natural issues and how shoppers would support the earth on the off chance that they change over to green items. Along these lines green showcasing plans to give more data to individuals and furthermore gives customers more decisions to change over to green way of life.*

Keywords: *Green marketing, consumer awareness, green consumerism, environment, VUCA*

Introduction:

“Do Consumers really care about green? They do! But there’s a chasm between green concern and green consumerism. To close that gap companies, need to communicate more effectively-make sure their messages and marketing are pitch- perfect.” – Joel Makower, Executive Director, GreenBiz.com.

Increasing mindfulness on the different natural issues has driven a move in the way purchasers approach their life. There has been an adjustment in purchaser mentalities towards a green way of life. Individuals are effectively attempting to decrease their effect on the earth. Be that as it may, this is not broad is as yet developing. Associations and business however have seen this adjustment in purchaser mentalities and are attempting to pick up an edge in the aggressive showcase by misusing the potential in the green market industry.¹ (Davis, 1992)

Green marketing is a present marvel which has built up an extraordinary critical in the modern business environment. A green business executes rehearses that are normal to all business, decreasing, reusing what's more, reusing. Moreover, the advancement of green marketing has opened the entryway of chance to investigate what's more, give an upper hand over firms. The examination expects to give hypothetical commitment in comprehension the purchaser readiness and goal to buy of green items.²(Gadenne& et al, 2011). The exploration likewise inspects the need of green marketing and investigates the difficulties and techniques of organizations have with green marketing. The study uncovered that customers are turning out to be all the more biologically cognizant and burning of obtaining environment agreeable items i.e. green items to assume their part towards a greener world. Numerous inquiries about likewise recommended that customers are progressively picking or maintaining a strategic distance from items in light of their natural effect. Be that as it may, they didn't know with reference to what constitutes ecologically inviting items. Henceforth, advertisers need to consider endeavors that are required to change over the earth worry into ecological customer conduct as green marketing is something that will constantly develop in both practice and request. ³(Antonio C and et al, 2009).

Advertisers by fulfilling this inclination and craving of customer towards environment through successful limited time techniques to teach them about green items, their use and resultant effect on the environment assurance will in long run improve their goodwill and building solid brand picture in the eyes of shoppers. Albeit natural issues impact all human exercises, couples of scholarly controls have incorporated green issues into their writing. This is particularly valid for marketing. As society turns out to be more worried with the common habitat, organizations have started to alter their conduct trying to address society's "new" concerns. A few organizations have rushed to acknowledge ideas like ecological administration frameworks and waste minimization, and have coordinated natural issues into all hierarchical exercises. ⁴(Brammah & Tweneboah-Koduah, 2011).

On the other way natural cases can likewise be an effective marketing instrument. Organizations are progressively utilizing natural claims as a part of an endeavor to separate themselves and their items or

administrations from those of contenders. These cases arrive in an extensive variety of structures, including explanations about ecological supportability, reusing, carbon lack of bias, vitality effectiveness, utilization of characteristic items or effect on creatures and the common habitat. Organizations understand that buyers today have an expanded consciousness of the natural effect that cutting-edge products have. Natural cases are currently applicable to a bigger item extend, from little family unit things, for example, nappies, bathroom tissue, cleaners and cleansers to major white ware merchandise and machines. ⁵(Cherian & Jacob, 2012).

Numerous shoppers consider ecological claims as a central point while assessing items to buy. Along these lines, it is fundamental that shoppers are furnished with precise data keeping in mind the end goal to settle on educated choices. Organizations making ecological or "green" cases ought to guarantee that their cases are deductively stable and properly substantiated. Purchasers are qualified for depend on any ecological cases you make and to anticipate that these cases will be honest and not deceiving.

Lamentably, a lion's share of individuals trusts that green marketing alludes exclusively to the advancement or promoting of items with ecological attributes. Terms like Phosphate Free, Recyclable, Refillable, Ozone Friendly, and Environmentally Friendly are a portion of the things customers frequently connect with green marketing. While these terms are green marketing claims, all in all green marketing is a much more extensive idea, one that can be connected to shopper products, modern merchandise and even administrations. For instance, the world over there are resorts that are starting to advance themselves as "ecotourist" offices, i.e., offices that "practice".

The green non-durable products have been priced higher than the non-durable products available in the market. The green markets pose a complex pattern of behavior by consumers. The consumers would buy the green products based on various factors like education, age awareness etc. There exists a cognitive ambiguity amongst customers as to whether buying a product tagged as green and paying premium price is scapegoating. Therefore the concepts relates to the VUCA and companies need to make strategies to combat.

Review of literature

Green Product Marketing: Consistent efforts have been made to improve the plight of the environment. Green Marketing came into limelight in late 1980s and early 1990s. Various agencies defined Green marketing based on need for such practices, Organization acceptance and implementation, acceptance and implementation by the consumers various factors affecting the green marketing initiatives. The first book titled Ecological Marketing was the outcome of first workshop on "Ecological Marketing", held by American Marketing Association (AMA) in 1975. Green marketing acquired a good position since early 1990s. There has been occurring about green consumers and green consumerism in 1970s and 1980s.

⁹Michael Polonsky (1994) defined "green marketing as the marketing that consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the gratification of these needs and wants occurs, with minimal disadvantageous influence on the natural environment."

¹⁰Zoëcon (2017) quoted that when the green movement first started, various companies like Pest Control Technologies found it necessary to charge higher prices for services involving natural products and methodology due to both product pricing and time spent (green services often required more service calls per account). As products have evolved and increased in efficacy, however, the companies are beginning to flatten their service pricing so that customers can choose the program that best suits their needs.

¹¹AVS Group (2015) said that successful promoting is client driven, so if maintainability and eco-accommodating items are essential to clients, green advertising might be compelling. Green is turning out to be increasingly standard—turning out to be more imperative to expanding quantities of individuals. An astounding case of an expansive organization grasping green advertising is Scott, a \$2 billion worldwide esteem mark that achieves one in three U.S. families—an extremely standard client base. Scott is propelling another line of bathroom tissue, paper towels, napkins, and wipes produced using 40%–50% reused content. The choice depended on research directed on Scott's esteem disapproved of clients: the exploration found that 86% are intrigued and 41% are exceptionally keen on items with reused content. It also said that organizations can figure out whether ecological concerns are vital to clients by essentially asking them. Set up meetings, post a study on the corporate Web website, or send messages asking for clients' criticism. At any rate, clients will value the enthusiasm for their sentiment, and an extraordinary new chance to address client issues might be revealed

¹²Jaideep S. (2016) shared that idea of green promoting worries with security of natural environment. Present day promoting has made a ton of issues. Development in promoting exercises came about into fast

financial development, large scale manufacturing with the utilization of cutting edge innovation, agreeable and extravagant life, style, serious rivalry, utilization of unfortunate showcasing strategies and methods to pull in clients, embellishment in publicizing, advancement and globalization, making of multinational organizations, retailing and dispersion by monster MNCs, and so on., made numerous issues. Departmental stores, forte stores, and shopping centers are overwhelmed with helpful and in addition ineffective items. These all variables have undermined welfare of individuals and biological adjust also. Especially, goliath industrial facilities have turned into the wellspring of various contaminations. Generation, utilization and transfer of numerous items influence environment unfavorably.

¹³Ward Susan (2016) said that Green marketing is ordinarily practiced by organizations that are focused on reasonable advancement and corporate social obligation. More associations are trying to actualize feasible business hones as they perceive that in doing as such they can make their items more appealing to customers furthermore lessen costs, including bundling, transportation, vitality/water use, and so forth.

As per inputs by ¹⁴Inc (2016), environmentally dependable or "green" marketing is a business practice that considers shopper worries about advancing protection and preservation of the common habitat. Green promoting effort highlights the unrivaled ecological insurance qualities of an organization's items and administrations. The sorts of attributes for the most part highlighted incorporate such things as lessened waste in bundling, expanded vitality productivity of the item being used, diminished utilization of chemicals in cultivating, or diminished arrival of lethal discharges and different toxins underway.

Consumer perspective:

¹⁵Sachdeva Sonya and et al (2016) said that green consumerism embodies a dilemma inherent in many prosocial and moral actions foregoing personal gain in favor of a more abstract, somewhat intangible gain to someone or something else. In addition, as in the case of buying more luxurious green products, there is sometimes a very verbatim cost that may act as a barrier to engaging in green consumerism. The current review inspects endogenous, exogenous, and structural factors that promote green consumerism.

¹⁶Mayank Bharti, (2013) expressed concerns by manufacturers and customers about the environmental impact of products during recent decades. Customers and producers have directed their attention toward atmosphere friendly products that are presumed to be "green" or atmosphere friendly like low power consuming (energy-efficient) electrical appliances, organic foods, lead free paints, recyclable paper, and phosphate free detergents. Indian marketers are also realizing the importance of the Green Marketing Concept.

¹⁷Morel & Kwakye (2012) demonstrated the importance of satisfaction, advertising and WOM by the introduction of the espoused attitude variable which measures the believe and attention that people pay around them (as well opinion of friend as green claims) so we can conclude as factors controlled by companies as factor here the WOM (as well the receiver as the sender of information) controlled by consumers have importance in development of purchase intention of eco-friendly products. The most important factors among the marketing-mix elements are the price and promotion (even here it was reduced to advertising), and we saw that product and place have a low impact but it is a good reason for companies to fix that. Finally, satisfaction and WOM were also the most important factors to explain the contribution to the variance of purchase intention.

¹⁸Henk, Campher (2014) gave insights on paradigm shift in the consumer behavior towards Green Products. Consumer today want more green products, their purchasing doesnot follow the suit.. Like everything else in evolution, it moves slowly but surely.

¹⁹ French, Steve (2017) said that "In the coming years, companies that embrace sustainability as a holistic means of doing business are poised to win." The customers have become very knowledgeable and are concerned about environmental issues like usage of plastic, deforestation, sustainable agriculture and alike

Research Methodology:

Statement of Problem: Idea of green marketing worries with insurance of natural condition. Present day showcasing has made a great deal of issues. Development in promoting exercises came about into fast financial development, large scale manufacturing with the utilization of cutting edge innovation, agreeable and lavish life, style, extreme challenge, utilization of undesirable showcasing strategies and systems to draw in clients, misrepresentation in publicizing, advancement and globalization, making of worldwide organizations, retailing and conveyance by goliath MNCs, and so forth., made numerous issues.

Objective of the Study:

1) To study the concept of Green Marketing.

2) To investigate the level of awareness of Indian consumers about Green Marketing especially green consumer non-durable products.

Type of Research: Descriptive Research

Sampling method: Convenience sampling

Sample size: 111 respondents

Data Collection: Data was collected through primary and secondary sources. Primary data collection included collecting data through survey method. Secondary data collection included collecting data from secondary sources like journals, websites, newspapers etc.

Data Analysis and Interpretation:

Based on the Data Collection, following analysis is presented:

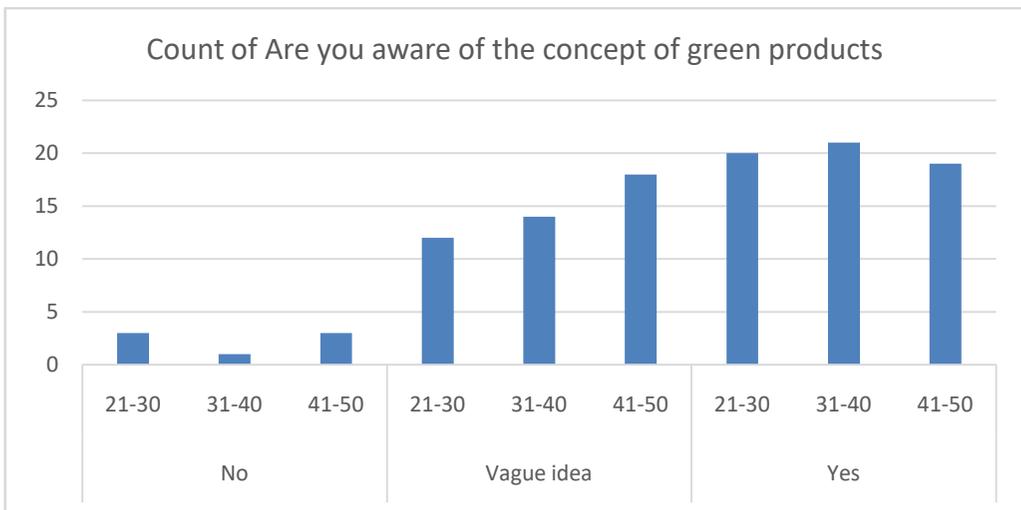


Table no 1. Table showing awareness about green products (consumer non durables) and age of the respondents

Source: Primary Data

Data Analysis and interpretation:

From the above Analysis it is evident that most of the respondents at least have vague idea or aware of the concept. This shows that concept is no more alien to the respondents. Very few of therespondents are not aware about the concept.

Attributes of green products							
Sl no	Awareness	Male		Female		Overall	
		Mean Score	Rank	Mean Score	Rank	Mean score	rank
1	Non-Toxic	3.8	III	4.1	I	3.95	II
2	Recyclable	4.2	I	3.9	II	4.05	I
3	Not tested on animals	3.9	II	3.86	III	3.88	III
4	Made from recyclable or renewable materials	3.42	IV	3.8	IV	3.61	IV
5	Healthy for the users	3.4	V	3.6	V	3.5	V

Table no.2: The characteristics of green products

Source: Primary Data

Data Analysis : As shown in table no 2, male respondents feel that most important qualities of green products as recyclable, not tested on animals, non toxic in the same order. However female respondents feel that important characteristics of green products are non toxic, recyclable, not tested on animals in the same order. The average results show that respondents feel that product should primarily be recyclable, non toxic and not tested on animals.

Suggestions:

This overview propose that the well qualified customers comprehend the natural issues, are included all the more completely and, consequently, are progressively worried about ecological quality and increasingly spurred to partake in earth dependable practices.

Salary level has a positive connection with present scenario. Individual with high salary will ascend to help ecological manageability and purchase eco-accommodating items. Salary as indicator of natural mindfulness and relates with decidedly with biological information and premium cost of eco-accommodating items.

Since there is absence of mindfulness in regards to accessibility of eco-accommodating items, organizations should concentrate on promoting eco-accommodating marking, in-store presentations and flyers. Limited time battles might be utilized to additionally advance the utilization of eco-accommodating items.

Therefore, advertisers should target middle age and senior natives for buy of eco-friendly items through their IMC.

Conclusion:

Environment unfriendly condition can harm the lifestyle of person. They have the duty to secure nature and condition. Utilization of green item will assist them with changing their way of life into a green one. In any case, the mindfulness level on the utilization of green items among the general population is exceptionally constrained. There is a need to teach the general population on the utilization of green items and on distinguishing the green properties of items they use. This would ensure the safer earth for the future age.

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STRATEGIES OF KALENJI IN VUCA WORLD CREATING BRAND AWARENESS IN INDIAN MARKET

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ABSTRACT: Decathlon is one of the world's largest sporting goods retailers. The retailer stocks a wide range of sporting goods, usually in large superstores which are sized at an average of 4,000m². Each brand represents a different sport or group of sports, with a dedicated product development and design team. This study is an attempt to investigate the effect of selected marketing activities in the creation of brand awareness of Kalenji which is the brand for running shoes provided in Decathlon. Further, it is more aimed to examine the consumer's awareness about the brand. This is because, for a category of running shoe which poses plenty of competitors in the market it becomes important to understand the current market scenario to withstand and thus to compete. This study will also analyze the changes in their strategies in the dynamic Indian market.

Keywords: Decathlon, Brand Awareness, Kalenji

INTRODUCTION

Brand awareness is the level of consumer consciousness of a company. It measures a potential customer's ability to not only recognize a brand image, but also associate it with a certain company's product or service (Kotler, 2009). It's also the foundation for brand equity that set of positive associations that add value to a brand. Brand awareness is the lowest level of brand recall. The process of building brand image among customers or consumers should be methodically performed and monitored by the company's marketing department. Employing brand awareness as a shopping guide is a strategy applied by consumers in order to save time and effort which, when dealing with an unknown brand, they would devote to comparing the products in relation to other attributes, such as quality, packaging and price. Brand awareness has a stronger impact on the subsequent purchasing choices, if the product once tried out fulfilled the consumer's expectations.

SPORTS INDUSTRY

Over the years, sports have evolved a noticeable sector for all economies, presenting myriad career as well as business opportunities. The scope of this sector varies globally. It includes several segments: sports infrastructure, sports events, training, goods manufacturing and retail. Moreover, the business of sports is not just limited to the mentioned avenues; it has far-reaching implications on the global economy due to its close association with other sectors, including education, real estate and tourism. The Indian sports sector is experiencing a sea of changes with all-round developments initiated by the government, the private sector as well as non-profit organizations. The government is introducing game-changing schemes such as 'Khelo India' to address issues regarding infrastructure, talent scouting and training facilitation. Private sector and non-profit entities are also increasingly contributing to the sector by organizing leagues and tournaments, funding talented sportspersons and getting involved in grassroots development. The key organizations managing sports in India are Ministry of Youth Affairs and Sports (MYAS), Sports Authority of India (SAI), Indian Olympic Association (IOA) and National Sports Federations (NSFs). Sports retail is a small but fast-growing segment of modern retail in India. Recently, the country has been hosting many international sports and this has given a boost to this sector. Many foreign and domestic corporate retailers have entered sports retail. 'Khelo India' programme, which focuses on revival of sports at grassroots level, will receive Rs. 520.09 crore, an addition of Rs. 170 crore from last year. Through automatic route 100% FDI is allowed in sporting activities like manufacturing of sports products. Sports goods which are imported by the government are exempted from import and other duties.

DECATHLON

Decathlon is a French sporting goods retailer. They are the largest sporting goods retailer in the world. Decathlon started with a store in Lille, France in 1976, founded by Michel Leclercq. Today, there are more than 1100 stores in 38 countries. The company employs more than 78,000 staff from 80 different nationalities.

The retailer stocks a wide range of sporting goods, from tennis rackets to advanced scuba diving equipment, usually in large superstores which are sized at an average of 4,000m². Decathlon Group also owns over 20 brands, with research and development facilities all over France to develop the latest innovative designs, registering up to 40 patents per year. Each brand represents a different sport or group of sports, with a dedicated product development and design team. In 2008, the brand Decathlon beat all its competitors on three points: margin, market share, highest turnover per square meter of retail space. It is up to the third at a world level. A 2008 survey of 774 catchment areas at the request of the Ministry of Economy and Finance shows that “for sporting goods, Decathlon is dominant in 92.8% of zones.”

KALENJI

Kalenji is a brand of products dedicated to running, created in March 2004 by the Decathlon group. Kalenji designs a whole range of products (footwear, textiles, accessories) intended exclusively for the practice of running. Among the types of practices covered by the brand are road racing, trail running and athletics. The brand is based at the Villeneuve-d’Ascq campus. The name "Kalenji" refers to the Kalenjin people in Kenya renowned for the quality of their long-distance runners. Initially a brand dedicated to walking and running, it was divided into two entities in 2008. Kalenji became an exclusive brand for running, giving birth to a new brand for walking Newfeel. Newfeel was until then the name of a flagship model of Kalenji shoes, it will be renamed Eliofoot.

REVIEW OF LITERATURE

Androulidakis G Kandus (2011) correlated the brand of mobile phone to users’ security practices. Users show different behavior in an array of characteristics, according to the brand of the mobile phone they are using. As such, there is a categorization of areas, different for each brand, where users are clearly lacking security mind, possibly due to lack of awareness. In a competitive and profitable market as footwear industry, the importance of having a strong brand is crucial to the success of a company. In the branding process it is important to understand from which point of view the brand is seen and perceived. When the analysis comes from the company, we have brand identity, meaning that both image and positioning are aimed, planned and desired by the firm itself. The brand image, on the contrary, comes from outside awareness, intending the way that actual consumers perceive it. Consequently, the brand image is purely emotional. There are five stages in the decision making process. One stage, the first, represents the absence of any brand related information, and this group includes all brands producing the needed good; therefore, a weak strategy will leave out a brand from this stage on. The other four stages, on the other hand, are including brand as an essential acknowledgment factor for the final decision. Thus the fundamental requirement of increasing this acknowledgment, and to reach such target, any decision making process based on brand has to begin from the awareness of the brand itself. The role of brands has been changing over the history. They were a designed means to get and conserve customers (Hatch and Schultz, 2009). However, nowadays brands play a much more important role in the purchasing decision of a product (Kathuria and Jit, 2009). Brands help in building emotional relationships with customers, which in turn brings tangible returns for the whole organization in terms of customer loyalty and identification of the customer to the brand (Kathuria and Jit, 2009; Hagel and Armstrong, 1997; Chaffey et al., 2000). One of the top goals for any brand manager is to strengthen the relationship between customers with brands (Gummesson, 2002). For any company, having a strong brand is a very valuable asset (Aaker, 1991, 1996; Keller, 2003; Aaker and Jacobson, 2001). However, in order to survive among its competitors, a brand needs to offer something distinctive or unique (Farhana, 2012). Products can be copied but not the brands (Christiansen et al., 2009). Brands give a product a sense of uniqueness with regard to their competitors and develop and create an attachment between the brand and a customer (Rafi et al., 2011). Differentiation is an important factor that a brand should bring (Farhana, 2012). A successful brand is, therefore, an identifiable product, service, person or place, improved in a way that the buyer or user perceives it relevant, unique and matching their needs. Christiansen et al. (2009) indicate that “a valuable brand will endure in the customers’ minds” (Christiansen et al., 2009, p. 322). Furthermore, the success of a brand results from being able to sustain these added values among their competitors (de Chernatony & McDonald, 1998). According to Farhana (2012), in today’s marketplace it is important to build, maintain and use brands to achieve strategic advantage. According to Macdonald and Sharp (2000), one of the main aims of marketing is to generate and maintain brand awareness. It is easy to believe that marketers consider brand awareness and brand recognition as two of their top objectives for their online marketing efforts (Hollis, 2005).

RESEARCH METHODOLOGY

The objectives of the present study are to study the demographic profiles of the respondents of kalenji, measure the brand awareness of kalenji among the people visiting the store, to identify the factors influencing consumer purchase decision and suggest the strategies to improve awareness level of kalenji. A survey was conducted among the customers of Decathlon, Bangalore store by the aid of structured questionnaire. The sampling unit for the study is customers who came to the BANGALORE store during the research period and sample size is 100 and Number of total questions included in questionnaire was 15.

Percentage analysis, table, chart are the statistical tools used in the study. The scope of the current study is limited to investigate brand awareness of Kalenji which is a brand of Decathlon representing running shoes and apparels among the Decathlon consumers who are buyers of Decathlon products in BANGALORE. In addition to that, the study is limited to only those customers who came to the BANGALORE store during the research period from Jan to Feb 2019. Moreover, study is limited to understanding brand awareness of Kalenji only even though Decathlon has lots of other brands too. One prime reason behind this is concentrating on one brand can yield a specific result which will be scattered when considering all other too. Also, this will provide important insights to the current market scenario whereby the marketing strategies can be examined.

ANALYSIS

The findings from the present research study are as follows: Among the respondents, 76 % are male and 24 percent are female. Majority (84%) of the respondents falls under the age group of below 25 years. 40 % of the customers spend based on the product worthiness. From (TABLE 1) it is evident that 44 per cent knows only running shoes from Kalenji. 10 per cent knows that Kalenji has apparels as well, 7 per cent are aware that running accessories are also sold under Kalenji. Only 3 per cent knows that watches are also available in Kalenji. About 36 per cent knows all the products sold under the brand Kalenji. About 40 percent of the customers were using Kalenji shoes during their visit. About 56 percent of the respondents are planning to buy running shoes within six months. About 46 percent of the respondents came to know about Decathlon store by spotting the store during their travel. A reason for this can be that most of the Decathlon stores are located in the outskirts of city. Then about 33 per cent knew about Decathlon because of the reference given by previous customers. Among the Decathlon brands, Quechua is the most known brand, that is, about 22 per cent. Even though online retailing is growing at an exponential rate, 90 per cent of the respondents prefer purchasing in store. From (TABLE 2) we get to know that about 54 per cent have told that they will definitely recommend Kalenji to a friend/colleague of theirs. And the remaining 46 per cent gave their response as they may recommend as they are not sure. 40 per cent felt the logo of Kalenji as creative, 28 per cent felt that it's just casual and 24 per cent felt the logo as energetic. So we found out that 75% of the respondents are aware of the Kalenji brand determined from TABLE 3.

Table 1: Products Under Kalenji

PRODUCTS	FREQUENCY	PERCENTAGE
RUNNING SHOES	44	44%
APPARELS	10	10%
WATCHES	3	3%
RUNNING ACCESSORIES	7	7%
ALL OF THEM	36	36%
TOTAL	100	100%

Source: Primary Survey

Under the brand Kalenji variety of products are available like shoes, apparels, watches etc. From the graph it is evident that 44 per cent knows only running shoes. 10 per cent knows that Kalenji has apparels as well, 7 per cent are aware that running accessories are also sold under Kalenji. Only 3 per cent knows that watches are also available in Kalenji. About 36 per cent knows all the products sold under the brand Kalenji.

Table 2: Factors Influencing Brand Kalenji

FACTORS	FREQUENCY	PERCENTAGE
QUALITY	26	26%
DURABILITY	22	22%
PRICE	16	16%
DESIGN	11	11%
WARRANTY	15	15%
DISCOUNT	2	2%
ALL OF THEM	8	8%
TOTAL	100	100%

Source: Primary Survey

As indicated in Table 2, Each person will be influenced by different factors. The highest is 26 per cent whom are influenced by the quality of the product. Neck to neck lies the durability of the product with 22 per cent. The next influential factor is price with 16 per cent followed by warranty with 15 per cent. Only 11 per cent agreed that design is influential. 8 per cent is influenced by all the factors combined together. Very less per cent, that is, only 2 per cent is influenced by the discount provided.

Table 3: Brand Awareness Level of The Respondents

GENDER	No of Respondents	Awareness Level	Not Aware	Awareness%	Not Aware%
MALE	76	60	16	79%	21%
FEMALE	24	15	9	63%	38%
TOTAL	100	75	25	75%	25%

Source: Primary Survey

From the above table, it is inferred that 76 respondents were male and 24 respondents were female out of which 79 percent of male respondents were aware about the brand where as 21 percent were not aware, coming to the female respondents 63 percent were aware and 38 percent were not aware. So from this we get to know that 75 percent of the total respondents are aware of Kalenji Brand and 25 percent are not aware.

SUGGESTIONS

Based on analysis of the data on the present study, Decathlon should be creating high brand awareness by exploring advertising media by visiting the stadium during matches and sponsoring the emerging clubs and teams by tying up with them. Promotion of E-retailing can be done by developing an application on play store and making it easy for customers to access it, it can be even more effective by introducing offers to the customers. Decathlon as a store has keep updating the products according to the trend in the market and give importance to consumer preferences.

CONCLUSION

The need for marketing is so essential to survive in the market. As people are turning towards established brands rather than local brands it became mandatory for every brand to create awareness about them among the general public. As per my studies more than half of the population who were part of my study, knew about the brand Kalenji. People opt for certain brands because they are unaware of other brands. So firm should focus more on creating brand awareness. Innovative marketing strategies need to be adopted as this is especially related to sports because sportsperson rely on a particular brand for a long time. It is a difficult task to persuade a consumer. Ways to reach up to new customers should be explored.

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A STUDY ON AWARENESS ON HOSPITALS MISSION BY STAFF NURSES AND ADMINISTRATIVE PERSONNEL IN TIER III CITIES Special Reference to Tumkur and Hassan of Karnataka

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ABSTRACT: *With the dwindling supply and ever growing demand for quality healthcare service from small clinics to big hospitals are mainly working under pressure with ever growing challenges. These challenges are posed by inside the establishment as well as from outside the entity from both the end. The constraints for administration and HR department are more which is squeezing the overall operations of the hospitals. Challenges are majorly with HR related issues with few other problems associated with monetary area. Affordable Care acts of government, entry of branded chains of hospitals, changing perception and expectations of community, changing roles of distribution channels, entry of private insurance companies and the tie-ups is stirring more challenges. In this context, a micro research is done to understand the awareness on mission of the hospital by staff nurses and Administration personnel in delivering decent services with special references to Tumkur and Hassan of Karnataka. A structured questionnaire is designed to collect responses from administrative staff. The data so collected is analysed using statistical tools. It is concluded that hospitals are struggling hard to cope-up with challenges an also keen on customer satisfaction to increase foot fall for their hospital.*

Keywords: *HR issues, Mission, Tier III cities, Affordable Care act*

Introduction

The healthcare industry across the globe is always has to operate under higher volume of pressure. As the kind of work they do in health care, especially in hospitals, the professionals have always had to operate under a certain amount of pressure. Compare to other industry professionals, Health care industry requires a great deal of integrity from all levels of professionals. And recent trends indicate that the pressure is only going to increase.

From small rural clinics to big city hospitals, human resources in healthcare will also feel the pressure. These professionals face issues like increased demand and staffing shortages, among others. To overcome these hurdles, HR must better understand the how and why behind each one. Read on to learn more about the four biggest challenges faced by HR professionals today, and more importantly, what we can do about them.

Biggest Challenges in Healthcare HR Growing Demand, Dwindling Supply

One challenge that healthcare HR professionals are currently facing, revolves around the staffing of nurses and doctors. As demand around the country continues to increase, candidates are finding that they have various options when it comes to choosing their work location; ultimately causing a large shortage in staff in certain areas of the country. With the rising trend towards performance based career models in the healthcare industry, many HR departments are also struggling to recruit and retain high performing workers. In order to manage these challenges HR Managers can implement Applicant Tracking Systems (ATS). These systems streamline the hiring process and include automated notifications and workflows which allow HR managers to quickly respond to qualified candidates while having access to compensation data.

Regulations: Reporting and Compliance

Another challenge in Healthcare HR is the introduction of the Affordable Care Act (ACA) and with it, the new reporting requirements. HR Managers are now required to report to the IRS in compliance with the ACA, meaning managers must accurately track employees and their work hours as they relate to health benefits. Other areas in which regular reporting and tracking are needed are that of annual reviews. In order to

receive federal or state funding, hospital based employees are required to have annual reviews and performance evaluations. Staff must also have credentials checks, accreditation renewals, and tracing of inoculations. Providentially, HR Supervision Software suppliers have stood quick to respond to the requirement for greater chasing and recording software. This software also supports administrators to formulate procedures required by personnel and affords hourly trailing submissions to recognize which personnel are fit for aids under new procedures. Single end-to-end HRIS submissions can merge Reasonable Care Act Recording. They also have capacity managing elements so that worker data and requests are retained up-to-date.

Cost: Investment in Talent Management

One of the biggest challenges faced by healthcare HR managers is securing funding for capacity managing edges which allow divisions to propose reasonable repayments and appeal the top workforces. This means that wages must be modest while also timely into clinics' budgetary policies. As finance catches expurgated and assurance refunds are discussed, hospitals must stay on top of expenditures to remain commercial. In the healthcare industry, capacity management plans proposing reasonable payments to employ and hold high performance staffs can have a straight effect on patient contentment and ROI; it can also drop workforce turnover, which can be another costly hit to an organization. In a landscape in which HR managers struggle with their current budget, finding ways to reduce costs even further in order to spend in capacity administration continues to be difficult. Fortunately, IT can be one area in which these cuts can be achieved. Single cloud-based HRIS applications lower costs for hospitals by eliminating internal IT costs. Cloud solutions can reduce costs associated with maintenance requirements, removing costs associated with hardware upgrades and providing automated maintenance and upgrades of applications.

Healthcare HR can become more strategic by running an efficient department and assuring that turnover is low. Technology can support HR managers in overcoming challenges related to staffing, regulations, reporting, and talent management, but cannot overcome poor human capital strategy and poor strategic workforce plan. If healthcare HR develops the right strategy and has the right technology behind them, they'll get a seat at the table

Ethical challenges

An ethical challenge in healthcare is a big deal. Recent news stories support this claim with headlines about ethical violations of healthcare providers. In 2016 the British Broadcast Center (BBC) reports Dr. Paolo Macchiarini, was accused of providing misleading medical research which led to the deaths of seven patients (Kremer, 2016). More recently an Olympics Physical Therapy doctor, Larry Nassar was found guilty and sentenced for sexual misconduct. These incidents hurt the character and trust of the medical leaders. In addition, it creates legal costs and rise in malpractice insurance coverage for the agency.

Exclusive Staffing challenges

Shortages- Staffing shortages continue to plague the healthcare industry. In India there are around 5 Lakhs Doctors are required to provide a decent service without any pressure. It counts around 1 doctors for every 1,674 patients based on the World Health Organization (WHO) norm of 1:1,000 population, according to an India Spend analysis of government data. The situation is worse than Vietnam, Algeria and Pakistan -- the shortage of doctors was one of the health-management failures cited by this report of a parliamentary committee on health and family welfare, which presented its findings to both houses of Parliament on March 8, 2016. And it's not just a nursing shortage problem. Experts predict the next ten years will yield a deficiency of specialists, generalist physicians and other clinicians, which will hamper healthcare organizations' ability to deliver high-quality care.

High turnover-Healthcare positions such as physicians, nurses and medical assistants experience high turnover rates, with the greatest amount of turnover occurring during the first year of employment.

Thorough background checks-Hospitals, medical practices and other healthcare providers must perform thorough background checks on potential employees. Since healthcare employees will be entrusted with the care of patients and with sensitive personal information, hiring organizations are most concerned about those who misrepresent themselves or use drugs.

Compliance regulation, training and certification challenges

Complex compliance regulations-The introduction of the Affordable Care Act (ACA) and continuous evolution of the regulations have created fear and anxiety for many healthcare providers. With a significant

number of variable-hour employees on staff, healthcare providers are tasked with properly classifying employees and tracking their time worked to comply with ACA requirements.

Certifications and credits

Healthcare organizations should have the proper tools to track certifications, as medical professionals have continuing education credits they must renew every year. To reduce risk and liability, it's crucial to have an easy system to track and article on each member's qualifications and permit expiration dates, but arguably the most important in the healthcare industry. In workplaces with complex and potentially dangerous equipment, such as scalpels, syringes and X-ray machines, proper training is vital to keep employees and patients safe. It's also critical to track and have proof of that training to protect the organization from liability.

Payroll challenges in the healthcare industry

Multiple rates of pay -Healthcare organizations often have different rates of pay for different types of employees: physicians, RNs, medical assistants, lab technicians, and so on. As such, organizations need to be able to easily keep track of and automate of these variances and warrant each worker is being compensated properly.

Unions-Nurses and other medicinal experts tend to have strong blending. A greatly unionized staff presents certain human resources and payroll challenges:

- Payroll systems must be able to easily handle union deductions and required pay scale differences
- Reporting tools must provide accurate documentation for discussions with union leaders
- Some union matters may also require the skill of an experienced HR professional to help secure and maintain good relationships and help the business follow all union rules

Role of Administrative Staff and Nurse in Delivering Services:

Maintain a Budget and Profits

As part of the overall consideration HR places on hiring and promoting clinical and support staff, they also must be loyal to the organization. The hospital relies on the prudent use of financial resources on the part of HR to meet its obligations to the patients and the community, but also relies on HR to keep the profits of stockholders and owners in the forefront. Human resource managers may believe an ER needs additional nursing staff, for example, but hiring may require HR to dip into reserves or reduce the number of doctors working there. Decisions such as these are made within the parameters and framework of the overall hospital budget.

Keep Staff Levels Appropriate to the Need

It's up to the HR manager to ensure each department and floor in the hospital is sufficiently staffed. With revolving patient counts, it can be a very difficult proposition. HR managers rely on reports from department heads, historical counts according to seasonal changes, as well as current patient needs. Absenteeism then plays a role in day-to-day staffing needs, placing additional pressure on HR to find immediate replacements and maintain open relationships with medical staffing agencies and PRN, or on-call staffers.

Serve the Various Staff Needs

Everything from insurance coverage for a new baby to a grievance against a director of nursing goes through the human resource manager's office. The HR manager and her team take care of the benefits for employees and monitors employee performance evaluations. HR tracks employee requests for vacation and extended leave and must ensure those positions are adequately covered when the primary job-holder is gone. A hospital, unlike an office or factory, can't operate effectively when key staff members are not there. Additionally, hospitals run on 24-hour schedules, making the job of the HR manager even more demanding.

Review of Literature:

1. **Margaret Patrickson and Janny Maddern (1996)**, attempted to investigate the organisational responses to such pressures by four major South Australian hospitals and the level of involvement of hospital human resource staff in the staffing issues associated with strategic planning. The study was conducted at four hospitals that were ranging from metropolitan public hospital to not-for-profit hospitals. Using designed questionnaire data was collected and the e result concluded that input into strategic decision-making by human resource specialists was remarkably lacking in the hospital system in South

Australia, as evidenced by the following information.

2. **Ekpe Oyono Ekpe et al(2015)** conducted a qualitative research approach based solely on insights drawn from the analysis of the existing literature of different studies, and books related to the topic of study in order to investigate the relationship between mission statement and organizational performance. The objective was to the study should serve as a means to help acquire useful information or knowledge about the subject area.

3. **Emmanuel A Ezekwe and Sam N Egwu (2016)**, carried out research to investigate the place of awareness on vision and mission statements among employee of Ebonyi State University-Nigeria; focusing on the implementation and challenges facing the objectives of the cherished statements. Result concluded that vision and mission statements are vital tool for strategic management in an organization and have the propensity to motivate, induce greater performance and communicate present and future direction of the institutions. Managers are advised to plan and use it more effectively.

4. **E. Mubarak Ali and S. Abdul Aameed (2016)** has conducted a qualitative research to study the Role and effectiveness of HRM. The study encounters the challenges in relation to HRM. These challenges are lack of staff satisfaction, lack of commitment and initiation, lack of team spirit, poor working condition, under staffing, lack of skilled manpower, high turnover, absenteeism and conflict among staff members are the main challenges faced by hospital managers in relation to HRM,

Research Methodology:

Statement of the Problem:

In spite of continuous effort by Government and its agency toward improving healthcare industry's to provide decent medical services, public as well as Hospitals are finding it manage and face the challenges in the turbulent and volatile conditions that are attached with medical care. Until unless the service delivery staff and the administrative staff understands the vision and mission of the institute, GAP may arise in service delivery which may lead to gaps.

Objectives:

1. To study the understanding of vision and mission of the Service provider by Administrative Staff/Nurses
2. To study the role of service personnel in delivering customer service

Sampling Design:

Sampling Population: Administrative and Nurses of Hospital in Hassan and Tumkur

Sampling Size: 73

Data Collection:

Primary data is used for to elicit data from respondents

Data Collection Method:

Data collection is done by designing structured questionnaire. With the help of survey data was collected.

Scope of the Study:

The study done in Tumkur and Hassan hospitals can be extended to know the understanding of vision and mission by staff and can help Management to prepare curriculum for Training/Development programmes.

Limitations:

The study is focusing on assessing the level of understanding the strategy by Administrative and Nursing staff. The Doctors are not considered for current study that have major role in delivering services. Reliability was also a concern as they took time to answer for few questions which they might have felt as sensitive ones as data was collected at their workstation.

Data Analysis and Discussion:

Table No.1: Types of Hospitals

Sl No.	Types	No. of respondents	Percentage
1	General	27	37
2	Speciality	41	56
3	Government	3	4
4	College -Medical Centre	2	3
TOTAL		73	100

Analysis:

It is recorded from the above table that majority (56%) of the hospitals are specialty in type, followed by general (37%) and Government (4%) with only two medical college Centers.

Inference:

As many Government hospitals are not serving patients with good approach, customers are looking for Specialty hospitals.

Table No.2: Age of Hospitals

Sl No.	Age of the Hospital	No. of respondents	Percentage
1	Less than a year	3	4
2	1-5 years	4	5
3	More than 5 and less than 10 years	53	73
4	Above 10 years	13	18
TOTAL		73	100

Analysis:

It is observed from the above table that majority (73%) of the hospitals are having around a decade of experience and few (18%) of the are into industry for more than a decade. Around a total of 9% are having less than 5 years' experience in the field.

Inference:

Many hospitals who are serving patients may be good in approaching and serving customers.

Table No.3: Administrative Staff

Sl No.	No. Of Administrative Staff	No. of Hospitals	Percentage
1	Upto 10	2	3
2	10 - 20	12	16
3	20-30	59	81
TOTAL		73	100

Analysis:

It is noticed from the above list that majority (81%) of the hospitals are having around 20-30 staff in their administrative section with few (16%) having only 10-20 staff.

Inference:

Many hospitals who are serving patients might have hired staff nurses and might having trained them to take care of administration work.

Table No.4: Staff-Cadre

Sl No.	Staff-Cadre	No. of Staff	Percentage
1	Doctors	32	44
2	Nursing Staff	18	25
3	Paramedical Staff	23	32
TOTAL		73	100

Analysis:

It is noticed from the above table that majority (44%) of the Staff are in the Cadre Doctors, followed (32%) by paramedical staff with less (25%) of Nursing staff.

Inferene:

Many hospitals are keen on filling the posts of Doctors.

Table No.5: Awareness of Vision, Mission Staff-Cadre

Sl No.	Opinion on awareness of Vision, Mission	No. of Hospitals	Percentage
1	Yes	64	88
2	No	9	12
TOTAL		73	100

Analysis:

It is recorded from the above table that majorities (88%) of the Staff are aware of Vision and Mission of the Hospital and rest (12%) are not aware of it.

Inference:

Many hospitals might have given orientation of Vision and Mission of the hospital to their staff.

Table No.6: Opinion of Staff on Patient Satisfaction

SI No.	Patient Satisfaction	No. of Staff	Percentage
1	High priority	49	67
2	Mid-level priority	17	23
3	Low priority	5	7
4	Don't Know	2	3
TOTAL		73	100

Analysis:

It is recorded from the above table that majority (67%) of the Staff are of the opinion that patient satisfaction is high priority and 23% of them felt it is mid-level priority and total rest of 7% feels it as low priority and 3% of them are not aware about priority.

Inference:

Staff felt that a patient satisfaction is very important.

Table No.7: Dedicated Staff to patient-satisfaction matters

SI No.	Dedicated Staff to patient-satisfaction matters	No. of Respondents	Percentage
1	Yes	42	58
2	No	31	42
TOTAL		73	100

Analysis:

It is recorded from the above table that majority (58%) of the hospital have staff dedicated to take care of patient satisfaction matters and rest (42%) don't have.

Inference:

Hospitals might have felt that satisfied customers will spread good word-of- mouth.

Major Findings

1. Majority (56%) of the hospitals are specialty in type
2. Majority (73%) of the hospitals are having around a decade of experience
3. Majority (81%) of the hospitals are having around 20-30 staff in their administrative section
4. Majority (44%) of the Staff are in the Cadre Doctors,
5. Majority (88%) of the Staff are aware of Vision and Mission of the Hospital
6. Majority (67%) of the Staff are of the opinion that patient satisfaction is high priority
7. Majority (58%) of the hospital have staff dedicated to take care of patient satisfaction matters

Suggestions:

As the role of nursing staff is also important in delivering services in hospitals, they have to take care of hiring nursing staff in good numbers. Also they should be given proper orientation to approach patients and customers. Dedicated staff to take care of customers should be given soft skill training to improve the overall service delivery from the hospital.

Conclusion:

To achieve the vision, mission statement should be made clear to all the staff at all the levels in the hospitals which will play important role in service delivery. Through this way, the service gap can be filled. Being Tier-II cities, these cities have ample opportunity to serve the customer better.

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Sustainable Supply Chain Management

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ABSTRACT: Supply Chain Management (SCM) has evolved over the years and has transformed itself according to the needs of business. Business has to survive and grow in the external environment and has to anticipate and change ahead of the changes happening in the competition. The business changes when happen drastically are referred as disruptions. These disruptions are part of the VUCA world.

Triple Bottom Line (TBL) approach has brought into business focus on sustainability. The sustainability has picked up as a movement and has encompassed all the activities of the business. SCM has also evolved to assimilate sustainability ideas and is being referred as Sustainable Supply Chain Management (SSCM).

SCM professionals love predictability because it makes complete SSCM cycle- material planning, ordering, stocking, logistics (forward and reverse), and payment to vendors smooth. But VUCA world brings with it turmoil and as a result the approach in dealing with business situations has to change. The speed of change is multiple times higher than what was 25 years ago. Rapid changes bring in disruptions in. This calls for agility in dealing with disruptions in supply chain. We can briefly say that dealing with VUCA world is to effectively manage turmoil with agility. Purpose of this paper is to bring in the connectivity between SSCM and VUCA world. Methodology adopted in the study involves 2 stages:

- 1) Literature survey to capture the key ideas and develop these into themes
- 2) Narrative is build around the themes with examples to bring in practitioners point of view.

Keywords: SCM, SSCM, TBL, VUCA

Introduction:

The business scenario has changed over the last one decade rapidly on account of 4 major developments. 3 developments pertain to business in general. These are namely globalization of business, Industry transformation to 4.0, impact of millennials among customers and workplace. 4th development is culmination of all these 3 aspects and propelled by climate change effects is called sustainability movement.

Let us look at the impact of each of these aspects on business and how they impact business scenario. Globalization has become a reality and is an essential ingredient of business. No business can claim to be isolated by geography or government policies. Any isolation artificially created by the government cannot sustain for long term. Globalization means interconnectedness of businesses. Businesses are dominated by their supply chains and of late with the interconnectedness of supply chains it is being referred as supply web.

Industry transformation to 4.0 is the need of the hour. It refers to current trend of automation and data exchanges in manufacturing technologies. This transformation is on the anvil and Indian industries are also following the global trends. While speaking at the World Economic Forum our Prime Minister stated that the nature of jobs will change with the advent of Artificial intelligence, Block chain and Internet of Things and also digital push given to rural areas (Financial Express, 2018).

Figure 1(VUCA Explained)

VUCA Explained		
	Complexity	Volatility
How well you can predict the results of your actions?	<p>Characteristics: The situation has many interconnected parts and variables. Some information is available or can be predicted. But the volume or nature of it can be overwhelming to process. Example: You are doing business with many countries, all with unique regulatory environments, tariffs and cultural values. Approach: Restructure, bring on or develop specialists and build up resources adequate to address the complexity.</p>	<p>Characteristics: The challenge is unexpected or unstable and may be of unknown duration. But it is not necessarily hard to understand; Knowledge about it is often available. Example: Prices fluctuate after a natural disaster takes a supplier off-line. Approach: Build in slack and devote resources to preparedness- Stock pile inventory or overbuy talent</p>

	<i>Ambiguity</i>	<i>Uncertainty</i>
	<p>Characteristics: Causal relationships are completely unclear. No precedents exist: You face "unknown unknowns".</p> <p>Example: You decide to move into immature or emerging markets or to launch product outside your core competencies.</p> <p>Approach: Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.</p>	<p>Characteristics: The event's basic cause and effect are known. Change is possible but not given.</p> <p>Example: A competitor's pending product launch muddies the future of the business and the market.</p> <p>Approach: Invest in information-collect, interpret, and share it. This works best in conjunction with structural changes.</p>
	How much do you know about the situation? —————→	

Source: Bennett, 2014

According to the report by Deloitte India and Lobby group Retailers Association India, Trend-setting millennials: Redefining the consumer story”, millennials, are the chief wage earners in India with a 47% share in the working age population. Being the largest demographic group in India and globally, millennials are characterized by high levels of disposable income and as digitally connected individuals will drive various consumer segments towards rapid growth and development. We are having rapidly changing business transformation due to ever changing business situations. This kind of change brings in turmoil as experienced in war-like situations. The acronym VUCA is borrowed from US army terminology to explain the business situations. VUCA is best stated in the Figure-1s (Bennett, 2014).

Nobody can wish away the effects of VUCA and its existence. Hence it is incumbent on business to adapt to this change. Given this background, this paper aims to study the connection between VUCA and SSCM.

India is hailed as the fastest growing economy in the world considering the annual average of GDP growth of 7% for the past 4 years. GDP growth will put stress on natural resources and change of land use. Globally climate change is the important factor which is driving the sustainable development. In emerging economies like India it is all the more crucial. Given its low ranking of 177 among 180 nations in the 2018 environmental performance index and the also considering that the latest IPCC report indicating a strong correlation between climate change and agrarian economies, it is evidently risky for Indian economy with 65% of Indian population dependent on agriculture. Business cannot operate in silos. Hence growth and sustainability of Indian economy and that of business are intimately connected to the manner in which country as a whole will perform in improving climate change.

Hence it is necessary to mitigate the risk of climate change by adopting the sustainable economy model which operates on shared values of all the stake holders. The performance of this economy is resting on 3 pillars namely economic, social and environmental. This model was first stated by Elkington in 1994 as 3P (People, Planet and Profit) or as TBL (Triple Bottom Line). It is estimated that 60-80% of the operations cost in manufacturing sector is covered by a conventional supply chain. Any cost add-ons to supply chain on account of greening the supply chain and making it sustainable can affect the profitability. TBL is all embracing concept and it is difficult to implement in totality satisfying all the aspects. It is observed in practice that TBL is having different boundaries set by the organization for implementation voluntarily or by statutory regulation or due to the combined effect of both. Hence its coverage varies from sector to sector and among industries within the same sector. This has given rise to improvisation of conventional supply chain and its evolution has gone through various typologies based the degree of emphasis on its green and societal aspects over the years. Green Supply Chain Management (GSCM) and Sustainable Supply Chain Management are distinguished in some literature. But most of the studies have considered SSCM is a next stage of GSCM. There is gradual transition and hence GSCM and SSCM are considered synonymously. SSCM is an integral part of the TBL and its impact is predominantly felt on Ecological and Social aspects. Though in the short run Economic (profit) may be seen on the down side but in the long term it covers up the cost and shores up bottom-line due to savings on account of recycling, waste reduction in process and conservation of virgin materials thereby helping to conserve natural resources. Reducing/eliminating fugitive and

gaseous emissions, effluents and solid wastes will reduce degradation of Environment. Engaging the stakeholders of society through various activities broadly referred as Corporate Social Responsibility (CSR).In India CSR is regulated by the latest amendment to Companies Act whereby 2% of the net profit has to be earmarked for CSR (Nayak, 2017).

Literature Survey:

Literature review was conducted as tabulated below by choosing from EBSCO and Google Research Scholar portal:

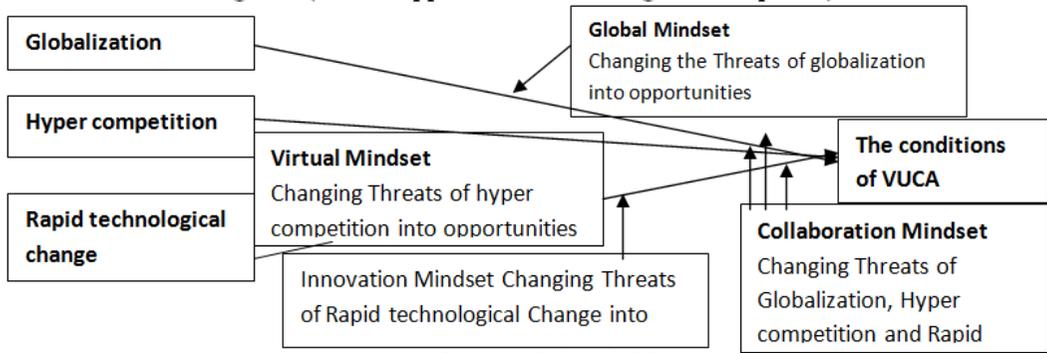
Period of publication considered is 2014-2018. Book reviews/Books excluded. First stage short listing is done after going through abstract and completed after going through the paper. Criteria of selection is based on the 4 groupings: leadership/change management/Risk management, type of research/ Innovation/ Technological disruptions, Performance/Business Excellence, Sustainability &VUCA,

Searching portal	Key word	No of articles	Relevant
EBSCO	VUCA world	50	
EBSCO	VUCA World (Peer Reviewed)	16	
EBSCO	VUCA World and SSCM(Peer Reviewed)	39	8
Google Scholar	VUCA World	2650	
Google Scholar	VUCA World and SSCM	345	9
Short listed articles			17

Leadership/Change management/Risk management:

Leadership, change management and risk management has been considered together because change and risk management is directed always top down by the leadership. In VUCA business environment leadership and change management is of different nature than in the past. The future leader is called “Cloud Leader”, who attempts to “bring out” the positive in each person, in every context in which he or she is immersed, a leader who seeks the best interventions possible according to his or her capabilities and resources (Rodriguez *et al*, 2015).Resilience of the leadership is necessary to deal with uncertain situations. They also explore how leaders could benefit from having bio-empathy, quiet transparency, and smart mob organizing skills in an uncertain future (Johansen *et al*, 2014). Quality of leadership is crucial to navigate through the VUCA atmosphere. Board level should display qualities like “modeling capacity” and “weaving capacity”. “modeling capacity”—tends to adopt a decision-making process that is focused on identifying points of commonality that can be used to build a bridge between different options. The second group—those who have “weaving capacity”— tends to focus on identifying the unspoken principles that can be used to more meaningfully synthesize and transform a range of options(Mathew *et al*,2016).Risk management is necessary to mitigate the effects of decisions which can go wrong. But the cost required insuring risk is very high. Challenges by themselves can turn into opportunities depending upon the way managers will respond. Create Risk management plan with 7 steps namely Define, identify, understand, prioritise, review risk management strategy options, decide, implement and monitor (Carpenter, 2017). How the risk awareness of retailer Tesco contributed to its ongoing innovation, leadership skills of Tesco leaders, and the necessity of coalitions within organizations (Alison, 2014). Leaders should no longer view change as having a planning phase followed by implementation. Rather it should be seen as consisting of many incremental cycles that iterate between planning and acting. So, organizations identify what is needed, do something about it, observe its effect, see what is needed next and then implement that. The role of the leaders is to enable the organization to engage in this process, by developing the organization’s inner resources (Pearse, 2017).
Type of research/Innovation/Technological disruptions:

Figure 2(VUCA approach in technological disruptions)



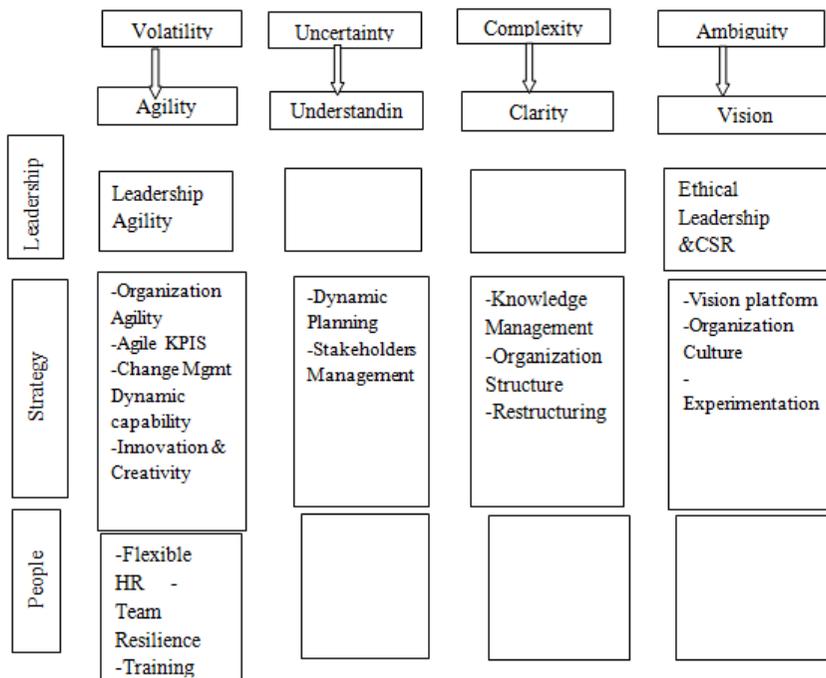
Source: Jari *etal*, 2018

These 3 are combined into one group as the related papers have a common thread of discovery and innovation in the organization. Internal discovery and innovative push for each employee and the likeminded group of employees is essential to fight the competition in business. Research for a VUCA world will not look like research of the past century. It must be real time, relevant, informed by first-hand experience, data-savvy and in-depth. In short, next generation research will need the rigor of academia combined with the access and timelines of the business world (Laurent *etal*, 2017). Innovation is no longer restricted to the process of creating something new from beginning to end but includes the capacity to quickly adopt externally created innovations that may be of benefit to the organization (Shukla, 2015). Key issues in modern VUCA management are agility (response to volatility), information and knowledge management (response to uncertainty), restructuring (response to complexity) and experimentation (response to ambiguity). Useful foresight tools are challenging tools, decision-making tools, aligning tools, learning tools and the ability to combine these management tools in the practices of corporate foresight and management systems. The VUCA approach is a key solution concept to technological disruption (Jari *etal*, 2018).

Performance/Business Excellence:

Performance and Business excellence are clubbed together as good performance is required for business excellence

Figure 2: BEVUCA



Source: Saleh *etal*, 2017

It is important to note that Volatility is to be countered by Agility and not by Vision. Resources should be allocated carefully to deal with VUCA situations (Bennet, 2014). 18 critical success factors so as to manage and excel under a high VUCA business environment have been identified. A conceptual framework(was developed for integrating quality management and risk management thinking so as to achieve BEVUCA (Saleh *etal*, 2017).

Sustainability &VUCA:

There are only 2 research papers that have dealt with the link between sustainability and VUCA.Less than 50 per cent of global Chief Ecology Officers believe their enterprises are adequately prepared to handle a volatile, uncertain, complex and ambiguous (VUCA) environment. The idea of Sustainable Cooperative Advantage (SCA) of intelligence, ideas and innovation can be tapped. This leads to profitable and sustainable innovations in a VUCA world, especially in what the author calls “Brain Based Enterprises” (BBEs) (Cook, 2016). Using the VUCA worldview and classification, That is seven underlying and seven United Nations (UN) Sustainable Development Goals (SDG)-derived factors, when combined with the Institute for the Future (ITFF) four food security scenarios in a pair wise manner led to the generation of a further 16 subsequent VUCA-inspired scenarios composed within a morphological grid. This is used to mitigate the risk of food security (Sharif *etal*, 2017).

Most important aspects of VUCA in SSCM are Visibility, Agility, Stability and Sustainability of supply chain.

Practitioner’s point of view regarding SSCM in VUCA world:

Author is a practicing SSCM professional and a life member of Indian Institute of Materials Management (IIMM).This year the theme was “Transforming to Smart Digital Supply Chain: Fostering Technology Sustainability &Innovation”. Based on the deliberations, interactions and exchange of ideas held in April 2018, the following are trends that will help in VUCA world. Here in we take the examples of food chain giant Kellogg and apparel giant H&M to elucidate.

Kellogg:

- 1) Visibility of supply chain: Increasing visibility of supply chain will help in reducing pipe-line inventories. Bringing in visibility of the entire supply chain end to end has benefitted all the channel partners. Kellogg has gone one step further and calling the supply chain as supply web. Majority of the vendors from emerging economies.
 - Predictive analysis is used to process data real time to have win-win situation. This has taken care of demand and supply side disruption. Tracking of all vendors and their supply chains will give visibility.
- 2) Agility of supply chain: Simplifying the work across the supply chain employees and all the partners of supply base of 1600 foods sourced from 20 countries. Frontline people should take decisions rather than escalate to the next level. They are empowered with necessary tools.
- 3) Stability of supply Chain: This is brought about by changing the focus from cost to stability of supply chain. This means that Kellogg will work with upstream suppliers. Upstream working with farms example for Rice from Thailand with their country’s bureau of rice research and development to develop draught resistant variety of rice. Bolivian farmers were encouraged to grow “Organic” quinoa and making them realize the importance of organic farming.
- 4) Sustainability of Supply chain: It is worth noting that Reputation of Kellogg is taken as one of the pillars in the sustainability matrix. Sustainable Supply Chain Management is resting on 4 pillars namely Climate Smart Agriculture, Climate and Natural Resource conservation, Humanrights and Reputation. The same is depicted as below.

Figure 3: Supply Chain Sustainability in Kellogg

<p>Climate Smart Agriculture</p> <p>Increase yields/build resilience to climate change/Reducing GHG emissions/Partners like RRI</p>	<p>Climate & Natural Resource Conservation</p> <p>Energy use and GHG reductions/Conserve natural resources/Water efficiency/Reduce food waste and loss</p>	<p>Human Rights</p> <p>Prohibit involuntary labour/Assess and prioritize audits based on risk/Embedded programs into sourcing/Partners like Sedex</p>	<p>Reputation</p> <p>Recognized leadership/Talent attraction and retention/Government support (license to operate)/Authenticity and food credentials</p>
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Source: Kellogg

H&M:

The vision and strategy of H&M is based on 3 pillars 1) leading by change 2) Circular and Renewable 3) Fair and equal.

- 1) Visibility of supply chain: All the Tier- 1 vendors have to follow evaluation (Higgs index). This is extended to 60% of Tier- 2 vendors still 2017. This will ensure visibility of supply chain vendors till Tier-2. This will ensure alignment of vendors to the common objective.
- 2) Agility of the vendors: The manufacturing cycle is reducing over the years. This has resulted into automation, faster information flow and improved logistics. The manufacturing cycle has been reduced from 90 days to 30 days and only evaluated vendors are considered. This will reduce pipeline inventories.
- 3) Stability of vendors: By going for evaluation of Tier-2 vendors, the supply chain is made more robust and stable.
- 4) Sustainability of supply chain: H&M has demonstrated its commitment to sustainability. It has gone ahead with the ambitious plan of using 100% recycle fabric by 2030. By 2040 it has committed to become climate positive value chain. It has moved ahead of the competition.

Sustainability/Corporate Responsibility of top readymade garment buyers					
Brands	Vision & Strategy	Objectives	Reported achievements in 2017	Suppliers	SSCM paradigm
H&M	To lead the change towards a circular and renewable fashion industry	By 2030 H&M will use 100% recycled fabric. By 2040 H&M will become climate positive value chain 100% renewable energy for own consumption	35% recycled and sustainable sources of materials. 59% cotton are from sustainable sources. 21% carbon emission is reduced 96% renewable energy is used for own consumption	Higg index is applied to all suppliers	Ahead of all the buyers
PVH	Positive impacts for people, the environment and communities from source to store	Empower people/Preserve environment/Support communities UNSDGs GRI initiative Eliminate Hazardous Chemicals by 2020. Reduce green house gases by 35% by 2030	70% of on product packaging are recyclable. 10 SDGs are monitored year on year	Higg index is applied to all suppliers	Well stated and good monitoring in place
Wal-Mart	Enhancing sustainability of operations and global value chains	To create zero waste Operate with 10% sustainable energy. Sell products that sustain our resources and environment	26% of renewable energy used for own consumption 77% of the waste is diverted from land-fill. 200 Billion worth goods sold are evaluated for sustainability performance	Higg index is applied to all suppliers	There is a committed program. RM G related Data is not available

Conclusions:

- 1) VUCA situation is dynamic and approach to deal with this kind of environment is also very dynamic. Leadership plays a major role in navigating through the turbulence. One size does not fit all. The strategy is tailor made for a particular organization.
- 2) Risk management is necessary evil. But it is costly. Hence proper prioritization of risk is important. If the input commodity is volatile, it is covered by hedging to minimize the risk.
- 3) VUCA and SSCM are interlinked. This is very much evident in the case of food supply chain of Kellogg. In case of H&M, the benefits of aggressive pursuit of sustainability is evident. H&M is ahead of the competition as shown in the table below:

Limitations:

The literature is very much limited on this subject. Many of the innovative methodology/ trends in line with VUCA environment are company specific. They are not published as these are kept as secret within the

companies.VUCA like environment was also prevalent during the period 2007-2010(subprime mortgage crisis). During that time author was serving as Head of SCM in Arcelor Mittal, Romania (US 3Bln\$ turnover unit).During that period market was stand still. That time the words of Mr.Lakshmi Mittal, CEO were- Forget the external situations. Focus on internal strengths. This made us change the procurement policy of spares. Started manufacturing inside the units where possible. Region wise stock details of spares were made available to avoid any purchase. Vendors were taken by surprise! But that was the need of the hour.

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An Analysis of the Efficiency, Factors & Investment Patterns Impacting the Indian Primary Equity Market

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ABSTRACT: The research mainly looks at initial public offerings of 210 companies that have been listed on the BSE and NSE Indices falling in the MSME bracket. The companies have varying issue sizes, selected from an array of 42 different sectors. The market prices for the companies have been collected in November of 2018. Information for the debt equity ratio and oversubscription ratios have been collected from the same websites. Gains for the companies have been calculated using return formulae.

The second part of the research also looks at a closer look at the O/S ratios, breaking them up into the type of investors that participate in the markets, namely Qualified Institutional Buyers, Retail Institutional Investors and High Net worth Individuals. Their effect on the total O/S ratio as well as the carry forward effect on each other has been analyzed. The break up has also been measured against the other factors affecting the IPO performance and key points highlighted. The O/S ratio is the best determinant of the demand for the IPO, but a weaker correlation to the gains may show an underdeveloped market in the country.

The factors that have been identified would likely help us ascertain the psyche of the average investor when dealing with IPOs, since a stronger or weaker relationship would show the level of importance of the particular variable in the minds of the investors. The hypothesis is that each of the major factors would at least in some way, shape or form affect the end result, but a lower correlation would point to the level of development of the market. The O/S ratios would also show the effect that groups of investors have on the overall ratio and the performance, as well as the possibility of short term gains.

This field of analysis may also help the pursuit of behavioral finance in the initial phases of the IPOs. The reaction of the investors to fads and trends, as well the sectors or type of company based on the quantitative factors, would help in ascertaining the average Indian investor.

Since the perception of the investors is not always measureable, we may see that the fit of the factors in the model may be lower. This may also be true in part due to the lack of information on the business cycle phase or other inflationary and macro economic factors that may play a part in the type of investment. The level of knowledge of the market has also increased, at an increasing level, due to schemes and public information, which remains unaccounted for.

Index Terms – Short term Gains, Long Term Gains, Aping effect in investors, Behavioural Finance, Indian Equity Primary Market

1. Introduction

The equity markets are affected in a large part by the participants that deal with trading and not always by the performance of the companies. The stocks on these indices are regularly under and overpriced. But during the IPO given out by companies, collection of funds through the equity markets may cause severe over and underpricing of the stocks. Factors like reputation of the company perception in the minds of the participants and investors also have a large affect. Advertising of the IPO may make all the difference when it comes to awareness and marketability. But rational investors always look at ratios like debt to equity, size of issue, band of the price etc. to take into consideration these factors, and others like Over subscription ratio the research paper tries to narrow down and determine the extent of effect each of these variables have on the overall performance. The performance of the IPO is also seen in multiple lights, like current and listing prices and gains, as well the returns made at the end of the day.

Technical markets are always considered unpredictable and wary, mainly due to collective market sentiment and perception versus reality. Many of the companies that end up doing well in these markets may do so simply because of the hype they create or the trend they latched on, and then simply use the funds later on. The secondary markets have active participants, with many different classes and types of investors, investing and speculating at different times. The primary markets have however, remained in the background, because of activity being highly risky. Many researchers have documented and analyzed the chase and fall when dealing with IPOs, with high O/S rates initially, and prices declining later on. The paper looks at the various aspects of the process and compares and contrasts the performance variables to a multitude of areas of interest like age, year of listing, issue size etc.

2. Literature Review

The major goal of this research by **(Seitibraimov, 2010)** is to establish whether underpricing and underperformance are present in IPOs of firms from the research targeted countries. Under-pricing and underperformance is an eminent feature of IPOs in all markets across different periods and are the most studied phenomena in the IPO literature. However, due to the lack of IPO history this topic had not been widely discussed for the CIS countries. Since such underperformance had not been widely covered, investors interested in these new stocks lacked a clear idea of how these IPOs historically performed compared to various benchmarks and IPOs from other countries. The aim of this research was to cover this gap and to determine what degree of underpricing and underperformance was prevalent in IPOs from Russia, Ukraine and Kazakhstan.

The study conducted by **(Dr.S.Poornima, 2016)**, analyzed different terms and gains of the IPO market and was geared to help investors to make sound decisions while locking up their funds. The main finding points towards a lack of cohesion between the different markets on the equity ground. Though the sample size was small, consisting of only 7 companies, the main criticism would be the shorted time frame studied, since larger volatility may cause harm to the gains in the market at the time of data collection. The study used a method on excess return after adjusting for the market fluctuations as the sole calculation, probably due to a time constraint. Using other tools and taking a longer frame of reference may have been important for the study.

Making the process of listing and gaining equity from the market would help in the development of the markets in India. **(Nair, 2012)** studied the various difficulties and breaks in the listing process of a regular company in India. In an attempt to understand the same she looked at various factors like the volatility of the market and the scenario of the global meltdown. Apart from this, individual factors like merchant bankers, amendments in the statues and government stability were also taken into consideration. But since the research was a mix of both primary and secondary data, there is a lack of subjectivity due to varying perceptions and opinions. The complex mechanism of the IPO however was insightful to many in order to remove unnecessary processes and taking care of external factors that may cause the downfall of a public issue.

(Naughton, 2009) studied the effect of IPO's on other companies and identified some core financial and nonfinancial reasons for the effect on prices of the other companies. First, as a direct consequence of the IPO, the offering recapitalizes the issuing firm in a way that generally results in a low debt-to-equity ratio. Flexibility in the investments given by low leveraged firms provides an added incentive to investors, when compared to higher leveraged firms. The approvals and recent certification gained by these firms also helps in gaining credibility in the market. The strength of the certificate by the investment banks affects investors' willingness to purchase new issues as opposed to shares of other firms in the same industry. Third, new entrants may have some nonfinancial advantage over their industry competitors; such as patents or newer technology that they are trying to raise funds for. These non-financial advantages may make issuing firms more attractive to investors.

With even small firms looking for better financing options and the debt market becoming saturated with entrepreneurs, companies like Haidilao aim to get their funds through IPO's. A master in the serving business, Haidilao International Holding Ltd., China's biggest hot pot restaurant chain, plans to seek approval next week for a Hong Kong initial public offering that could raise as much as \$1 billion. The firm already has GoldmanSachs looking over the details, showcasing the popularity of IPOs in the industries that earlier did not garner the same attention. **(Chan, 2018)** believes that since Hong Kong is the hub of the economic development, a lack of taxes and regulations, would make the \$1 billion deal the largest consumer IPO of the year. This would be the focus of the transformation of HK into a hub for fundraising by new-economy companies.

3. Research Methodology

3.1 Population and Sample

Population: Companies registered on one of the two major stock exchanges in India in the last 8 years.

Sample size: The sample size for the research has been defined as 210 companies with varying returns, sizes and sectors.

Sampling techniques: Purposive sampling technique has been used to identify the companies for the research.

Basis of selection of samples: The study was conducted in the areas without any monetary incentive and the aim was to get a varied sample throughout the Indian Financial Capital markets.

3.2 Data and Sources of Data

All data has been collected from secondary online sources. In an effort to maintain similarity in the data points and consistency between figures, most data has been taken from the same source. In cases where a few figures were not available for certain companies, the formula applied by the website has been used manually.

The two major websites used were money control and chittogarh IPO across the last 8 years.

The IPOs considered for this research have been post 2010, and all information about the listing has been taken from money control. The current market price taken has been taken as on 24th November 2018. A total of 210 companies have been taken and the year wise split up is given below

3.3 Theoretical framework

The scope of the study extends to IPOs that have been made public in the last 10 years and looks into the buying side and demand statistic of all these companies. The research also extends to looking at sector wise developments of the IPOs and takes a look into whether certain sector maybe more or less volatile than the market as a whole. Finally the data also looks at the buying habits of the investors and the general schematics of whether the market reflects the interest of the individual buyers.

Equations

Return would be calculated by using the formulae:

$$\text{Return} = \left[\frac{\text{First day closing price} - \text{Offer price}}{\text{Offer Price}} \right] * 100 - (1)$$

$$\text{Performance} = \text{FX} (\text{Age, D/E, O/S, Value of issue, Industry Sector, Season, Month, Issue Size}) - (2)$$

3.4 Statistical tools and econometric models

Descriptive statistics, Correlation, Multiple regression analysis, Collinearity, ANOVA, One sample t Test, Paired sample T test, Independent T test, reliability analysis, and percentage analysis would be used for the assessment of the companies.

3.5 Hypothesis

To find whether factors identified are significant and account for all the changes in the return of the IPO

H0: Factors identified are not significant and do not show visible changes with direct or indirect relationships

H1: Factors identified are significant and show visible changes with direct or indirect relationships

H0: The factors outlined in the research do not account for all the variations in the return of the IPO

H1: The factors outlined in the research account for all the variations in the return of the IPO

H0: The buying habits of individual types of investors are not related to each other or the market as a whole.

H1: The buying habits of individual types of investors are related to each other or the market as a whole.

H0: The primary market is not significantly influenced by the secondary markets and behavioural finance tropes

H1: The primary market is significantly influenced by the secondary markets and behavioural finance tropes

H0: There is no significant change in the company structure of firms that opt for an IPO before and after 1995 & 2015

H1: There is a significant change in the company structure of firms that opt for an IPO before and after 1995 & 2015

3.6 Variables

Table 1- Variable name & Classification

VARIABLE	TYPE OF VARIABLE	CLASSIFICATION
Age of the firm (at the time of IPO)	Independent variable	Internal, Controllable
Debt Equity ratio (Balance sheet)	Independent variable	Internal, Controllable
Oversubscription rate of shares	Independent variable, (Dependent for O/S analysis)	External, Uncontrollable
Oversubscription rate of shares by QIBs	Independent variable	External, Uncontrollable
Oversubscription rate of shares by HNIs	Independent variable	External, Uncontrollable
Oversubscription rate of shares by RIIs	Independent variable	External, Uncontrollable
Value of the share on issue day	Independent variable	External, Uncontrollable
Industry sector	Independent variable	Internal, Uncontrollable

Oversubscription Rate of each investor	Independent variable (Correlation Variable)	External, Uncontrollable
Month of IPO	Independent variable	External, Controllable
Season of IPO	Independent variable	External, Controllable
Issue price compared to Listing Open	Independent variable	External, Uncontrollable
Return of the IPO	Dependent variable	External, Uncontrollable
Indian market after 2008	Control variable	External, Uncontrollable
Market and business cycles	Confounding variable	External, Uncontrollable

The age of the company may play a role in the amount of goodwill and trust a company can develop in the market. Companies that have been in existence for longer have been able to, especially in a country like India where brand value is largely dependent of the lifetime and money value of the product will have made their name in the market. Understanding that such brand value and goodwill would work well in the market among older investors may point us towards the expectation of the returns in the market. The age of the company has been taken by subtracting the year of inception of the company from the current year of 2018. For the sake of analysis, the age of the companies' have been broken down into 5 intervals with an interval size of 20.

Secondly the listed price in the market may be able to highlight the base point of the share. A higher price may signify value and confidence, but at the same time be outside the hold of many of the smaller or less active investors in a developing market like India. On the other hand companies also risk underselling their shares and never being able to come up with enough capital for their main purpose by reducing the price of the share too much. Hence finding the perfect price for the share is very important for the company.

The O/S ratio is the clearest indicator of the demand of the shares in the market. The figure tells us the number of times the shares have been oversubscribed by. There are five types of investors in the market, three of them being major holders; the high net worth investors, Qualified Institutional Buyers, Retail Institutional Investors, Employees and others. The research goes on to understand the O/S of each of these buyers and looks at general statistical analysis of each of the investors as well. For the purpose of the research and regression we have taken the overall oversubscription rate.

The size of the issue also plays an important part in the overall success of the IPO since the total funding required might be too vast for a market to sustain. In cases where the issue size maybe too big, even if the price of individual shares might be well in its place.

Behavioural finance has contributed to gains in the technical secondary markets, and to test the assumption that investors act the same in different markets, we analyse the month of listing to see whether IPOs do well in accordance with the 'January Effect' or a switch is seen in India due to the financial year ending in March. October may also be a month of prosperity due to the season of Diwali.

The comparison of the Issue Price and the listed open has been taken into account, since the first day of performance is one of the most vital for an IPO. Assuming that the issue price is beaten by the open price, we would expect the gains to be higher due to the creation of demand and prevalence of Bulls in the market.

The sector of the industry would help narrow down the benchmark performance and the factors on which the companies' performance would depend. The sector may also be influencing the size of the issue or the rate of O/S in the market.

Taking into account the role of behavioural finance, variables like Season of the listing are very important. In a developing economy like India, the role of the primary sector and farming are instrumental in the manufacturing plants. Moreover, since most of India is not irrigated or farmed using machines, a good monsoon is vital for the survival of the companies. Hence we look at the season of the listing to find if monsoon bound IPOs are more successful than the other seasons

The last variable considered is the Debt to Equity ratio of the company, which is an extremely important balance sheet management accounting ratio. With this we can compare the level to which the company is levered and the amount of risk the company can surmount depending on the investors and credit worthiness. A high D/E ratio may be bad due to the added pressure of the regular interest payments, even if it allows a better locus of control over the company.

The dependent variables studied are the gains in the market, which are of two types, namely listing and current. Both these gains have different outputs and insights to share, focusing on the two terms of investment.

3.4.2 Descriptive Statistics

Table 2- Independent Variable Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Err
IssueSize	210	23.25	15475.00	814.7710	1729.02394	2989523.785	34.313	.334
Listing Gains	210	-97.15	153.50	-.3624	43.17644	1864.205	1.608	.334
CMP	210	.04	2777.90	295.7728	410.08867	168172.714	8.783	.334
Age	210	1.00	154.00	28.9143	23.25359	540.729	8.511	.334
D/E Ratio	210	-56.12	39.83	.1617	5.23029	27.356	81.977	.334
O/S Ratio	210	.07	277.28	23.1257	42.60159	1814.895	13.712	.334
Issue Price	210	10.00	1766.00	309.2476	307.91355	94810.752	4.542	.334
Current Gains	210	-99.93	655.28	-15.5575	102.04606	10413.398	15.295	.334
Valid N (listwise)	210							

Table 3- Investor Pattern Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
QIB	210	.00	174.99	20.9960	33.90583	1149.605	5.390	.334
HNI	210	.01	958.07	61.5073	124.89359	15598.408	16.420	.334
RII	210	.00	77.93	6.3031	9.41374	88.618	21.630	.334
QIB O/S	210	.00	1.00	.8000	.40096	.161	.285	.334
HNI O/S	210	.00	1.00	.8000	.40096	.161	.285	.334
RII O/S	210	.00	1.00	.7857	.41131	.169	-.033	.334
Valid N (listwise)	210							

3.4.3 Correlation

Running a binary data set, where correlation was found between the subscriptions being more than 1, aka being oversubscribed, or being undersubscribed, we find no correlation above a 0.5 and a significant value of 0.477 between HNIs and RIIs.

For the actual O/S ratios, we measured the level of correlation between the investors and see that a high correlation exists between the HNI and RII investors. We also see a moderately high correlation between the HNI and QIB investors.

A high correlation value is seen with variables like CMP and Issue price at 0.715, but the correlation between the current and listed gains is a low to moderate positive one at 0.377. We also see a moderate correlation between the Issue Size and variables like Issue Price and CMP at 0.589 and 0.560

3.4.4. Regression

The regression analysis shows us that the R square and adjusted R square is 49.5% and 48.3% respectively. Nearly 50% of the changes may be explained through the variables explained. We may see other variations being explained by the sector of the company, or the business cycles, as well as a change in management later on. Any new products or even the reason behind the IPO may skew the results. A Durbin Watson data point of 2.065 may indicate a slight presence of Autocorrelation.

3.4.5.1 T-test D/E Ratio

The D/E Ratio of companies was taken from a large set of companies that fall in a multitude of sectors and market caps. The t test has been performed to see whether companies in the Indian ecosphere are extremely different in their capital budgeting habits as compared to the global level. The D/E Ratio is one of the best ways to compare this. The average debt equity ratio acceptable in global markets is 1.5- 2. Since the significance value is lower, we reject the null hypothesis. Hence the D/E ratios of companies’ par sectors and market caps in the Indian market seem to be varied from the global markets.

Table 4- Sector-wise distribution of D/E Ratio

Sector Description	Average of D/E RATIO
Constructing & Contracting	3.163
Finance	1.573
Infrastructure	0.914
Media and Entertainment	0.886
Miscellaneous	0.258
Diversified	0.027
Power	0.027

3.4.3.1 T-test O/S Ratio

The O/S Ratio of companies was taken from a large set of companies that fall in a multitude of sectors and market caps. The t test has been performed to see whether companies in India are significantly different in the O/S Ratios as compared to the norm of levelled subscription of 1, 10 and 42.

For all three situations, we accept the alternate hypothesis. Therefore, it can be concluded that the population means are statistically significantly different. We have assumed that the O/S level is 1, 10 and 42 for normal ratios in of the lowest and highest averages in the world (Malaysian being the most competitive)

Table 5- Age wise distribution of oversubscription

Age Intervals	Average of O/S RATIO
0-20	23.427
20-40	24.421
40-60	23.965
60-80	33.126
80 & Above	21.383
Average	23.998

Table 6- Issue size based distribution of oversubscription

Issue Size	Average of O/SRATIO
Less than Mean Size (800 Cr)	23.791
More than Mean Size (800 Cr)	24.637
Average	24.214

Table 7- Sector-wise distribution of oversubscription

Sector Description	Average of O/SRATIO
Constructing & Contracting	27.970
Finance	12.023
Infrastructure	13.785
Media and Entertainment	18.06
Miscellaneous	34.486
Diversified	12.121
Power	5.782

3.4.3.2 T-test Issue Size

The data is compared to the average issue size in America and other developing countries. The issue size is not significantly different from the issue size in America, which may point to a higher development, while it is significantly different from the issue size in developing countries like Brazil, Russia etc.

3.4.4 Paired T-test Year of listing & O/S Ratio

The IPOs have been divided on the basis of been listed before 2015, or on or after 2015, and the O/S ratio for the same have been compared. The mean data first points to a larger spike in the O/S level and a higher volatility in the O/S as well after 2015.

From the result of Paired T Test, we can reject the null hypothesis that there is no difference in the variances between the groups and accept the alternative hypothesis that there is a statistically significant difference in the variances between groups.

Table 8- Comparison of gains according to Oversubscription

Particulars	+ve Listing Gains	+ve Current Gains	N	% Of Companies (Listing Gains)	% Of Companies (Current Gains)
Oversubscribed	105	50	195	54%	26%
Undersubscribed	9	6	15	60%	40%

The data shows that companies which have been oversubscribed do not have any disposition to perform better later or even immediately after the opening. In fact, due to a smaller set, the % of companies that are doing better is larger in the undersubscribed set.

4. RESULTS AND DISCUSSION

The variables can first be classified according to their effect and the locus of control the company has on them and based on the same the factors that drive them can be explained. The Internal dependent variables and their respective factors are:

- Age does not have an impact on any of the performance variables in the research. We see that none of the variable like market price, opening price or even the size of the issue is affected by the age of the company. The Oversubscription rate also stays moderate throughout the intervals. However we do see a change in the market, when comparing IPOs listed before and after 2015, with a near 3 fold increase in the O/S. The D/E Ratio is not significantly different for different age groups; however the year of the inception being 1995 does affect the ratio significantly, mainly due to changing benchmarks and acceptable norms in the industry. Older companies may also have been dependent on family money as opposed to loans from external agencies
- Issue size of the IPO: The issue size of the IPO is statistically impacted by the age of the company. Very young companies are also opting for large amounts of equity funds but the high D/E ratios prove that these companies are choosing debt as their primary funding option.

Sector wise distribution of the companies also shows great difference in the issue sizes, which may be caused due to varying requirements of funds or ease to be successful in the IPO market. On the flip side we also see that access to loans may be harder for some and a small IPO may increase the credit worthiness, explaining the IPOs in the range of 25 crores.

- D/E Ratio The research also points to a difference within the sectors, which is expected due to different benchmarks

Oversubscription also varies significantly with the debt equity ratios, which may point to analytical and fundamental investors in the market. The break up shows us highly levered firms being largely oversubscribed to

- Listed Open: Finally listed opening is impacted by the level of oversubscription as well as the issue size, but not by the age of the company

Table 9- Significance of demographic and O/S Ratio on Listed Opening, Issue Size & D/E Ratio

FACTORS	Age	Issue Size		O/S Ratio		Sector
		Above & Below 800	Interval size 300	Under & Over	Levels of O/S	
Listed Open	No Effect	Significant effect	No effect	No effect	Significant effect	Significant effect
Issue Size	Significant Effect	Not Valid	Not Valid	Not Valid	Not Valid	No effect
D/E Ratio	No effect	No effect	No effect	No effect	Not Valid	Significant effect

The external dependent variables and their respective factors are:

- **CMP** the current market price is not affected by the month of listing or the age, but does have an impact due to the level of oversubscription and the sector. We also see difference due to season and sector distribution, as well as higher CMP in cases where the listed open is higher than the issue price. We also see that the oversubscription has significantly impacted the market price. Interestingly the market price is lower for IPOs with lower oversubscription as compared to those which are undersubscribed
 The high positive correlation of CMP and issue price proves that company stocks are not very volatile in the Indian markets
- **Listed Gains:** one of the important metrics to judge the short term money making potential of the IPO is through the listing gains. The gains are significantly affected by the rate of oversubscription, overall as well as individually for each investor. We also see than a higher open price, when compared to the issue price, would lead to a positive listing gain the end of the day.
 The listing gains are not impacted however, by the season, sector or month, which may go against the preconceived notions of festivals like Diwali or months like January or March helping in positive short term gains
- **Current Gains:** looking at a longer term perspective almost no variable in the oversubscription affect the gains.
 The data also points to behavioural biases like month of listing, sector or season not affecting the gains significantly. The low correlation between the listing and current gains also points to the gap between the short and long term gains.
- **O/S Ratio:** oversubscriptions a whole is also not affected by the variables like month of listing, seasons or sectors, but a higher value is seen for monsoon season for most years.
- **Investor specific O/S ratio:** finally HNI investors have significant differences in the month of listing and RII investors in sectors, but none are affected by the season.

Table 10- Significance of demographic, Behavioural terms and O/S Ratio on CMP & O/S Ratio

FACTORS	Age	Issue Size		O/S Ratio	Month	Sector	Season
DEPENDENT		Above & Below 800	Interval size 300	Under & Over			
CMP	No Effect	Not Valid	Significant effect	No effect	Not Valid	Significant Effect	Not Valid
O/S Ratio	Not Valid	No effect	No effect	Not Valid	No effect	No effect	No effect

Table 11- Significance of Behavioural terms and Investor specific O/S Ratio

FACTORS	Month	Sector	Season
RII	No effect	Significant effect	No effect
HNI	Significant effect	No effect	No effect
QIB	No effect	No effect	No effect

Table 12- Significance of Investor specific O/S Ratio on Gains

FACTORS	O/S Ratio		RII		HNI		QIB	
	Under & Over	Levels of O/S						
Listed Gains	No effect	Significant effect						
Current Gains	No effect	No effect						

Table 11- Significance of Behavioural terms, sector and price difference on Gains

FACTORS	Month	Sector	Season	Issue Price Vs Listed Open
Listed Gains	No effect	No effect	No effect	Significant effect
Current Gains	No effect	No effect	No effect	No effect

5. Acknowledgment

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The Effect of E-learning on Students: An Empirical Analysis on College Students in Kolkata

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ABSTRACT: Digital inventions and innovations in the contemporary era of globalisation have changed the landscape of many sectors – education being no exception. Rising trend in the adoption of e-learning has changed the ecosystem of the education sector worldwide. A wide number of e-learning materials are helping learners from all the backgrounds to learn new things faster and with more convenience and ease. Also a wide variety of content at affordable prices is attracting more and more learners towards this new experience of learning. This paper tries to showcase such effects of e-learning on today's college students with the help of a primary survey done on 109 college students, across different years of their degree courses, in colleges in Kolkata. The paper outlines the basic factors leading to increasing adoption of e-learning and with the help of statistical tools tries to analyse the effect of e-learning on the grades of these students.

Keywords: College Students, Digitalization, E-Learning, IoT

Introduction

Globalization is the buzzword in the present era. The economic sectors all over have undergone a sea-change to get connected to the forces of globalisation with the expectation to emerge with more power and valour. But globalisation is not done yet with the elephantine shifts and avant-garde patterns that it has already generated. On the contrary, we are seemingly entering a new era of globalisation in the 21st century. If the 20th century globalization was about the unbounded flow of physical goods and services, then the 21st century globalization is the phase of digital globalization, circumscribed largely by flows of information and data. The digital flows of data and information, of late, in fact produces more economic value than global trade in goods and services. Though nascent, the digital form of globalization is producing considerable changes all across the globe. We are hence increasingly entering the new phase of *digital globalization*.

With digital globalization new types of goods are traded which includes virtual goods like e-books, online games, apps etc. which are just a click away from us. In a sense, digital globalization is thus more inclusive in nature, as its aspects are easily reachable to global citizens. The wide use of internet all over the world has helped in easy insemination of the aspects of digitalization. As of June 2018, 55.1% of the world's population has internet access. Wide availability of IoT as the new technological paradigm is conquering the entire globe by connecting various objects around us. Such wide availability of digital technology through IoT has helped in increased automation in both home and industrial sector. Other niche sectors like the education sector, health sector, travel and tourism sector etc. is now in the forefront of adopting these latest technologies.

In the education sector, technology is increasingly becoming an integral part of the daily learning and teaching process. Insemination of digital aspects into the education system is the trend of the present era. Smart schools and colleges, with the help of IoT, are trying to promote a higher level of personalized learning. The students are also increasingly adopting e-learning techniques to upgrade their knowledge domain. With universities all over the world conducting various online certification courses and organizing various distance education programmes, learning process is becoming much easier, faster, convenient, efficient and more connected than ever before.

Today's generation of college students are much different from their ancestors and understand the need to upgrade themselves to match the societal environment, both inside and outside the colleges, that is highly digitalized. This paper tries to focus on the benefits of e-learning in today's digital age on the part of the students and with the help of a primary survey tries to find out how acceptable is e-learning to college students as a new way of learning.

Characteristics of E-learning

E-learning basically refers to a new model of education in which learning is conducted via gadgets, electronic media etc. typically on the internet. The technique of e-learning imparts students the "21st century skill" in empowering themselves with advanced and creative problem solving techniques. It helps them

access enormous volumes of study materials across online libraries and other online sites and encourages a sense of community building among teachers, students and third parties. It gives better opportunities to students to interact with different communities, making friends, maintaining peer relationships etc. and hence help in knowledge sharing and cultural convergence (Jenkins 2008, Blanchard and Markus 2004; Wright 2010; Atkinson 2010).

E-learning is often associated with distance learning via materials found in the web. Thus students work on their own time from their own convenient place to communicate with teachers and other fellow friends via electronic forums, video conferencing, chat rooms, bulletin boards and other digital platforms. E-learning is thus the use of ICT used to deliver education where learners and instructors are divided by time and space (Keller and Cernerud,2002).

The use of e-learning techniques empowers individual to take charge of their own lifelong learning with endless chances of repetition (Bouhnik and Marcus, 2006; Fletcher and Artiles 2005). E-learning also helps both the learners and the institutions to reduce the cost of learning. While universities have to incur lower cost in provisioning the courses online and therefore raise their revenues (Ho and Dzung, 2010), students are also benefitted as they get easy access to different online courses at lower costs compared to costly courses in big named institutions.

Objectives of the study

- To study whether all years of college students homogeneously adopt e-learning
- To study whether adoption of e-learning depends on the cost of such learning technique
- To study whether adoption of e-learning is affecting (mainly improving) the grades of the college students

Research Methodology

Data

The research is based on a primary survey on 109 respondents, by means of a structured questionnaire, scattered across different degree colleges under University of Calcutta in Kolkata. The students selected are distributed across the three years of college (first year, second year and third year) and the survey is conducted in January, 2019 when all the candidates are almost near to their yearly exams by three to four months.

Sampling

Convenient sampling has been done.

Limitation of the study

- Data on college students from different years of their college are not uniformly distributed.
- Data across gender is not uniformly distributed.

Software used for analysis

- Microsoft Excel is used for calculating the results of Chi-square test for homogeneity and Chi-square test of independence. It is also used for the graphs drawn.

Analysis and Interpretation of the Data

Out of 109 students selected 41 are male and 68 female. 34 students belong to the first year of college, 33 students are from the second year of college and 42 students from the third year of college.

The respondents selected across gender and across different years in college are presented in Table. 1 below:

Table.1: Gender wise and Year-wise distribution of 109 respondents

Gender	No. Of Students	1 st year of College	2 nd Year of College	3 rd Year of College
Male	41	13	11	17
Female	68	21	22	25
Total	109	34	33	42

When asked about whether they own an e-learning device, 78% of the students affirmed the availability of their own e-learning devices as shown in Figure. 1.

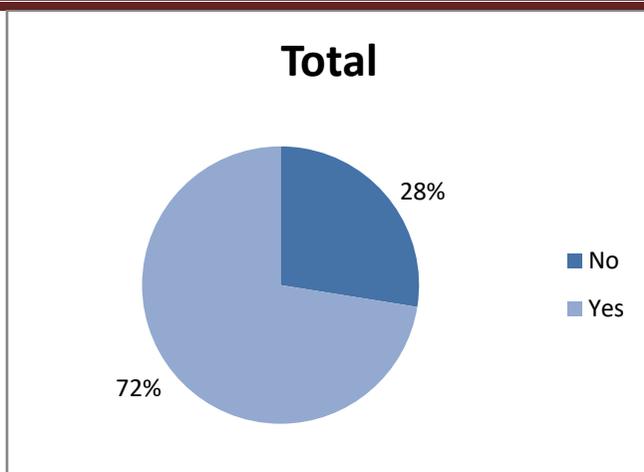


Figure.1: Availability of E-learning devices among college students (in %)

The types of e-learning devices owned by them varied from smart phones to desktop computers, laptop, iPads and other digital devices, with maximum of them owing personal smart phones, followed by desktops and laptops. Every student has a possession of more than one e-learning device.

Figure.2 shows the number of digital gadgets the students have access to.

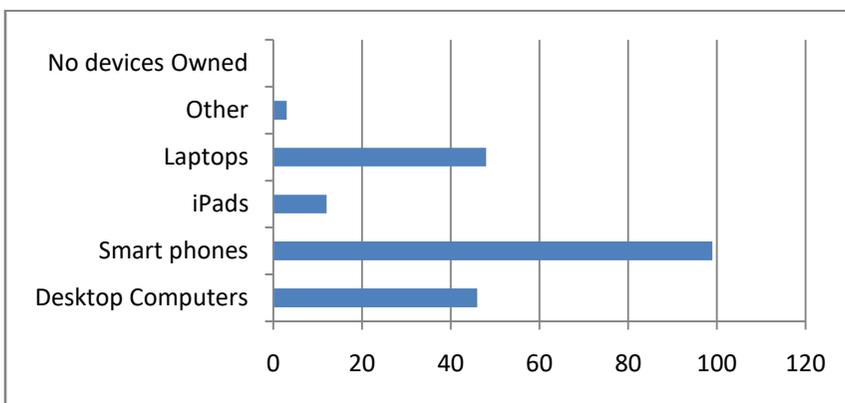


Figure.2: Types of E-learning devices owned by College Students

107 students out of 109 affirmed the availability and easy access to internet either on their smart phones or to their desktops, laptops, iPads etc. through paid wifi access in their home or free wifi access in their education institution (though not all the students have uniform availability of wifi access in their colleges).

First, a Chi-square test of independence is performed between low cost of e-learning and increasing adoption of e-learning. The null and the alternative hypothesis taken up for the purpose is –

H₁₀: Adoption of e-learning and low cost of e-learning is independent

H_{1A}: Adoption of e-learning and low cost of e-learning is dependent

The result of the test is shown in the following table, Table.2 –

Table.2: Result of the Chi-square test of dependence between adoption of E-learning and cost associated with E-learning

Chi-Square (calculated)	Degrees of Freedom	Critical value of Chi-Square Tabulated	Comparison	Decision Reached
13.162813829	4	9.488	13.162813829 > 9.488	H ₁₀ Rejected

Rejection of H₁₀ at 5% level of significance in the test undertaken affirms that low cost of availability of e-learning materials is the most influential factor among the college students behind the increasing adoption of e-learning.

A second Chi-square test of homogeneity is then performed to see whether students across all three years of their degree course in college adopt e-learning as a method of studying. The null and the alternative hypothesis laid down for the purpose are as follows –

H₂₀: Students across all years of college homogeneously adopt e-learning

H_{2A}: Adoption of e-learning not homogeneous across all years of college

The result of the test is given in the following table, Table.3 –

Table.3: Result of the Chi-square test of homogeneity on adoption of E-learning among all College Students

Chi-Square (calculated)	Degrees of Freedom	Critical value of Chi-Square Tabulated	Comparison	Decision Reached
1.367871	4	9.488	1.367871 < 9.488	H ₂₀ Accepted

The acceptance of the null hypothesis in this case suggests that students across all the years in college prefer to adopt e-learning. When asked about what is the form of e-learning they prefer to use the most, maximum of them (57%) answered that they prefer to supplement materials of e-learning with the college curriculum they are provided. Only 8% of them are not interested in e-learning. Rest 35% of them prefer to depend mainly on e-learning. The statistics of the pattern is depicted in figure. 3.

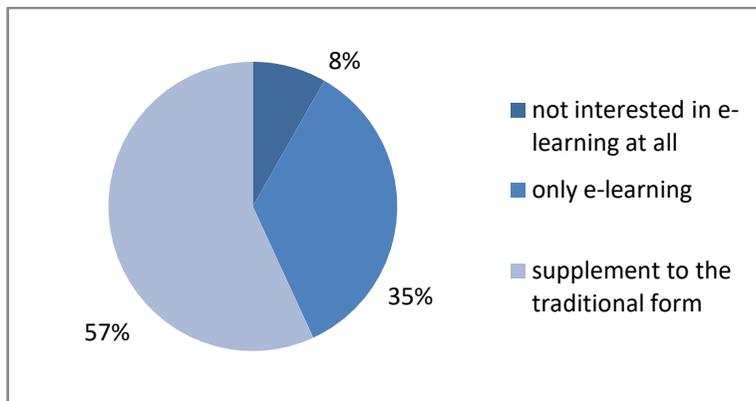


Figure.3: Forms of E-learning undertaken by College Students (in %)

From the above two tests it can be suggested that students mostly prefer to supplement e-learning owing to wide availability of numerous resources in one place and low cost of gathering such innumerable materials which would otherwise cost them more than the per month average cost of internet accessibility.

When enquired about what purpose they use e-learning for, they responded in the following pattern, as shown in Figure.4, showing that learning new things and preparation of projects are the most common thing they use e-learning materials for. They also prefer e-learning materials because it helps them find solution to the problems they face daily related to their college curriculum and other homeworks.

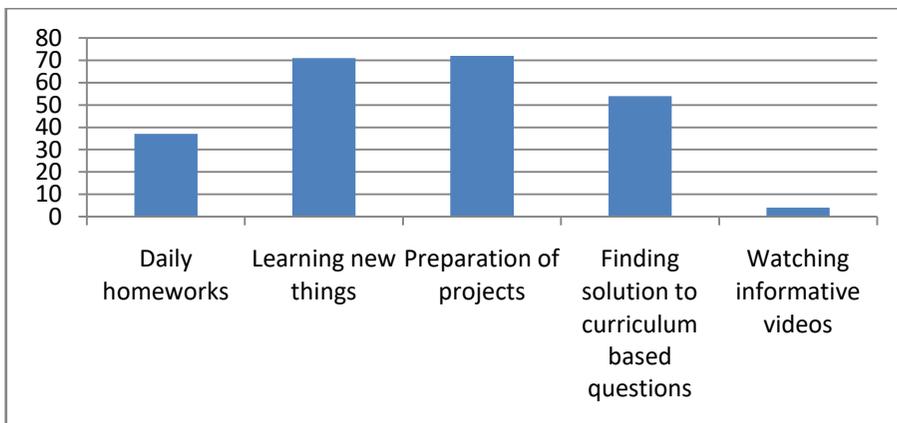


Figure.4: Purpose of adopting E-learning among College Students (in %)

The third test undertaken is to test whether increasing adoption of e-learning is improving the grades of the students. A Chi-square test of independence is conducted to affirm/negate the proposition and the null and alternative hypotheses laid down for the purpose is as follows –

H₃₀: Adoption of e-learning and grades of students are independent

H_{3A}: Adoption of e-learning and grades of students are dependent

The result of the test is shown in the following table, Table.4 –

Table.4: Result of the Chi-square test of independence between adoption of E-learning and grades of the College Students

Chi-Square (calculated)	Degrees of Freedom	Critical value of Chi-Square Tabulated	Comparison	Decision Reached
18.25955831	10	18.307	18.25955831<18.307	H ₃₀ Accepted

This result has to be interpreted with much cautious. As normally expected that e-learning will improve the grades of the students undertaking it, but as the result from the survey shows that in this case the use of e-learning by the students has not affected their grades or they are unsure about whether e-learning has any effect on their grades at all. If we however closely observe the calculated chi-square value and compare it with the critical chi-square value it is found that the calculated value and the tabular critical value do not have a significant difference, showing that a little more adoption of e-learning in the future years can possibly have positive effect on the grades of the students .

The students are also enquired about the advantages and disadvantages of e-learning according to them. The possible points of advantages of e-learning were specified in the survey consisting of the following factors:

- E-learning promotes new ideas
- Lowers cost of study
- Possibility of repetition of illustration on a topic
- Freedom in choosing study materials
- No fixed tenure of learning
- Easy access to information as and when required
- All types of information availability under single umbrella
- Learning from own home at convenience

The responses on the above categories are recorded and illustrated in the following figure, Figure.5 –

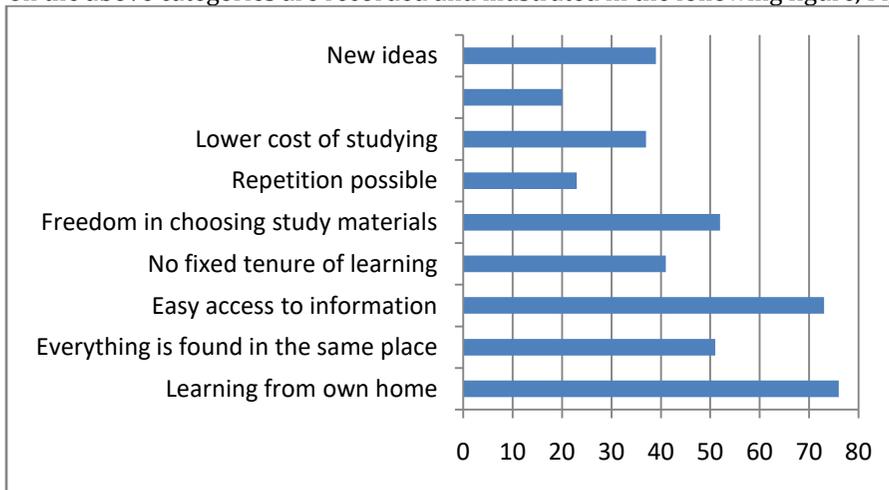


Figure.5: Advantages of E-learning according to the College Students

Learning from own home at one’s convenience, easy access to information, possibility of finding all relevant information in one place freedom in choosing one’s own learning materials and possibility of grabbing new ideas beyond the scope of the college curriculum are the most influential factors contributing to the increasing adoption of e-learning among the students considered in the survey.

Nothing however comes easily without shortfalls. In order to understand the shortfalls of the process of e-learning, the students were again asked to respond on a specific set of factors presented to them on disadvantages of e-learning. The factors were the following:

- E-learning lowers one’s creativity in solving problems
- Increasing adoption of e-learning is resulting in the loss of traditional mode of classroom based learning
- Unhealthy to work for long hours on electronic gadgets
- Loss of incentive to learn as there is no compulsion of learning
- Quarantined at home results in loneliness and depression
- No interaction with the outer world
- No direct communication with friends
- No face to face doubt clarification with teachers

The responses on the above categories are recorded and illustrated in the following figure, Figure.6.

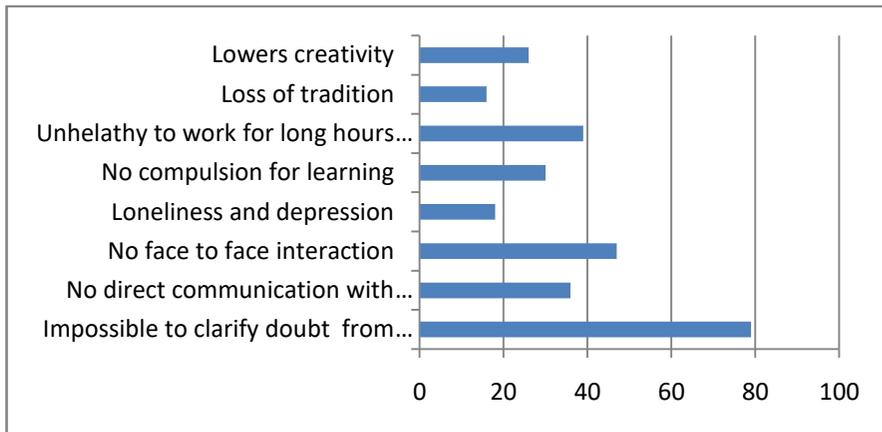


Figure.6: Disadvantages of E-learning according to the College Students

Despite of all the disadvantages they however agree that e-learning is helpful at the end of the day. 73% of the students confirm that e-learning proves to be useful to them. While 23% are not fully ascertained about the usefulness of e-learning, only a meagre 4% says e-learning is not of much use to them. The result on the usefulness on e-learning is shown in Figure.7.

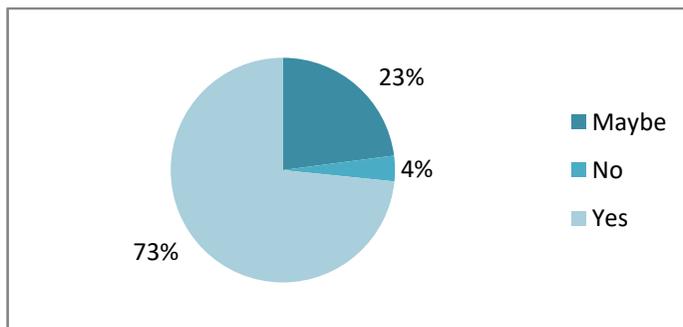


Figure.7: Usefulness of E-learning according to College Students

The students were also asked about whether e-learning is a kind of short-cut to them to traditional mode of learning, almost 80%of them affirmed the proposition showing that in order to keep up with the fast pace of today’s life they are increasingly adopting e-learning. The result of the enquiry is shown in Figure.8.

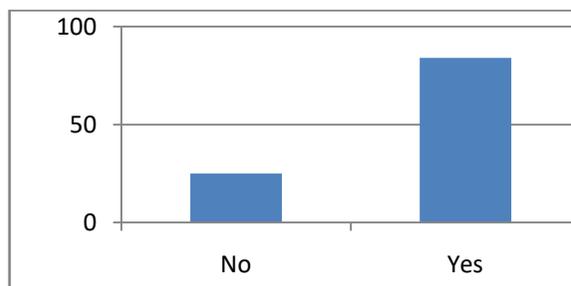


Figure.8: E-learning – A short-cut to traditional mode of learning (in %)

Since e-learning is helping students with a short-cut in today's world of rat race and fast learning, they are either confident or planning to adopt more e-learning in the future years. More than 50% of the students are confident about adopting e-learning as their future mode of learning while almost 30% of them are planning to substitute their present mode of learning with e-learning. The result on possibility of future adaptability of e-learning is provided in Figure.9 below.

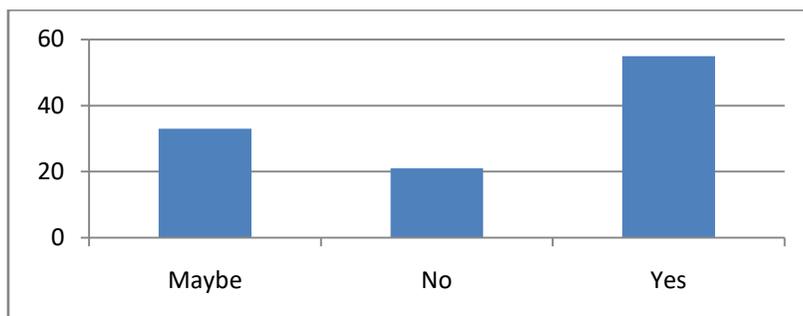


Figure.9: Possibility of future adaptability of E-learning among College Students (in %)

Conclusion

The study shows that the effect of digitalization of education has increased and has the potential of further increasing the phenomena of e-learning as a substitute to traditional mode of learning. Increased internet penetration at low cost has made the adoption of e-learning among college students more popular. Students across all the years in their college accept that e-learning gives them a scope to have access to unlimited source of information that helps them to learn new things beyond their college curriculum.

The study undertaken here however covered degree colleges in the urban areas in the city of Kolkata. What remains to be seen is whether the rural areas in places adjacent to Kolkata have a significant response on e-learning. In rural areas of the country there is very low teacher-student ratio with limited infrastructure. The real challenge of digitalizing education lies in levelling the playing field of all the students and learners. Another crucial point to keep in mind is that though e-learning is very useful to today's learners, one must at the same time learn individual time management. In today's age of digitalization, we feel an acceleration of time. The hyperconnected world of IoT, with mobile phones, laptops, iPads and all other electronic devices, is pouring on us truckload of information every second. The students and learners today thus must find out for themselves the best way of e-learning in order to enhance their learning experience.

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TO STUDY SECTORIAL VOLATILITY DURING VARIOUS BLACK SWAN EVENTS IN THE INDIAN STOCK MARKET

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ABSTRACT: *Black swans were presumed to be non-existent until they were discovered by Europeans in Western Australia. The black swan theory derived from the popular myth of their non-existence refers to falsification of a set system of thoughts by a wild inexplicable event with significant ramifications that humans attempt to rationalize with benefit of hindsight. This combination of low predictability and large impact makes the Black Swan a great puzzle, but that is not yet the core concern. Add to this phenomenon the fact that we tend to act as if it does not exist, but almost all "social scientists" that, for over a century, have operated under the false belief that their tools could measure uncertainty. For the applications of the sciences of uncertainty to real-world problems have had ridiculous effects. Any portfolio manager will say the following for his definition of "risk," and odds are that he will supply you with a measure that excludes the possibility of the Black Swan-hence one that has no better predictive value for assessing the total risks than astrology (we will see how they dress up the intellectual fraud with mathematics). This problem is endemic in social matters.*

Managerial implications the research paper has observed the trends of volatility of stock returns during the period 2009 - 2014 and its implications for the Indian capital markets. The findings of the research have several managerial implications for stock market investors that contribute to its dynamics. The stakeholders can make their investment strategies based on results of the research, as it highlights the significant factors which influence returns and its volatility.

Keywords: *Black Swans, Volatility, Risk, Stock returns, Investment Strategies, Returns.*

Introduction

Indian stock markets are mostly driven by sentiments of investors/traders. The Efficient Market Hypothesis (EMH) introduced by Fama (1965) believes in market inefficiency. In India we cannot solely apply this hypothesis as it is believed that markets have already priced in valuation even before an event is occurred. There are several events that impact the life cycle of stock price movements that can never be predict. This is the reason why EMH failed to explain various market anomalies like 1987 crash, the Dot.com bubble of 1990s etc (P.K. Naik and P. Padhi, 2015). According to Nassim Taleb(2007), these events were called the 'Black Swan events'. Such events cannot be predicted by investment analyst or any trading algorithms.

It is really important to understand the impact of these events as several crores are lost or made in a short span. The post mortem analysis of these events would give an insight into how the portfolios of investors need to be rebalanced in anticipation of black swan events. The sentiment can be positive or negative, understanding these consequences of both these sentiments would help the industry in risk mitigation, alpha creation and better portfolio management practices.

Statement of the Problem

The different approaches in picking up stock like top down approach and bottom up approaches have served their relevance in helping pick the right stock. However, these methods don't help in considering the future consequences of certain unforeseen events that affect various sectors. The importance of studying the level of sentiments and their dimension is to ensure that portfolio drawdown is minimum at any point in time. This not only helps investors protect their wealth but as practice, investment advisors are also bound to gain on the service they deliver to their client. It also provides an insight into the very less explored Indian stock market sentiments for various events. So far, a lot of researches are been undertaken in understanding global events in India. However, through studies it has been proved that the weightage of domestic factors is higher in determining the trajectory of our indices like Sensex/Nifty 50.

More importantly, it is bound to give insights into the behavioral finance aspect of knowing how the market is driven. It specifically addresses these research questions:

1. What sentiment (positive and negative) is dominant in the happening of a Black Swan event?
2. Can the degree of impact be quantified both in terms of gains and losses?
3. What are the current methods and techniques that can help in identifying the inflection (change) point?

Objectives

The long-term objective of the research is not to predict the timing of the Black Swan event but to study the impact of such event for better preparedness. Preparedness will differ from investors to investors. Some investors can choose to reserve certain part of their portfolio for immediate actions at the happening of the event while others would prefer to make spontaneous changes to their portfolio. In particular the study has the following sub-objectives:

1. Identification of sectors those are least/most volatile to market news;
2. Analyze the sector that has the least draw down on stocks during the happening of the event.
3. A comprehensive study on an emergence of a trend/pattern at the time of disruption in the market.
4. The frequency of happening of such events in comparison with other emerging countries.

Literature Review

In the past various economists have figured that studying such events is essential to understand the ever-changing pulse of markets. In this field, Brown and Cliff (2004) have found that investor sentiments are correlated with return generation based on particular event.

Baker and Wurgler (2006, 2007) have found that the returns are normally low when sentiments are high and vice versa. They also built a sentiment index to measure the behavioral traits of investors at predetermined periods. Post these analyses several studies have been undertaken to build relationship between stock returns and sentiment index. Yu and Yuan (2011) observed the movement of prices using three important parameters - investor sentiments, volatility and returns. He has concluded that expected returns are positively related to volatility when the sentiment is low but is generally high during high sentiment period. Chang et al. (2010) observed that when volatility rose from investor sentiments the risk that prevailed was idiosyncratic risk i.e. affects only small asset classes. This risk can be mitigated by diversification.

Parallely, there is a statistical theory that predicts extreme price values in financial markets known as Extreme Value Theory (EVT). Mathematically defining such extreme movement in price as the occurrence of Black Swan events is the work of Manhire(2018). It speaks about how it's possible to approximate the magnitude of such a rare event and also that fact that one cannot predict the occurrence of the rare event with meaningful degree of certainty. It is also observed that the price differential not only happens in the equity market but debt market is also equally affected. In the article Black Swan in the Money Market (John B. Taylor and John C. Williams) writes about how the spreads between overnight interbank rate and London interbank offer rates (LIBOR) jumped during 2007-2008. This increased the cost of borrowing of loans which had a domino effect on the economy. This can be taken as an indirect effect the amplified the negative sentiments of investors during that event.

Also, Zhao et al. (2011) point out that the movements of stock market are determined by enormous factors including overall economy, inflation, trading strategies, return on equity, market sentiment, and company itself. Also, it's interesting to mention the black swan theory with its impact on the stock prices.

The article by Estrada and Vargas (2012), in which the authors investigate whether beta is a useful tool for selecting portfolio assets. Estrada and Vargas conclude that by investing in high-beta funds after the market has decreased, and in low-beta funds after the market has increased, excess return is generated. However, as shown by Fama and French (1992) beta is not a flawless measurement of risk as they find little to no positive relation between market beta and average stock returns.

Estrada and Vargas find support in both Chan and Lakonishok (1993) and Grundy and Malkiel (1996) who examine the usefulness of beta and find that one cannot yet reject the CAPM, they also investigate the accuracy of beta themselves and find that it is useful. Estrada (2009a) examines the impact Black Swans had on the return generated from the Dow Jones Industrial Average between 1900 and 2006, as well as from 1990 to 2006. The author finds that extreme trading days are more frequent than what is expected under the normality assumption, thereby concluding that daily return data deviates from the normality assumption, and that Black Swans do have an extreme impact on return. Estrada (2009b) does the same examination in emerging markets and international markets (Estrada, 2008) and arrives at the same conclusion.

Estrada (2009a) also stresses the virtually non-existent possibility of predicting the outcome of these days, confirming Taleb's (2007a) theory of adjustment and profit from the ensuing reversion.

High volatility of stock prices in financial markets is generally caused by the black swans. They are the various events that have a significant impact on future predictions and causes high volatility on stock market returns (Marh and Pflleiderer, 2012). Thus, calculation of stock prices are based on expected future cash flows generated by asset which are highly dependent by significant events - black swans (Mahmood et al., 2014).

In his work Boudoukh (2013) states that a basic tenet of financial economics is that asset prices change in response to unexpected fundamental information. When unexpected fundamental information arrives the volatility of stock prices is 150% higher than in the normal days. The periods with high volatility are found to be associated with important events in each country. The large changes in volatility seem to be related to important country-specific political, social and economic events (Aggarwal et al., 1999). By Tradeking (2015) there are arguably no better examples of how investment news can impact stock prices than the recent crisis in financial services stocks:

- On September 11, 2008 Lehman Brothers (LEH) announced it was actively seeking a buyer. Right after the announcement, its shares plummeted 45%. Lehman's announcement made it clear they were having troubles finding a suitor. As was expected, on September 15 Lehman filed for bankruptcy, the largest bankruptcy in U.S. history.
- In the same week, insurer American International Group (AIG) admitted that its balance sheets were similarly threatened by the subprime mortgage crisis. Between September 10 and September 16, when the government announced a feverishly constructed rescue plan for the insurer, AIG's stock plunged about 80%.

Adams and Thor (2014) illustrate the existence of black swan events and their historical frequency because the recent financial history has witnessed a number of extreme, and often severe events that could not be predicted based on prior events.

According to the theory of mean reversion, after a negative Black Swan hits the market, it will tend to revert to a long-term mean (Fama& French, 1988). Since stocks with high beta values tend to move more relative to the market, we will then invest in a portfolio consisting of ten of the stocks with the highest average beta values hoping for a higher portfolio return than that of the market index. We will hold the portfolio until the next Black Swan occurs. After a positive Black Swan we will invest in a new portfolio consisting of ten of the stocks that have had the lowest correlation with the market, i.e. low beta stocks, to minimize the losses as the market declines. Since beta is a relative measure that is under constant change, we will recalculate the beta values looking back over a period of 60 days before the occurrence of every Black Swan, excluding the actual day of the Black Swan. Based on the recalculated beta values, new portfolios will be created and investments will be made after every new Black Swan, in accordance to our investment strategy.

This research article is initiated with the purpose using various existing techniques to access price movements during Black Swan events specifically in the Indian scenario. India being a growing country and only less than 25% of the population invested in the stock market, the information that would be arrived at would be of great help to the general masses and future prospective investors. It would also give confidence to new investors to enter the markets with caution and understanding the risk appetite they are capable of taking.

Research Methodology

I. Research Design

The research undertaken is of the nature of descriptive and causal. The primary research method is to collect data points for 30 companies of Sensex and access for drastic changes in volatility and price movements. Such time periods would be separated out and further assessed for quantum of change and event confirmation. Once the time period fits into the preview of a Black Swan event, all the stocks for that particular period will be taken and analyzed for degree of fluctuation of volatility and returns. A Sectorial study would be undertaken with the previous process to see if there is similarity in movement in one particular sector. Finally, a statistical hypothesis testing would be conducted to check if the deduction of Black Swan event affecting the price movement is true or not.

II. Sample Size - Price movement of 30 Sensex companies

III. Sample Frame - Monthly stock data from 4th March 2009 to 22nd February 2019

IV. Nature of Data Collection - Secondary data collected from BSE website and other stock related websites.

Data Collection

I. Data Source - Secondary Data from BSE website

II. Performance Evaluation

Normal distribution

When we look at the data of daily returns it is important to take the distribution into consideration. A set of data that is normally distributed suggests that both sides of the mean are symmetric which implies that the frequencies of average values are high compared to extreme values. When a population is normally distributed it typically takes the shape of a bell, a so-called bell shaped curve. This shape of the normal distribution can be altered by skewness and kurtosis that forces the distribution towards another shape depending on the degree of extreme values and whether they are weighted towards more positive or negative values (Bodie et al., 2011). We will use a Jarque-Bera test to see if our data suffers from skewness and/or kurtosis and hence non-normality.

Skewness

A perfectly normally distributed set of data implies that both sides of the mean, positive and negative, are illustrated as the exact mirror images of one another. The measure of symmetry between each side of the mean, or more accurately the lack of symmetry, is called skewness. A set of data that is positively skewed has a longer tail extending towards higher values in the positive domain or to the right in the bell-shaped curve compared to the left hand side or negative domain of the mean. A negatively skewed set of data has a longer tail extending towards more negative values on the left hand side of the mean compared to the right hand side or positive domain of the mean (Information Technology Laboratory, n.d.). By analyzing the skewness of a data set, better estimations can be obtained upon whether some given point in the data set will take a higher or lower value than the mean.

Positively skewed data takes a positive value and negatively skewed data takes a negative value whereas a standard normally distributed set of data has zero skewness (Bodie et al., 2011).

Skewness is computed as follows:

$$Skewness = \frac{1}{n} \sum_{i=1}^n \frac{[(r_i - \bar{r})]^3}{\sigma^3} \quad (3.1)$$

Where n is the total number of observations, r_i are the individual daily returns, \bar{r} is the overall average return and σ^3 is the standard deviation to the power of 3.

Arithmetic mean

The arithmetic mean is what is commonly referred to as “mean” or “average” and is simply computed by taking the sum of all observed values divided by the number of values observed. Computing the arithmetic mean will yield a comparison between the daily return of the portfolio strategy and the benchmark index.

The arithmetic mean is calculated as:

$$\bar{X} = \frac{\sum X}{N}$$

Where \bar{X} is the arithmetic mean, X is observed value and N is total number of values observed.

Beta

We will use beta as a tool in our investment strategy. The beta values for the active and passive portfolio will also be a part of the performance evaluation, where we will discuss beta as a measure of risk, and compare the beta values between the active and passive portfolio strategy. The beta of a stock can be estimated as

$$\beta_i = \frac{Cov(R_M, R_i)}{Var(R_M)}$$

Where $Cov(R_M, R_i)$ is the covariance between the market return and returns of asset i , and $Var(R_M)$ is the variance of the market return.

Standard deviation

Standard deviation measures how much a data population deviates from its mean, both on the positive and negative side. A higher spread from the mean implies a higher standard deviation. The measure is based on historical volatility and is calculated by taking the square root of the variance.

Hypothesis

Null Hypothesis: Black Swan event does not cause increased volatility and price deviation.

Alternative Hypothesis: Black Swan event causes increased volatility and price deviation.

Assumptions:

- Price deviation refers to a sudden shift in the trajectory of stock prices after the occurrence of the event.
- Volatility is measured in Standard deviation. Increased volatility can be defined as a measure anywhere more than twice what persisted before the event.
- The test would be undertaken for 30 stocks of Sensex. It is done so because Sensex covers all the industry and the major capitalized scripts in the Indian stock market.
- Check for ‘Black Swan’ event would be undertaken using Extreme Value Theory (EVT).

Limitations

Even though suggested as a criterion for Black Swans, we will not try to look back at historical announcements to evaluate if the events were unimaginable. This task would pose too great of a historic analysis for the scope of this thesis and we would also run the risk of excluding determining factors and/or including irrelevant factors. Instead we use a simplified, technical, definition of Black Swans as explained in the theory section. Neither the return of the BSE 30 nor the individual stocks includes dividends as the inclusion of dividends from thirty corporations would be a laborious task. Moreover, we will not be taking transaction costs into consideration in this thesis. The reason for this being that during the time frame of 21 years, the transactions we are involved in are too few to have a significant impact on the result.

Outcome of the Study

The research undertaken would help investors and financial services sector to take precautionary measures will doing asset allocation and building investment solutions. In a world where investments are also based on algorithms. This research is expected to enhance the modeling process of various investment algorithms and help in better decision making.

Procedure

Identifying Black Swan Event:

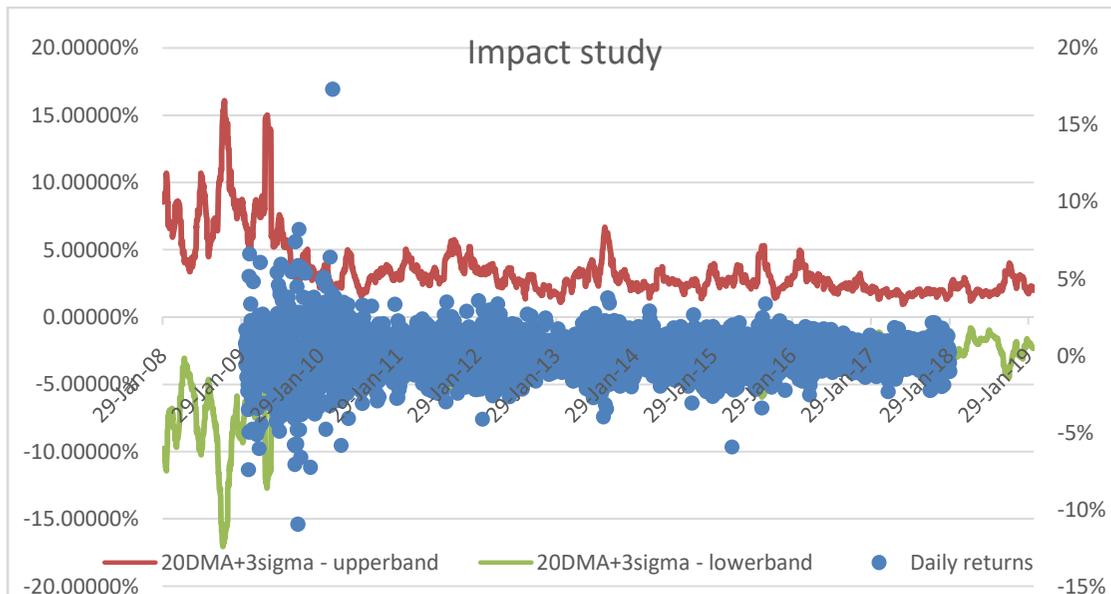
- Sensex data (Jan 2008 to Feb 2019) - was taken to conduct the test for checking of extreme values (movements).
- Standard deviation and Mean of daily returns were computed for the whole data from 2008 to 2019. The Std.dev was 1.39% and Mean 0.03%
- In order to find the extreme values Gaussian distribution was fitted and the values at extreme tails were identified using $Mean+3*Std. dev$ (for positive side) and $Mean-3*Std.dev$ (for negative side). Such extreme values were identified as “Black Swan” Events.

Study of Impact (Positive vs Negative):

The data was further studied to check for impact of the “Black Swan” event on the economy if it’s positive or negative. For this the following steps were followed:

- 20 day moving average and 20 dayStd.dev was found to smoothen out the upper and the lower band curves that predicts accuracy of returns falling within that plane.

- The data was plotted against the daily returns data and it was found that majority of the time it was negatively skewed (please see table below).
- This indicates that the high impact event called “Black Swan usually affects the Indian stock market in a negative way.



Conclusion

The data observed proved that predicting “Black Swan” event is difficult as the periodicity of the event is random. However, it can be said with on happening of one such event that markets are bound to reactive negatively 98% of the time. There are also no prolonged impacts as the sharp impact gradually fades in an average period of 14-15 days post which the markets are usually observed to be very less volatile. After a steady period of range boundedness it is seen to rally for a short period of time.

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Annexure

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Date	Close	Daily returns	Standard Deviation	Mean		Upper band	Lower band (3 sigma)	Upper band (2 Sigma)	Lower band (2 sigma)	Moving average of return	Moving average of SD	20DMA+3sigma - upperband
2	01-Jan-08	20300.71					4.19%	-4.13%	2.80%	-2.74%			
3	02-Jan-08	20465.3	$= (B3-B2)/B2$	$=STDEV(C3:C2762)$	$=AVERAGE(C3:C2762)$			-4.13%	2.80%	-2.74%			
4	03-Jan-08	20345.2	-0.59%				4.19%	-4.13%	2.80%	-2.74%			
5	04-Jan-08	20686.89	1.68%				4.19%	-4.13%	2.80%	-2.74%			
6	07-Jan-08	20812.65	0.61%				4.19%	-4.13%	2.80%	-2.74%			
7	08-Jan-08	20873.33	0.29%				4.19%	-4.13%	2.80%	-2.74%			
8	09-Jan-08	20869.78	-0.02%				4.19%	-4.13%	2.80%	-2.74%			
9	10-Jan-08	20582.08	-1.38%				4.19%	-4.13%	2.80%	-2.74%			
10	11-Jan-08	20827.45	1.19%				4.19%	-4.13%	2.80%	-2.74%			
11	14-Jan-08	20728.05	-0.48%				4.19%	-4.13%	2.80%	-2.74%			
12	15-Jan-08	20251.09	-2.30%				4.19%	-4.13%	2.80%	-2.74%			
13	16-Jan-08	19868.11	-1.89%				4.19%	-4.13%	2.80%	-2.74%			
14	17-Jan-08	19700.82	-0.84%				4.19%	-4.13%	2.80%	-2.74%			
15	18-Jan-08	19013.7	-3.49%				4.19%	-4.13%	2.80%	-2.74%			
16	21-Jan-08	17605.35	-7.41%				4.19%	-4.13%	2.80%	-2.74%			
17	22-Jan-08	16729.94	-4.97%										
18	23-Jan-08	17594.07	5.17%										
19	24-Jan-08	17221.74	-2.12%										
20	25-Jan-08	18361.66	6.62%										
21	28-Jan-08	18152.78	-1.14%										
22	29-Jan-08	18091.94	-0.34%										
23	30-Jan-08	17758.64	-1.84%										
24	31-Jan-08	17648.71	-0.62%										
25	01-Feb-08	18242.58	3.36%										
26	04-Feb-08	18660.32	2.29%										
27	05-Feb-08	18663.16	0.02%										
28	06-Feb-08	18139.49	-2.81%										
29	07-Feb-08	17526.93	-3.38%										
30	08-Feb-08	17464.89	-0.35%										
31	11-Feb-08	16630.91	-4.78%										
32	13-Feb-08	16696.01	0.39%										
33	13-Feb-08	16696.01	0.39%										

HEALTH CARE WASTE ABATEMENT THROUGH TRAINING, DEVELOPMENT AND CONSCIENTIZATION IN THE ERA OF VUCA – A DESCRIPTIVE STUDY

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ABSTRACT: For more than 20 years, the term “VUCA” has been used to describe the volatility, uncertainty, complexity and ambiguity that can be created during military engagements and strategic business planning. Setting the stage for strong management and leadership practices, these conditions have long shaped organizations’ capacity to manage risks, foster change, solve problems and strategically plan for the future. And now, the concept is gaining new relevance to characterize the current environment and the leadership required to navigate it successfully. Unpredictable events happening outside an organization can be negative or positive, but either present greater VUCA, which makes it more difficult for leaders to make decisions. This also has an effect on medical waste management along with other areas. Annually an estimated 16 billion injections are utilized around the world, but not all are properly disposed of afterwards. Open burning and incineration of health care wastes can, under some circumstances, result in the emission of dioxins, furans, and particulate matter. Measures to ensure the safe and environmentally sound management of health care wastes can prevent adverse health and environmental impacts from such waste including the unintended release of chemical or biological hazards, including drug-resistant microorganisms, into the environment thus protecting the health of all in the society. Health-care activities defend and restore health and save lives. But what about the waste and by-products they generate? This paper is to investigate qualitatively and to dig deeper to the root causes of health care waste in this world of VUCA to make it more practical, more precise and more situation-centric.

Keywords: VUCA, Health Care Waste Management, unpredictable

INTRODUCTION: VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity. That is, VUCA World is a condition of the world where we live now, has made such speedy changes, and is very fast, unpredictable, which is influenced by various factors which conditions are difficult to control where views on truth and reality become very subjective.

ELEMENT ANALYSIS OF VUCA: The element analysis of VUCA works to enhance the strategic significance of VUCA foresight and insight as well as the behaviour of groups and individuals in organizations. It discusses systemic failures and behavioural failures, which are characteristic of organisational failure.

VOLATILITY: V denotes Volatility in VUCA. Here, Volatility is the sum total of the nature and speed of change forces, change catalysts and the nature and dynamics of change. Volatility refers to the different situational social-categorization of people due to specific traits or reactions that stand out during that particular situation. When people act or react based on a specific situation, there is a possibility that the public categorizes them into a different group than they were in a previous situation. These people might respond differently to individual situations due to social or environmental cues. The idea that situational occurrences cause certain social categorization is known as volatility and is one of the main aspects of the self-categorization theory. Sociologists use volatility to understand better how stereotypes and social-categorization is impacted based on the situation at hand as well as any outside forces that may lead people to perceive others differently. Volatility is the changing dynamic of social-categorization in a set of environmental situations.

U IS FOR UNCERTAINTY: Uncertainty in the VUCA framework is almost just as it sounds: when the availability or predictability of information in events is unknown. Uncertainty often occurs in volatile environments where there are the possibilities for surprise, the intellect of awareness, lack of predictability, and knowledge of issues and events that are complex in structure involving unanticipated interactions that are significant in uncertainty. Uncertainty may occur in the intention to imply causation or correlation between the events of a social perceiver and a target. Situations where there is either a lack of information to prove why a perception is in occurrence or informational availability but lack of causation are where uncertainty is salient. The uncertainty component of the framework serves as a grey area and is compensated by the use of social categorization and/or stereotypes.

C = COMPLEXITY: The accumulation of forces, the multiplication of issues, no cause-and-effect chain and confusion that surrounds association. Complexity is the “C” component of VUCA that brings up the interdependence and inter-connectivity of multiple components in a system. When conducting research, complexity is a component that scholars have to keep in mind. The results of a deliberately controlled environment are unexpected because of the non-linear interaction and interdependencies within different groups and categories. In a sociological aspect, the VUCA framework is utilized in research to understand social perception in the real world and how that plays into social categorization as well as stereotypes a single identity of a target while keeping all other identities constant.

A = AMBIGUITY: The uncertainty of reality, the chance for misreads, and the mixed meanings of conditions; cause-and-effect confusion. Ambiguity is the “A” component of VUCA. This indicates to when the general meaning of something is unclear even when an appropriate amount of information is provided. Sociologists generally use ambiguity to determine how and why an answer has been developed. Sociologists focus on details such as if there was enough information present, and did the subject have the full amount of knowledge necessary to make a decision. Ambiguity leads to people assuming an answer, and many times this leads assuming ones race, gender, and can even lead to class stereotypes.

So, here the particular meaning and relevance of VUCA relates to how people take into account various situations under which they take key decisions and solve problems in the genre of medical waste management. Thus, the premises of VUCA tend to shape the whole system of bio-medical waste management capacity into:

- Concept building the issues that will shape in future.
- Comprehend the consequences of issues and actions
- Identification the Interdependence of Variables
- Preparedness for alternate challenges and realities
- Infer and reach out to relevant opportunities
- Interventions

THEORITICAL BACKGROUND: From the emergence of New Public Management in 1990s, there is a need for more experiment in the field of public administration. Since, public administration has been acting as management. So, we need more experimental ways in research to novel, up-to-date and dynamic concepts into public administration related problems. Bio-medical waste and related health problems which fall into developmental administration and ecological system theory must take into consideration of a new leadership theory by suitable application of each components of VUCA.

This is mainly a qualitative study which takes hints from comparative system analysis and leadership theory of Warren Bennis and Burt Nanus. This can be used to develop a vision for your organisation based on values and beliefs and not management-speak. Use Bennis transformational theory to develop a vision for your organization based on values and beliefs and not management-speak. Following interviews with a range of leaders Warren Bennis and Burt Nanus identified four strategies that leaders should use when trying to transform their organizations. These are shown below.

- Goal 1: Develop a clear and understandable vision for the organization
- Goal 2: Act as social architects for the organization by changing the organizational culture
- Goal 3: Create trust throughout the organization by making explicit their values and views
- Goal 4: Identify their own strengths and weaknesses and encourage their followers to do the same.

DEFINITION: HEALTH CARE WASTE: The waste generated while processing healthcare duties has a greater chance for infection and injury than any other type of waste limited knowledge of handling of healthcare waste may lead to serious health problems which has a huge impact on the environment as well.

DIFFERENT KIND OF MEDICAL WASTE:

The below items explains how and what medical wastes can be

Infectious waste: any hospital discarded item can be a potential infections waste, be it blood, cultures, infected swabs or bandages

Pathological waste: human tissues, organs or fluids, body parts and contaminated animal carcasses;

Sharps waste, Needles: syringes, disposable medical tools, etc.

Chemical waste: laboratory preparations solvents, disinfectants, sterility and heavy metals contained in medical

Pharmaceutical waste: expired, unused and contaminated drugs and vaccines;

Cytotoxic waste: highly hazardous products which are prone to mutagenicity, teratogenicity or carcinogenicity, such as cytotoxic drugs used in cancer treatment and their metabolites;

Radioactive waste: substances which are contaminated by radionuclides including radioactive diagnostic material or radio therapeutic materials; and

Non-hazardous or general waste: waste that does not pose any particular biological, chemical, radioactive or physical hazard.

THE MAJOR SOURCES OF HEALTH-CARE WASTE ARE:

- hospitals and other health facilities
- laboratories and research centres
- mortuary and autopsy centres
- animal research and testing laboratories
- blood banks and collection services
- nursing homes for the elderly

High-income countries generate on average up to 0.5 kg of hazardous waste per hospital bed per day; while low-income countries generate on average 0.2 kg. However, in under developed countries, health-care waste is often not segregated into hazardous or non-hazardous wastes making the real quantity of hazardous waste much higher.

PROBLEM AREA: HEALTH RISKS:

Health care can affect people working closely around it since it may have harmful microorganisms or drug-resistant microorganisms. Adverse health outcomes associated with health care waste and by-products also include:

- open wounds;
- toxic exposure to pharmaceutical products, in particular, antibiotics and cytotoxic drugs released into the surrounding environment, and to substances such as mercury or dioxins, during the handling or incineration of health care wastes;
- chemical burns arising in the context of disinfection, sterilization or waste treatment activities;
- air pollution arising as a result of the release of particulate matter during medical waste incineration;
- thermal injuries occurring in conjunction with open burning and the operation of medical waste incinerators; and
- Radiation burns.

ENVIRONMENTAL IMPACT ASSESSMENT OF HEALTH-CARE WASTE:

- ❖ Release of pathogens and harmful pollutants into the environment can be a side effect when healthcare waste is treated
- ❖ The disposal of untreated health care wastes in landfills can lead to the contamination of drinking, surface, and ground waters if those landfills are not properly constructed.
- ❖ The treatment of health care wastes with chemical disinfectants can result in the release of chemical substances into the environment if those substances are not handled, stored and disposed in an environmentally sound manner.
- ❖ Burning of waste has been widely practised, But there are challenges around availability of proper resources required to burn waste effectively else there is a risk of polluting the environment and in the generation of ash residue.
- ❖ Only modern incinerators operating at 850-1100 °C and fitted with special gas-cleaning equipment are able to comply with the international emission standards for dioxins and furans.
- ❖ There are different other techniques available such as microwaving, autoclaving, steam treatment integrated with internal mixing, which minimize the formation and release of chemicals or hazardous emissions should be given consideration in settings where there are sufficient resources to operate and maintain such systems and dispose of the treated waste.

WASTE MANAGEMENT: WHY NOT YET A SUCCESS:

There are multiple factors at play which is acting as a barrier in the path of success

- Lack of awareness
- Inadequate training in proper waste management,

- Absence of waste management and disposal systems,
- Insufficient financial and human resources and the
- Nil priority given to the topic
- Lack of appropriate regulations in many countries

ROAD TO SUCCESS:

The management of health-care waste requires high attention and diligence to avoid unpleasant health outcomes associated with poor practice, including exposure to infectious agents and toxic substances.

KEY ELEMENTS IN IMPROVING HEALTH-CARE WASTE MANAGEMENT ARE:

- Promoting practices that reduce the volume of wastes generated and ensure proposer waste segregation;
- Developing strategies and systems along with strong oversight and regulation to incrementally improve waste segregation, destruction and disposal practices with the ultimate aim of meeting national and international standards;
- Where feasible, favouring the safe and environmentally sound treatment of hazardous health care wastes over medical waste incineration;
- Building an iron clad system, which is a long term process which will address responsibilities, take care of resource allocation
- Raising awareness of the risks related to health-care waste, and of safe practices
- To take care of staffs handling wastes in different stages by choosing safe and friendly management options.
- Support of the official machinery for long term improvements keeping local bodies in loop for immediate support.

INTERNATIONAL ACTS:

WHO pioneered the initial overall guidance document, ‘Safe management of wastes from health-care activities’. Now in its second edition and more recently a short guide that summarizes all the key elements.

SAFETY OF WASTES FROM HEALTH-CARE ACTIVITIES:

All aspects which play a key role (for example – regulation, planning, recycling, storage etc) have to be taken care of. The document is aimed at managers of hospitals and other health-care facilities, policy makers, public health professionals and managers involved in waste management. In addition, as part of monitoring Sustainable Development Goal 6 on safely managed water and sanitation, the WHO/UNICEF Joint Monitoring Programme will regularly report on safe management of health care waste as part of wider monitoring efforts on water and sanitation in health care facilities.

WHO has developed multiple training modules on best practices which covers waste management completely, from identification and classification of wastes to considerations guiding their safe disposal using both non-incineration or incineration strategies.

WHO guidance documents on health-care waste are also available including

- a monitoring tool,
- a cost assessment tool,
- a rapid assessment tool,
- a policy note,
- guidance to develop national plans,
- management of waste from injection activities,
- management of waste at primary health care centres,
- management of waste from mass immunization activities and
- Management of waste in emergencies.

WHO and UNICEF also launched a global initiative in 2015 to ensure that all health care facilities have adequate water, sanitation and hygiene services. This includes addressing health care waste.

HEALTH CARE WASTE PROBLEM IN INDIA: Effective management of biomedical waste is not only a legal necessity but also a social responsibility especially for a country like which generates annually about 0.33 million tonnes of hospital waste and, the waste generation rate ranges from 0.5 to 2.0 kg per bed per day. It is imperative to have a safe and reliable method for handling of biomedical waste.

Though legal provisions of Biomedical Waste (management and handling) Rules 1998 exists to diminish the impact of hazardous and infectious hospital waste on the community, still these provisions are yet to be fully implemented. The absence of proper waste management, lack of awareness about the health hazards from biomedical wastes, insufficient financial and human resources, and poor control of waste disposal are the most critical problems connected with healthcare waste. The hazardous impact of medical waste on the public and environment increases if adequate and appropriate handling of these wastes is not adopted. The hospital waste management has diverse ramifications as it not only affects the health of patients but also of healthcare workers (doctors, nurses, sanitary staff, etc.) and general public.

Although, there is an increased global awareness among health professionals about the hazards and also appropriate management techniques but the level of awareness in India is still less than average.

With this background, many studies were conducted with the main objective of assessing knowledge, attitude, and practices of doctors, nurses, laboratory technicians, and sanitary staff regarding biomedical waste. Results have shown that doctors, nurses, and laboratory technicians have better knowledge than sanitary staff regarding biomedical waste management. Knowledge regarding the colour coding and waste segregation at source was found to be better among nurses and laboratory staff as compared to doctors. Regarding practices related to biomedical waste management, sanitary staff were ignorant on all the counts. However, injury reporting was low across all the groups of health professionals.

HEALTH CARE WASTE PROBLEM IN THE WORLD OF VUCA: As per the rich literatures on the problem of bio-medical waste management, most of the studies revealed that dependent variable is and independent variables are the importance of training regarding biomedical waste management needs emphasis and lack of proper and complete knowledge about biomedical waste management impacts practices of appropriate waste disposal. Some the eminent scholars stressed upon source segregation as an important factor.

SOLUTIONS: There are so many institutions as well as institutional leadership involves in management of bio-medical waste. They are:

- Ministry of Environment and Forest
- Ministry of Urban Development
- Ministry of New and Renewable Energy
- National Institute of Urban Affairs (NIUA) – capacity building
- Niti Ayog
- National Green Tribunals
- Central Pollution control Board
- State Pollution control Boards
- Municipal Corporations
- Municipalities
- Panchayats.
- Associated chamber of commerce and Industry (ASSOCHAM)
- Confederation of Indian Industry
- Federation of Indian Chambers of Commerce and Industry
- National Solid Waste Association of India (NSWAY)

Medical Officers and doctors have for a long time held a special position in society. In addition to clinical responsibilities, physicians frequently serve also as leaders and advocates at the individual, community, and societal levels. They are often in a unique position of insight, and provide important and useful perspectives which are valuable even outside of the scope of medical practice. As respected members of the community-at-large, as well as key members of the healthcare system, doctors have the opportunity to get involved and make a difference at any and all levels.

The realities of modern medicine provide perhaps the greatest opportunities for medical leadership ever available. This availability creates, of course, a great need for leaders to both step in and step up to the opportunities. The incredibly fast pace of change, the growing importance of increasingly complex organizations, and increasing cost pressures are but a few challenges facing the modern medical leader. Leadership roles in medicine, as well as healthcare in general, have both multiplied and grown in complexity, and physicians are being looked at to bridge the gap between practitioner, clinician and manager. This suggests both a great challenge as well as an unprecedented opportunity. As the next generation of health professionals we can already see the complex world of medicine and healthcare that awaits us. Although it poses many challenges to us, if we prepare ourselves adequately and get involved

early-on we have the potential to make great strides, both within and outside the worlds of medicine and healthcare.

STRONG DECISION MAKING CAPABILITIES: Crucial areas, which need to be addressed for effective handling of bio-medical waste are capacity building by training and retraining, concern and commitment on part of the healthcare providers, institutional and city level policies, occupational safety and personal protective devices, information dissemination and practical advocacy endeavours. There is a need for evolving policy and protocols by health care institutions and concerned institutions from the government to manage recyclables. To begin with, it would be useful to have a proper inventory of medical institutions. The government should hand over the responsibility to the health offices or ward offices to accept the registration of health care establishments and more specific details about the hospitals and waste generated could be collected at a second level. Arrangements should be made for the availability of the details of all health care establishments in the ward's head office (municipal corporation or municipalities). This results in compulsory registration and safe disposal of biomedical waste as well. The health inspector must be made responsible to monitor the documentation. Systematized training programmes should be conducted on a periodic basis for all the representatives of medical institutions. Representatives of ward committees should be involved in the training programmes. The awareness training camps must be conducted in all the wards with compulsory participation of the staff. Awareness creation regarding the biomedical waste disposal should be made part of the curriculum of all medical related schools. Awareness programmes should be extended to public through mass media communication. Besides systematization of hospital solid waste, installation of a treatment plant must be made compulsory to disinfect the liquid waste before discharging into the sewage. For Health Waste Management to be a successful initiative Health Waste Management should be a social responsibility and everybody should get involved.

SITUATIONAL LEADERSHIP vs. FUNCTIONAL FOREMANSHIP:

Taylor advocated functional foremanship for achieving ultimate specification. This technique was developed to improve the quality of work as single supervisor may not be an expert in all the aspects of the work. Therefore workers are to be supervised by specialist foreman. Taylor advocated functional foremanship for achieving ultimate specification. This technique was developed to improve the quality of work as single supervisor may not be an expert in all the aspects of the work. Therefore workers are to be supervised by specialist foreman. The scheme of functional foremanship is an extension of principle of specialization at the supervisory level.

On the other hand, situational leadership is a relatively new leadership style that has been developed and studied by Kenneth Blanchard and Paul Hersey. Situational leadership refers to when the leader or manager of an organization must adjust his style to fit the development level of the followers he is trying to influence. The fundamental principle of the situational leadership model is that there is no single "best" style of leadership. Effective leadership depends on the task, and the most successful leaders are those who adapt their leadership style to the individual or group they are trying to lead or influence. Effective leadership depends on the task, job, or function that needs to be accomplished and varies, with the person or group that is being influenced. The Situational Leadership Model has two fundamental concepts: leadership style and the individual or group's performance readiness level, also referred to as development level or maturity level.

STRONG SUPPLY CHAIN STRATEGIES: The supply chain management of bio-medical waste, in particular include: Planning and Managing supply and demand; Warehouse Management; Transportation and Distribution, Delivery and customer's delight following the basic principles of supply chain management viz. working together; Enhancing revenue; Cost control; Assets utilization besides, citizen's satisfaction. The last two decades has seen the rise of a few terms always used in conjunction with production, operational management and control. To name a few JIT (Just-In-Time); TQM (Total-Quality-Management); ZI (Zero-Inventory); ECR (Efficient Consumer Response); VMI (Vendor Managed Inventory). All these have now been integrated within the domain of Supply Chain Management Process. Though, the SCM have found the versatility of applications, more so in the private sector enterprises (business environment) for cost cutting and for having a competitive advantage. In the government set-up like bio-medical waste management, though the basic objective, is not maximization of profit, but the social-economic development of people. Even, if the objectives of these two mutually exclusive categories of enterprises are different, they share some features:

- Service and Delivery: Satisfying the end-consumers (citizens) by providing the right product, in right condition at the right time to fulfil the social obligation towards society.
- The optimum allocation of limited resources. Thus, the SCM has many applications in the government environment too.
- Waste management programme should co-relate with other International, national and local schemes and programmes such as Community medicine training programme, Community development programme, National health policies, health schemes and Environmental Awareness programmes.

ORGANISATIONALLY SMART: Here, We can take hints from Warren Bennis theory and apply it to organize the Health-care waste Organization structure.

- ❖ First, we have to develop a clear-cut and understandable vision for organization.
- ❖ Secondly, organization structures should act as social architect for the organization by changing the organizational culture.
- ❖ Thirdly, creating trust throughout the organization by making explicit their values and views.
- ❖ Last but not the least, Identification of organizations own strengths and weaknesses and encourage its followers to do the same.

ABILITY TO TAKE RESPONSIBILITY WHEN THEY ARE WRONG AND ACKNOWLEDGE MISTAKES: Bio-medical Waste Management involves different types of institutional governance and leaderships. In this process, red-tapism, Bureaucratic blame game should be avoided. MOs (medical officers as administrators should act like leaders) should work freely in their respective arenas.

TRANSPARENCY: Transparency is the foremost criteria when it comes to bio-logical waste management. Every Public hospitals, Private nursing Homes, Medical Colleges, Health Clinics and Medical Facilities should show properly in their websites how much bio-medical waste they are generating every day in which how much they are actually processing or treating properly per day.

LACK OF AWARENESS: Lack of awareness among various sections of the staff was a matter of concern. Unless all the hospital staff at all levels co-operate, the system will not be able to function effectively. Apart from awareness creation, it is imperative that waste management is systematized with proper monitoring. Study about awareness and practices among health care waste management among hospital staff in a medical college hospital, Bangalore indicated that doctors, nurses had better knowledge and attitude and practiced HWM better than other housekeeping and technical staff. Interestingly, an initiative has been taken up to include hospital waste management as a subject in the post-graduate syllabus at Armed Forces Medical College (AFMC) and Medical Training Centre (MTC) Bangalore (The Medical Council of India, Nursing Council of India and the Dental Council of India have been approached to direct the teaching institutions to include the subject in the undergraduate and post graduate syllabi. Initiatives were taken to establish waste management cells to monitor and facilitate of biomedical waste at four hospitals coming under the Bangalore Medical College and Research Institute. Each hospital planned to have five to seven members team trained in safe management of hospital waste.

DIGITALIZATION: As digitalization is making everything easy, it has its drawbacks too. The biggest influence that is so dominating from the change in our world today is in the field of technology. In today's world like it or not, we cannot avoid progress. We just have to adapt. Technology and information that is getting faster does not only affect lifestyle, lifestyle or developments in the field of the economy out there, but also influences us early on how to educate our society. Even though what we actually don't know about the development of the world and technology, there are some attitudes that we can prepare so that our children can survive, have competitiveness and be ready to face the VUCA era. However, in the field of bio-medical waste management, there is a positive sign that the introduction of the Health Care (Management and Handling) Rules 1998, had led to the increase in the institutions that are enrolled but a complete list is unavailable. As there was no data available on the number of clinics and hospitals at the ward level, the data during the study had to be collected personally.

FUTURE PERSPECTIVE: VUCA might be heard before and a relatively old expression but it clearly sets the scene for future organizational challenges. The description of our world as volatile, uncertain, complex and ambiguous might not be perfect, but it is the best I came across and it makes us reflect on what should be

done. It describes the challenges we are facing in our professional as well as private lives. Business models, strategies and organization models will have to change. As leaders will have to let go even more control, their leadership skills will become even more important.

CONCLUSION:

The VUCA Leadership behaviours should be defined and benchmarked, so the gaps can be bridged. In addition, the participants' capabilities to lead in a VUCA environment should be enhanced. By practicing the desired set of skills and behaviours, the attendees shall gain a clear understanding of the leadership traits needed to thrive in the ever changing, unstable life cycle of the healthcare environment. Armed with the ability to make decisions in ambiguous environments, the participants will be able to inspire, lead and influence their people to sustain growth in a World of VUCA. In today's world, Doctors should act as leaders while doing their duties as administrator in their respective medical facilities. Leaders need in-depth understanding of their organization's capabilities and strategies to take advantage of rapidly changing circumstances. Leaders need to keep their ears open to all voices. Listening only to information sources and opinions that reinforce their own views carries great risk of missing alternate points of view. They need to engage directly with their customers and employees, rather than relying only to the hierarchy of communication. Leaders must spend time in the marketplace, retail stores, factories, innovation centres, and research labs, or just wander around offices talking to people. Leaders need the courage to make audacious decisions. They must dare to take risks and often go against the grain. They cannot afford to keep using traditional management techniques while avoiding criticism and risk. The greatest risk is to avoid risk. This era belongs to the bold, not the meek and timid. Leaders need to be more flexible than ever. Long-range plans are often obsolete by the time implementation has started. Flexible tactics are required for rapid adaptation to changing external circumstances, without altering strategic course. This is not a time for continuing the financial engineering so prevalent in the past decade. Rather, leaders need multiple contingency plans while preserving strong balance sheets to cope with unforeseen events. Last but not the least, more studies must be conducted in qualitative as well as quantitative access for bio medical waste so that the proper management of bio medical waste can take place.

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VUCA IN HEALTHCARE

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ABSTRACT: Markets are extremely dynamic and aggressive today; digitalization and globalization have eased the way business transactions are carried out. But this has also steered a lot of volatility, uncertainty, complexity, and ambiguity in the modern world. No domain or vertical is uninfluenced and healthcare is no exception.

Healthcare is one such industry where the trends and transitions are quite extensive.

All the sub domains operating in this segment are persistently and constantly focusing on metamorphosing the attributes employed for delivering the required care, cost structures, clinical services and quality, the usage of data and transparency of data, patient experience and the overall coherence of all this with efficiency and effectiveness of care offered and delivered.

Term VUCA came into existence in the military in the late 1990s and was later applied to the corporate and non-profit world by several eminent personalities one of them being Bob Johansen, former CEO of the Institute of The Future.

VUCA is a mixed bag of prediction, readiness, advancements, growth, and involvement. It embraces key techniques like strategic planning, changes and risk management, risk mitigation, sound decision making and problem-solving all together.

The understanding of the fundamental and core principles of VUCA which are preparedness, anticipation, evolution, and intervention would turn threats into a significant competitive advantage to the enterprises, organizations, and individuals, aiding them to be leaders rather than followers.

The eventual target is to consistently and profitably run businesses and be remarkable in the marketplace by enduring the vigorous competitive forces and evolving consumer behaviours.

This article deals with how VUCA affects different sub domains of health care and what steps or measures can be taken by the government as well as individual enterprises to minimize prevent them.

Keywords: Volatility, Uncertainty, Ambiguity, Complexity, Patient management, Clinical trials, Pharma Industry, Diagnosis, Human Capital, Strategies.

INTRODUCTION

In today's scenario, Healthcare has come a long way from just providing medical assistance to the needy to the contemporary comprehensive and complicated cycle of prevention treatment cure and post intervention care. Upgrading and improving the quality of treatment to escalate the overall quality of life by providing the right treatment to the right patient is the motive and objective of Healthcare professionals. The rigorous competition and evolving markets pose a threat to healthcare providers and the various stakeholders in the industry to keep their game up to stay in business.

Contemporary health care industry is fragmented and classified into various sectors; the UN ISIC (Industrial standard industrial classification) provides the following breakdown:

- Hospital Activities
- Medical and Dental practise activities
- Other human health activities (deals with activities that are supervised by the nurses, midwives, pathology etc.)

As per the Global Industry Classification Standard and the Industry Classification Benchmark the industry can be further funnelled down as:

- Healthcare- equipment's and services
- Pharmaceuticals, Biotechnology Products and related sciences.

Any operating industry has leeway for bottlenecks and healthcare is no exception. However, as it directly involves the public and their health (very existence) the inefficiencies might lead to lethal outcomes.

Mitigating and incorporating the measures to combat these issues has to be done strategically by the Healthcare providers and others involved, with contemporary rationale.

LITERATURE REVIEW

Harvard Business review anatomizes VUCA into four elements and parts. Characteristics of each along with an approach to deal and rectify them are described below:

Volatility

Characteristics: Time span is unknown, challenges are not stable, sometimes they are unexpected and unpredictable. Can be understood with ease as knowledge is available about them.

Approach: Usually made and build in slack, they are expensive and need resources and investment to mitigate the risk.

Uncertainty

Characteristics: Ground reasons and effects are already known even if other information is not accessible, change is possible. **Approach:** Adequate information should be gathered and meaningful insights should be drawn and further shared. Requisite investment should be made. Works best with changes associated with the structure like incrementing information analysis networks to reduce the uncertainty.

Complexity

Characteristics: Here a few aspects are available and few are not known and volume and nature have to be processed. Overall scenario and situation have a lot of interconnected and interdependent parts and parameters. **Approach:** Restructuring and rearrangement strategies used, competent specialist and adequate resources are required to address the emerging complexities.

Ambiguity

Characteristics: Precedent and pattern not available, causal relationships are also ambiguous and unclear. **Approach:** Demonstration and experimentation required. The hypothesis is generated and designed to understand the effect and cause relationship. Insights obtained from experimentation are further employed and applied to deal with the scenario.

ROLE OF VUCA IN HEALTH CARE

The business landscape has escalated over the years to a pinnacle where the trend is not consistent for a long period of time. The trends that markets see are short lived and are rigorously competitive.

What is the reason for such a pattern in the contemporary world? This is because of the changing needs, evolving lifestyles and search for better solutions.

This can be attributed to the volatility of the market. **What is relevant today may not be relevant tomorrow.** If we talk about Pharmaceuticals for example, the blockbuster drugs today may be obsolete or worthless over a period of time. This may be an interplay of many reasons and factors. Eg: Darvon/ Darvocet chemically called as Propoxyphen, an analgesic which brought cashflows to the company was withdrawn from the market worldwide in the year 2010 due to the high risk of heart diseases (attacks and strokes) it posed.

A classic example of penicillin also explains the volatile conditions of the market and the potential customers.

How to survive this evolving market and its needs?

There is no specific answer to this, but a pattern of Adaptation and smart implementation of the sought strategies can help the businesses to deal with the prevailing volatility.

- **Facts to information:**
The transformation data into information through the series of evaluation and analysis would help the firms to understand the contemporary scenario. These through analysis would give insights on how to operate in those markets. The changes and the effects can be understood from the market information.
- **Interaction:**
This interaction can be established only through thorough communication. Sending out the appropriate messages and accepting the feedbacks are key. The marketing campaigns and efforts should be in alignment with the consumer's needs.
- **Clear Motives:**
The intent and the plans should flow down to the subordinates in a structured way to exactly imply the organisational goals and objectives. A firm with strong leadership and co-ordination can deal

with the challenges that a volatile market brings up.

1. PATIENT MANAGEMENT:

Patient management is the entire process that simply involves taking care of patient and meeting his/her needs. But this is not that simple as it looks. It is not easy to engage all the patients that come up to the hospital/physician. The retention of the patient and the loyalty towards the physicians and the drugs is quite uncertain. Healthcare is one such segment which is becoming extensively patient-centric, i.e. consumer-oriented. The demand for quality services and effective treatments have been always the priorities, yet higher in this new age. This is exerting the pressure on the healthcare providing institutions and the physicians to push themselves to give the deliverables that are expected.

The activities done to meet such expectations are typically referred to as patient management. It is very ambiguous on how to go about these expectations that pop up. Starting from the consultation to the very dispensing of drugs, monitoring the patients movement, recording them and controlling the variables to improve the performance, stands as an approach of patient management. Incorporating the technology in the practice, example, the sample testing in laboratories with the high end technologies, the electronic billing and IT software to maintain the patient records etc... are assets to the hospitals, its staff and the laboratories.

But how are these adding values to the patient? This is quite uncertain and entirely depends on what the customers expect and what are our deliverables. Though the patient management system is becoming fancier, up and running but it has its own uncertainties. Ambiguity about patient expectations also poses a threat in this management as treatments cannot be customised to every individual patient. Nevertheless, it is in our hands to build relationships with the patients and examine ourselves in the light of expectations vs. performance. This retrospection and understanding the evolving expectations by adapting to newer technologies can aid in creating value to the patients. Proper communication and sharing of relevant information to the patient by the relevant authorities also adds on as an effort to eliminate the VUCA challenges in patient management.

2. CLINICAL TRIALS:

Clinical trials are the investigations and experimentations which are carried out to govern and regulate the efficacy and safety of medical treatment and technology on healthy volunteers and patients to avert and treat them. Clinical trials are a mandatory requisite in the healthcare world to secure approvals and market the treatments further. Digital revolution has led to the generation of a lot of data. The bulk of clinical data in today's world is also growing at a tremendous pace. The biggest concern is that it is quite fragmented and scattered and has a lot of veracity associated with it. Numerous exegeses can be concluded from this data and pharma companies and other healthcare sectors constantly exploit and employ it to obtain a good lump of profit from it. Instances of uncertainty and ambiguity associated with it are unavoidable. Sponsors and pharma giants conventionally disregard adverse effects and events corresponding to medical technology to make the approval process smooth and favourable. An analysis of 48 studies sponsored by industries was conducted and it was observed that only those results and conclusions which would be functional for marketing a product were published.

A classic example to substantiate it is Lipitor (Atorvastatin) case. Lipitor was one of the biggest blockbusters, launched in 1997 in the USA and was prescribed to around 29 million citizens but no data in correlation to adverse events was made accessible to FDA. In 2012, post-patent expiry evidence regarding its adverse effects came into light and the FDA took steps to alert patients with labels warning of muscle damage, liver injury, diabetes and memory impairment etc.

In 2007, the Food and Drug Administration Amendments Act made it obligatory and mandatory on legal terms for sponsors to incorporate the publication of clinical trial results. Only 23000 results were exhibited out of 224000 study records in the clinical trial registry. In India in 2013 Indian regulatory authorities released new regulations and guidelines in correspondence to the Supreme Court directives. This made the overall clinical trial process more complicated and hectic and impacted a lot of key stakeholders of the Pharma world.

Pharma world constantly toils in the VUCA environment as a result of constantly changing norms and standards than any other domain. There is a need to persistently question, doubt, challenge and discuss problems with a broader mindset and inculcate procedures to make the entire process more transparent. Pharma Industry associations, clinical research associations and other public and private institutions should collaborate and render leadership and long-term support programs for effective functioning. Proactive

behaviour and attitude, enhancement of human skills and practicing ethical measures would strengthen the overall industry base.

3. DIAGNOSIS:

Diagnosis is the science which is centric towards identifying the illness or the health problem by thorough examination of the symptoms that the patients exhibit. It is an attempt by the clinicians to understand the signs and symptoms that a patient reports, in order to categorise as a specific illness or disease. In this area there exists a wide degree of uncertainty and complexity.

It has been reported that 1 out of 20 patients usually encounter the uncertainties during their diagnosis it may be because of delays, misinterpretation, wrong tests prescribed, erroneous results so on and so forth.

The uncertainty in the clinical practice can be attributed to the negligence or not knowing. The clinicians may not be fully aware of what tests to prescribe or the newer tests that can be used to analyse the symptoms that are showed up by the patients. The evolving new diseases, the threat of unknown diseases and its symptoms strengthen the uncertainties. The inability of the medical practitioner to think and initiate a specific test and treatment for the problems stated is a mere reflection of the complex medical science, diagnosis methods which may be relevant or not to the problem. The clinicians are not able to start an appropriate course of treatment (starting with the diagnosis) because they are focused on narrowing down the diagnoses and integrating them on the basis of their perceived knowledge. The inherent uncertainty associated with the variation in the diagnosis: different range of tests to same patients, over diagnosis, repeats testing, surgeries that are unnecessary,

Increased indices of hospitalization, referrals from various physicians to others in order to understand the problems deeply have also led to very complex scenarios like increased cost or excess expenditure by the patient out of their pocket which is undesirable by the patient and their families. The ever increasing prices and cost of diagnosis have sprung up the concept of cost-contamination, where the physician have to closely watch the resources avails to use and take accurate diagnostic decisions.

Despite of high prevalence of diagnostic uncertainties and practical casualties that keep happening in the segment, it is less significant in the medical practice. It's highly over looked and neglected as much evidence of such happenings are not exhibited. Yet the healthcare providers and the clinicians are making continuous efforts to reduce the occurrences of such mishaps.

4. PHARMACEUTICAL INDUSTRY:

Globalization, technological advancements, expansion strategies and complex network of shareholders have escalated the overall efficiency and effectiveness of these operations but has also led to the invasion of VUCA. Top management and executive of pharma giants are constantly struggling to come up with the strategies to retain their share and value in the market. Quintiles research predicted a decline in the annual growth rate of pharma companies to just 6%-9% through 2021.

VUCA can be observed in different sub domains of the pharma industry; Volatility can be detected in biosimilars case, their emergence and development and the necessity to make them accessible to patients faster and at an affordable price as compared to before. Uncertainty instances can be observed in the segments associated with digital technologies which directly or indirectly impact the drug development and commercialization process. Complexities in the regulatory process and pricing strategies are one of the biggest concerns of the pharma industry in this dynamic environment. Growth in the emerging market, taxations, M&A are the sources which give rise to ambiguity in the pharma world.

Sophisticated and knowledgeable in-house expertise and policies as well as employing specialized technologies can help in overcoming and preventing VUCA challenges.

5. HUMAN CAPITAL:

For any business that exists the greatest asset is its human capital that is employed. It increases the value of the organisation. Healthcare being a service sector and is highly driven by the human capital. In this state of art where the people are focused towards value based and customised medicines, a healthy relationship between the service providers and seekers would support the patient's health and the healthy functioning of the firms. Talking in terms of human capital, there exists a major chunk of baby boomers population that is aging day by day. This is causing a decline in the staff, the nurses, the paramedics, physicians etc...

This situation is a difficult and complex one to handle. Choosing the right fit into the designated position is also a task in itself, due the increase in fake propositions made by individuals to procure a job. Hence the

managements have to strategically operate the human resource functions to be a class apart amidst the VUCA environment.

STRATEGIES TO MANAGE AND MITIGATE VUCA:

Disruption is at its peaks and all aspects of VUCA can be observed in today's scenario. The pace at which changes are taking place is volatility, unpredictability is associated with uncertainty, correlation of cause and effect is complexity, and unclear data and information results in ambiguity.

Strategies adopted and executed by businesses to survive in this VUCA environment are described and discussed below:

It's imperative and mandatory for the organizations and enterprises to have a clear and coherent vision and mission and to further shape the culture and working environment of the organization as per it. During the instances of volatility and uncertainty, it's the responsibility of the top management and executive to focus on core competencies of the business and to ensure that cultural values remain intact.

The world has turned into a global village and customers expectations regarding a product or service have escalated. It's important for the businesses to understand the changing needs of the customer by employing big data analytics as well as technology so as to constantly upgrade, innovate and be profitable.

Strategies for effective working of any domain or sector should be flexible to cope up with the changing environment. Persistently learning and experimenting is also requisite for the organization to sustain in VUCA environment.

Having a qualified leader and appropriate human resource with required skills and competencies are also critical. Constant training and skills development program is also important.

Pharma industries should focus on bringing new drugs and treatment for complex therapies by escalating their expenditure on R&D activities to be profitable as well as to cater the societal needs in a more effective way.

To penetrate and tap new markets as well as strengthen their share in the existing market, companies should exercise M&A expansion strategies.

Adoption of the novel and innovative technologies can increase compliance with guidelines and government regulations and make the supply chain process more integrated and will eventually make companies and organizations more stable.

CONCLUSION:

It's the responsibility and duty of all the health providers who are associated directly or indirectly to proactively respond and adopt strategies to combat the instances and challenges in the VUCA environment. Physicians, patients, policymakers, regulators, government and various stakeholders should work in an integrated manner to make the process more hassle-free and transparent. This collaborative approach can lead to better decision making and more assertive leadership. The primacy of VUCA has to be understood by the firms and the management in order to develop the strategies and action plans which could help them to sustain this challenging market domain. However, it is easier said than done, thus it is the matter of continual planning and authentic execution of the viable plans.

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WORK MOTIVATION - AN INSIGHT INTO PRACTICES & OUTCOMES

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ABSTRACT: According to Pinder “Work motivation is a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related behavior, and to determine its form, direction, intensity, and duration. Work motivation therefore, is the process that accounts for an individual’s Intensity, Direction, and Persistence of effort toward attaining a goal, specifically towards attaining an organizational goal. Intensity is how hard employees try to meet a goal. Direction includes the efforts that are channelized toward organizational goals and Persistence is how long the employee is able to maintain efforts toward a goal.

In the changing scenario, it is important to know the influence of motivation on employees as it impacts their performance. When motivational practices are followed by employers, it is important to understand, how employees take these motivational practices. The pertinent question will be whether the employees will be really motivated by these motivational practices. Some of the pertinent questions include questions like ‘Are employees passionate about their jobs?’ ‘Do the pay package, promotions, good work environment and job opportunities motivate workers?’ ‘Are employers trying to understand the employees motivational factors?’ ‘Are the employers trying to understand the needs and aspirations of their employees?’ ‘How employees are reacting when their aspirations are not met?’ ‘Is there any meeting place between the motivational practices of the employers and the motivation of the employees?’ and so on. The present research is an attempt to understand the possible motivational practices of the employers on the one hand and the perception of the employees towards these motivational practices. Positive perception of these motivational factors will result in benefiting both the employers and the employees. The outcome of this research paper is the motivational practices of the employers and the benefits from motivation to the employer and the employees.

Keywords: Motivation, Work Motivation, Motivational practices, Perception of motivational practices.

INTRODUCTION

Motivation is derived from Latin word ‘movere’ meaning to move. “A motive is an inner state that energizes, activates or moves and directs or channels behavior toward goal” (Berelson & Steiner),¹ “Motivation is a voluntary activity which governs the choices made by an individual among available alternatives.” (Vroom),². Atkinson³ defined “motivation as a condition that energizes a behaviour and directs a goal.” Motivation is the “driving force behind all actions of individuals.” The power of an individual’s needs and desires have a strong influence on the direction of the behaviour.

“Work motivation is a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related behaviour, and to determine its form, direction, intensity, and duration.” Pinder⁴.

Work motivation therefore, is the process that accounts for an individual’s Intensity, Direction, and Persistence of effort toward attaining a goal, specifically towards attaining an organizational goal. Intensity is how hard employees try to meet a goal. Direction includes the efforts that are channelized toward organizational goals and Persistence is how long the employee is able to maintain efforts toward a goal.

Motivation can be both Intrinsic and extrinsic. Intrinsic motivation is understood as that involves activities primarily for the own sake, because the activity is supposed to be interesting, involving, satisfying and challenging to the individual. Extrinsic motivation can be viewed as that which involve activities for the attainment of goals outside the primary activity such as praise, recognition, reward, salary increase, improvement in working conditions and others.

In organizations, motivation is functionally described “as the drive that pushes an individual to work”. A motivated employee is one who has a yearning for work. In recent times, both employees and employers are very keenly involved in the subject matter of motivation. If employees would know the factors that motivate them, they probably could expect the same from their employers. Similarly, the employers would like to know the nature, degree, and type of motivation of their employees so that they become more capable, resourceful and fruitful to their business. Benton relates the function between the organization and motivation. He refers to organization as employees and employees as “resources” or “assets”, highlighting the importance of employees in profit making part of a business organization. Motivation is a tool that

discovers the fundamental reasons of rewards or incentives causing employees to work and strengthen their value contribution to the business.

Theories of Motivation:

Theories of motivation are a great source of literature in the area of motivation and related aspects. These theories have attempted to understand what motivates individuals in general. When it comes to theories of motivation, Maslow's Needs Theory, Alderfer's ERG Theory, Herzberg's Two-Factor Theory and Adams' Equity Theory becomes worth noting.

1. Maslow's Needs Theory

Given by the eminent need theorist, Dr. Abraham H. Maslow. He formulated the theory of needs popularly known as hierarchy of needs. Maslow asserts that higher order needs emerge as lower order needs are fully satisfied. Maslow's hierarchy of needs in a pyramid form identifies five levels of individual needs, which are arranged in the order of importance from primary or lower level to secondary or higher level.

Physiological Needs according to Maslow are the lower order needs which include hunger, thirst, shelter, sex, and other bodily needs. They are satisfied externally, through forces outside of the person. These needs are the strongest because if not fulfilled, the person is not able to survive.

Safety and Security Needs focuses on individual's security and protection from physical and emotional harm. It includes stability, permanence, tranquility, and influence on personal, interpersonal, and environmental conditions.

Social needs in the third level of the pyramid are also called secondary needs which are satisfied internally. It includes affection, affiliation, and acceptance needs.

Esteem Needs ascribe the ego integrative process. Individuals look for a stable, firmly based, high level of self-respect, and respect from others in order to feel satisfied, self-confident, and valuable. This upper order need, includes internal (self-respect, autonomy, and achievement) and external (status, recognition, and attention) esteem factors.

Self-actualization Needs refers to need for self-actualization or self-fulfilment. It is an individual's desire to convert his potential into actual needs. Maslow describes self-actualization as an ongoing process. It includes growth, achieving one's potential, and self-fulfilment.

This is perhaps the best known and the least supported of all motivational theories. Abraham Maslow proposed that these five levels of human needs are hierarchical in nature. As the lower level needs are satisfied, the next unsatisfied need becomes dominant and become motivational factors. Satisfied needs no longer motivate, only unsatisfied needs motivate people.

2. Alderfer's ERG Theory⁶:

An attempt to simplify Maslow's need theory was put forward by psychologist Clayton Alderfer with his ERG theory. According to him people are motivated to do things by different needs, which are identified as Existence needs, Relatedness needs and Growth Needs. Clayton Alderfer formulated a need specific model of motivation known as ERG theory in terms of growth, relatedness, and existence.

Growth impels a person to make creative, productive, and complete meaningful tasks that have effects on himself and his environment.

Relatedness involves relationships with family, friends, co-workers, employers, and significant others.

Existence includes all of the various forms of material existence requirements.

Alderfer considered that people could move around the hierarchy meeting their needs. People may not start from the bottom and work their way up. People might be meeting their relatedness or social needs while they are tired or hungry. Alderfer also argued that people could go backwards in meeting their needs. If people fail to achieve higher order needs they may eat too much, drink too much and concentrate on making money to compensate for not achieving the higher order needs.

3. Herzberg's Two-Factor (Motivation-Hygiene) Theory⁷:

Frederick Herzberg was the first to show that opposite of satisfaction is not dissatisfaction; rather they are two different factor scales, one ranging from satisfaction to no satisfaction and the other from dissatisfaction to no dissatisfaction. When he related number of workplace factors against these two scales, he realized they were very different factors and he called the first set of factors as motivation factors and the second as hygiene factors. According to him,

Motivation factors are intrinsically rewarding factors in the work environment such as promotion, personal growth opportunities, recognition, responsibility, and achievements. Meeting these factors will increase motivation by creating a satisfying work environment.

Hygiene Factors are the workplace factors, when not met, lead to job dissatisfaction. When they are met, they do not lead to job satisfaction, but rather, to a reduced level of dissatisfaction. Hygiene factors include quality of supervision, pay, company policies, physical working conditions, relations with others, and job security.

4. Adams' Equity Theory

Holds that motivation can be affected by the comparisons employees make of their job inputs (effort, experience, education, confidence) and the job's outcomes (salary levels, raises, recognition) relative to the inputs and outcomes of other employees. If the ratios of inputs to outputs are roughly equal between employees, a state of equity is said to exist. The situation is perceived to be fair. However, when the ratios are seen as unequal, employees may experience tension and emotions. Employees who believe they are under-rewarded may be angry, while those who feel they are over-rewarded might feel guilty. The four basic comparisons are Self-Inside: an employee's own experiences in a different position within the current organization, Self-Outside: an employee's experiences in the situation or position outside the current organization. Other-Inside: other individuals within the current organization and Other-Outside: other individuals outside the employee's current organization.

The above theories and studies on motivation have contributed to the vast knowledge on motivation. These theories and studies have emphasized the need for motivation and its impact on individuals and organizations. It is important to note that though motivation is highly relevant to one and one across organizations, studies on motivation have suggested that motivation is not same but different. Motivational practices are found to be different from time to time, place to place, industry to industry and from company to company.

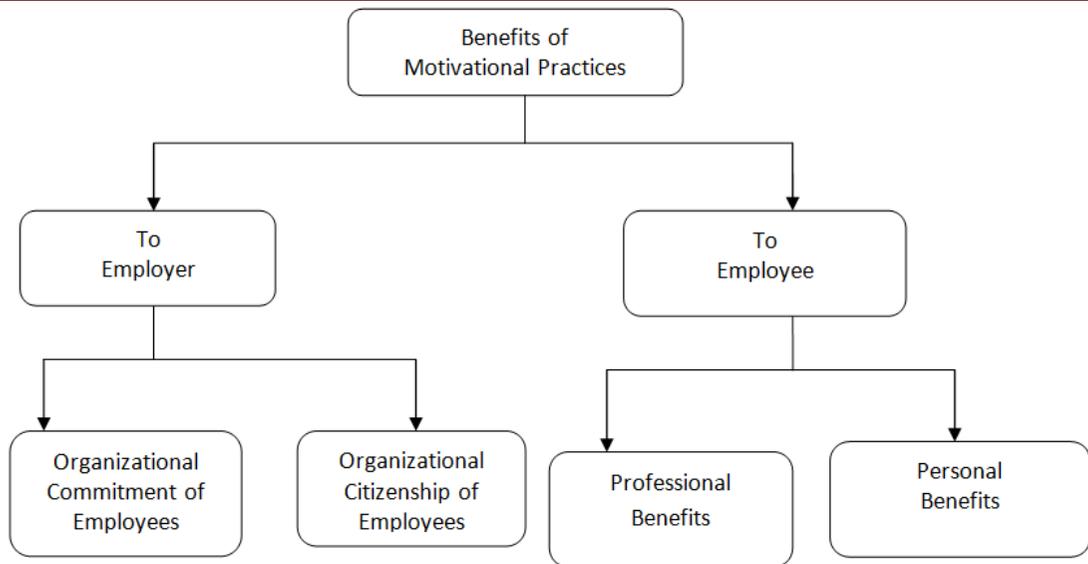
Statement of the Problem

The Hawthorne Studies conducted by Elton Mayo found that employees are not motivated solely by money and employee behaviour is linked to their attitudes. According to Maslow, needs acts as motivators at different stages in individuals. Vroom's theory says that employees effort will lead to performance and performance will lead to rewards. Rewards can be positive or negative. Adams called personal efforts and rewards and other similar give and take issues at work respectively as input and output. Adams Equity theory explains why pay and conditions alone do not determine motivation. Equity Theory explains why people can be happy and motivated by their situation one day, and yet with no change in the terms and working conditions can make very unhappy and de-motivating. Herzberg categorized practices as Motivators and Hygiene. According to Herzberg people have two different categories of needs and they are essentially independent of each other and affect behavior in different ways. He found that when workplace factors were not met, it led to job dis-satisfaction but at the same time, when it is met, it do not lead to job satisfaction but may only reduce dis-satisfaction.

In the changing scenario, it is important to know the influence of motivation on employees. Some of the pertinent questions include questions like 'Are employees passionate about their jobs?' 'Do the pay package, promotions, good work environment and job opportunities motivate workers?' 'Are employers trying to understand the employees motivational factors?' 'Are the employers trying to understand the needs and aspirations of their employees?' 'How employees are reacting when their aspirations are not met?' 'Is there any meeting place between the motivational practices of the employers and the motivation of the employees?' and so on. The present research is an attempt to understand the possible motivational practices of the employers on the one hand and the perception of the employees towards these motivational practices. Positive perception of these motivational factors will result in benefiting both the employers and the employees.

Motivational Practices:

They are the initiatives of the employers to motivate their employees. It includes both Intrinsic and extrinsic motivational practices. These practices not only benefit the employees but will also benefit the employer.



Motivational initiatives include Location, clean and neat workplace, employee safety at workplace, job respect in society, superior-subordinate relationship, employee-employee relation, facilitation of work-life balance, pay/fringe benefits and bonus, freedom to plan work and autonomy, grievance handling, opportunity for advancement and training, equity and fairness in the work place, nature of job, growth prospects, job security, company policy & procedures and additional responsibility & challenging work.

These motivation initiatives will benefit both the employer and the employees. The employer is benefited with employees organizational commitment and organizational citizenship. Organizational commitment is "A psychological state that characterizes the employee's relationship with the organization, and has implications on the decision to continue or discontinue with the organization". Organizational citizenship behavior is an individual's behavior which is discretionary. This behavior is not directly or explicitly recognized by the formal reward system and it in the aggregate that promotes the effective functioning of the organization. This will result in Altruism or selflessness, Compliance to the rule and Sportsmanship in employees.

Motivation, if properly channelized, the employee is professionally and personally benefited. Professional benefits includes Clean & neat place to work, employee safety at work place, respect and dignity, good pay, bonus and fringe benefits, advancement and training, growth and job safety. Personal benefits includes, work-life balance, job satisfaction, recognition, development, increased self confidence, achieving of personal goals, productive, more disposable income and higher standard of living.

Conclusion:

There has to be a match between the employers motivational practices for which the employees should act positively. There is a need for the employers to understand the motivational aspirations of their employees. At the same time, the employees have to understand their motivational aspirations so that they can exhibit higher level of organizational commitment and citizenship behavior and at the same time enjoy improved professional and personal benefits.

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An Impact study on Indian Diamond Industry and the Economy – Case of PNB Scams

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ABSTRACT: *The purpose of this study is to provide information about how the diamond industry manages their operating cycle, what options they have available to finance their working capital requirements and at what cost, what is the process of arranging finance from the bank. This paper focuses on insides of the PNB fraud, how the fraud was committed, how the fraud got exposed and loopholes in the banking system that made committing such practices possible. For better understanding of the events, we have considered the illustration of hypothetical company AB Gems Pvt. Ltd. which operates in the diamond industry from more than 50 years and suddenly due to such scams in baking industry how its business got affected and what measures they considered to tackle such challenges. The case study is discussed in 3 phases i.e pre scam situation, the scam and the post scam situation and analysis. The case paper also provides the other diamond companies examples which got in to legal implications due to measures taken by lender banks to prevent their business operation affected due to banking scam. Lastly, the paper concludes with the highlights the findings and suggestion, and the measures taken by RBI based on the survey of top 100 frauds in India conducted by the Central Vigilance Commission.*

Keywords: *Diamond Industry, Operating Cycle, Working Capital Requirement, Scam, Measures.*

Name of Company: - AB' GEMS PVT LTD

Background of Company: -

AB' Gems Pvt. Ltd. was incorporated around 1967 by Mr. Amit Bose. Company is in the business of buying rough diamonds from local as well as import from the foreign Parties, manufactures the polish diamonds and then export the same to their foreign clients. Also, company trade in the finished and rough diamonds. Company is in this business for **more than 50 years**. AB' Gems Pvt. Ltd. Also has their manufacturing plant located at Katargam, Surat, Gujrat. At present their business is spread across 6 countries. The company is doing well and has shown the positive growth till date. Company is also taking work from other companies on job work basis. Around 2005 AB' Gems has also started their Jewellery business in which they manufacture the diamond studded Gold Jewellery and sell in the local as well as in foreign markets. They have one showroom located at Opera House, Mumbai for this purpose.

Registered Office & Branches: -

Company has Registered Corporate Office located at the Surat Diamond Bourse, Khajod, Surat, Gujrat. It has 5 foreign branches located at different countries such as at Hong Kong, Canada, Chicago (USA), Brussels (Belgium), Tokyo (Japan). Company also has a branch located at Bharat Diamond Bourse, Bandra Kurla Complex, Bandra, Mumbai, and Maharashtra through which they export the goods to foreign clients.

PRE SCAM SITUATION: -

Prior System: -

AB' Gems is in the business which requires the high working capital to operate. For this purpose, they need to take various types of loan from bank to fill the gap in working capital requirements almost on daily basis. So, AB Gems approaches the Bank at the start of the financial year and decide the amount of financial facility they require during the year and bank accordingly ask for their documents such as last 3 years audited financial statements, CMA Projections and other business documents and decides whether they can up to the quoted limit provide the loan or not. Mostly, since company has done well in past and it is continuing the same trend and it has excellent record and goodwill bank agrees to the full loan amount limit and mentions the Interest cost and other bank charges at which the facility will be available. Based on these agreed terms bank provides the sanction letter to the AB' Gems. These letter contains the details about various types of loan facility bank will be providing to the AB' gems and details of Interest Rate, Bank charges, Credit period

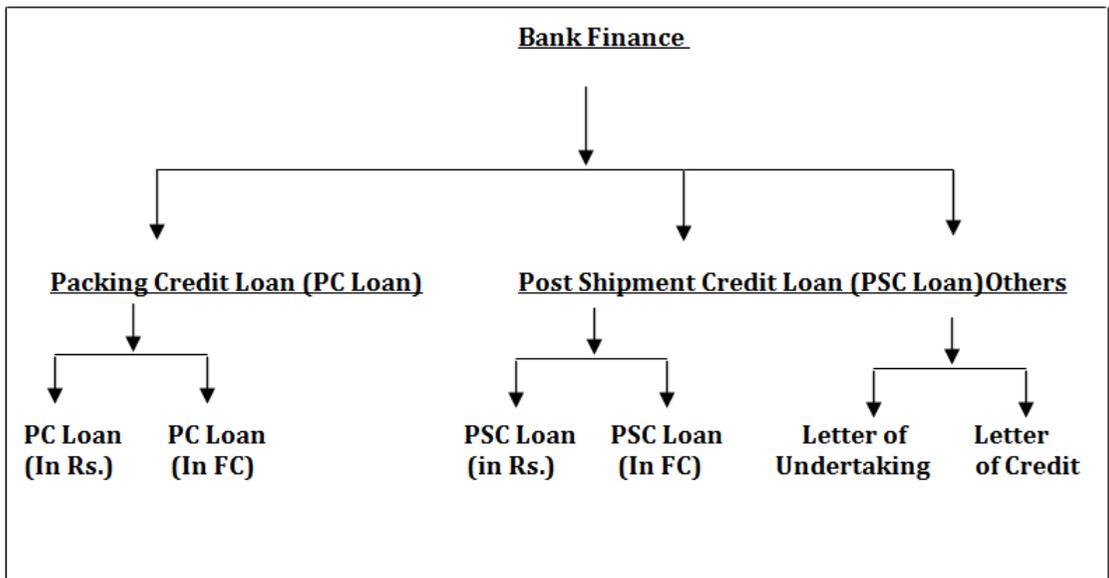
limit, and other documentation details which AB’ Gems needs to maintain and submit to the bank on timely basis.

Further, since company interact with bank on daily basis and from many years’ company is providing business to the bank there is an element of mutual trust created between them which is beneficial for both the parties. Many times bank may provide loan to company at lower rate than the market rate so that they can retain their customer and company get finance at a lower rate.

Operating Cycle: -

So Company first take the orders from the client and accordingly it takes Packing Credit loan for buying the raw material and for manufacturing purpose and after the manufacturing when company export the goods at that time company takes the post shipment loan since after exporting the amount will be received by company from client only at the end of credit period which may vary from Cash on Delivery (COD) to 180 days depending upon terms of trade agreed with Buyer. So they take post shipment loan to repay packing credit loan as well as to pay labour charges and other business cost. When the payment realizes from the party AB’ Gems instruct the party directly pay to the bank and AB’ gems also gives standing instruction to the bank that after deducting loan amount transfer the balance to the account of AB’ Gems. Since the above transaction may occur in foreign currency it is possible that company take above mentioned loan in foreign currency. This way cycle continues and company takes loan almost on daily basis according to quantum of business and repay on continuous basis. With each loan bank generates the new advice and on which the reference number is mentioned to keep the track of loan taken and repaid accordingly also bank charges the interest also. The repayment of loan takes place of First in & First out basis. Since the quantum of transaction is huge with bank sometimes it becomes difficult to keep the track of loan taken and repaid for both the sides so in such case internal audit and proper record keeping & Accounting become very helpful to avoid such situation.

Types of Financial Borrowings Required for Diamond Businesses to Operate: -



Purpose of Different Financial Borrowings: -

➤ **Packing Credit Loan (PC Loan): -**

- This Loan can be avail to meet the liabilities of import payment or Labour charges.
- This loan is given on submission of Import documents to the bank.
- Packing credit Loan is available for a period of 90 Days. Then after the bank will charge overdue interest on PC Loan.
- PC Loan can be availed in rupees or in foreign currency.
- One cannot use this loan for any other purpose than Import payment or Labour charges payment.
- Interest on such loans shall be charged same as charged under saving account.

➤ **Post Shipment Loan (PSC Loan): -**

- This Loan can be availed to meet the working capital requirement on account of deficiencies arises for the period of export made till date of realization.
- In this case the bank will finance us on submission of Export documents and the repayment of loan should be done on realization of exports.
- When one avails the Post Shipment Loan it is same as Bill Discounting.
- PSC Loan can also be avail in Rupee or in foreign currency.
- One can use this loan for any purpose of the business, they can even repay the Packing Credit Loan also from this Loan.
- When one takes PSC / PSCFC Loan at that time bank will give 25 / 5 days as a grace period on the terms decided on the export then by adding those grace days on export terms, due date shall be calculated.
- If the repayment of loan is not realized after 30 Days of the overdue period, then in that case bank will convert the Foreign currency loan in to Rupee loan @ spot rate of that day and then bank will charge the interest at Special Higher Rate this is called the “CRYSTALLIZATION OF THE BILL”.

➤ **Difference between Rupee Loan and Foreign Currency Loan (\$): -**

- In case of Rupee Loan interest is calculated considering 365 days in a year where as in case of Foreign currency (\$) Loan it is calculated considering 360 days in a year.
- In case of Rupee Loan bank is not charging any extra commission, where as in case of Foreign currency (\$) Loan bank will charge extra commission as even they have to buy Foreign currency (\$) from foreign banks.

➤ **Letter of Undertakings (LOUs): -**

- The Letter of Undertaking is bank guarantee under which a bank allows its customer to raise money from another Indian bank's foreign branch in the form of short-term credit. The loan is used to make payment to the customer's offshore suppliers in foreign currency. The overseas bank usually lends to the importer based on the LOU issued by the importer's bank. LOUs, which are essentially a form of guarantee, have come to be a far cheaper and convenient way for importer to raise credit.

➤ **Letter of Credit (LCs): -**

- A letter of credit is a letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase. Due to the nature of international dealings, including factors such as distance, differing laws in each country, and difficulty in knowing each party personally, the use of letters of credit has become a very important aspect of international trade. Banks typically require a pledge of securities or cash as collateral for issuing a letter of credit.

Interest Cost & Other Expenses: -

- **For Packing Credit Loan (RS.): -**

Rate of Interest -

Between @ 8 % to 10 % (Borrowing Rate)

Over Due Interest rate @ Borrowing Rate + 2%

- **For Packing Credit Loan (\$): -**

Rate of Interest -

Borrowing Rate till due date @ (Commission + LIBOR) % p.a.

i.e. 3 % + 0.75 % = 3.75 % p.a.

Over Due: 2% in addition of what charged earlier at the time of taking loan.

Commission charged by bank: - Borrowing Rate + Additional 2 %

- **For Post Shipment Loan (RS): -**

Rate of Interest -

For First 90 Days: - @ between 8 % to 10 % (Borrowing Rate)

From 91st Day till Due Day: - @ Borrowing Rate + 2% = 10 % to 12 %

For Over Due Period: - @ Over Due Rate i.e. Additional 1 % or 2 % = 13 % to 14 %

- **For Post Shipment Loan (\$): -**

- **Rate of Interest -**

- Borrowing Rate till due date @ (Interest + LIBOR) % p.a.

- i.e. 3 % + 0.75 % = 3.75 % p.a.

Over Due: 2% in addition of what charged earlier at the time of taking loan.

Commission charged by bank: - Borrowing Rate + Additional 2 %

- **Interest rate @ of Crystallization of the Bill: -**

At the rate of 16% to 18% on Loan amount from ending of additional period of 30 days allowed after end of overdue period.

- **Letter of Undertaking (LOUs): -**

Indian Banks charges a Fees for guarantees provided and the overseas bank offering the credit, charges an interest at a spread over LIBOR.

- **Punjab National Bank (PNB)**

Incase buyer’s credit is taken from non PNB branches cost goes up by 0.60% on per annum basis.

- **Buyer’s Credit availed with PNB branches** – 0.25% p.m. for specified period of liability with minimum of 0.40%, subject to minimum of Rs.1000/- per guarantee

- **Buyer’s credit availed with other banks** – 0.30% p.m. for specified period of liability with a minimum of 0.50%, subject to minimum of Rs.1000/- per guarantee

- **Letter of Credit (LCs): -**

Banks collect a fee for service, typically a percentage of the size of the letter of credit. The International Chamber of Commerce Uniform Customs and Practice for Documentary Credits oversees letters of credit used in international transactions.

Punjab National Bank (PNB)

A 4 Handling of Export Letter Of Credit		
A 4.1	Advising Charges of Export Letter of credit	Rs.1000/- per LC for PNB customer
		Rs.2000/- per LC for non-PNB customer
A 4.2	Amendment charges on Advised Export LC	Rs.600/- per amendment for PNB customers, Rs.1000 for non-PNB customers
A 4.3	Confirmation charges on Advised Export LC	Charges to be decided by IBD-HO on case to case basis
A 4.4	Acceptance commission for accepting usance drafts to be drawn on or accepted by banks in India.	0.15% p.m. with Min. of Rs 1500/-
A 4.5	Foreign Bank Charges (For LC Advising where charges are to be recovered from foreign bank)	US\$ 75 per LC

Source: - www.pnbindia.in

IMPORTS	
B 1	Import Letter of Credit/Revolving Letter of Credit/Letter of Credit covering imports of goods on Deferred Terms
B 1.1	Upto Rs 6 crores or equivalent
	- Commitment Charges
	Usance Charges
	0.175% for every quarter or part thereof for the full validity of the credit minimum Rs.1200/-
	0.175% for bills upto 10 days sight minimum Rs.1200/-
	0.350% for bills over 10 days and up to 3 months sight. minimum Rs.1200/-
	0.350% for the first 3 months plus 0.1% per month in excess of 3 months for bills over 3 months sight. minimum Rs.1200/-
B 1.2	Over Rs.6 crore or equivalent***
	Full charges upto Rs.6 crores + One half of charges for amount exceeding Rs.6 crores upto Rs.25 crores.
	Bill amount exceeding Rs. 25 crores charges will be as applicable upto Rs.25 crores + one fourth of charges exceeding Rs.25 crores.
B 1.3	Foreign Letter Of Credit established against 100% cash margin.
	In case of LCs established under 100% cash deposit as security, the charges will be 1/4 of the normal charges .However the deposit must be at Card rate. No concession upto GM level
	***Note : For example, if a LC of Rs.30 crores is to be opened, normal commission upto Rs.6 crore plus one half of the normal commission for Rs.19 crore plus one fourth of normal commission on balance Rs.5 crores.

Source: - www.pnbindia.in

Credit Period in the Industry: -

From Bank: -

Loan Type Period

Packing Credit Loan 90 Days

Post Shipment Loan From 60 Days to 180 Days

To Debtors: -

Credit Period could be COD (Cash on Delivery), 30 days, 60 days or 90 days or 120 days. Sometime it could be 150 or 180 days. Credit Period also depends on Nature, amount of Transaction and Business Relationship with the corresponding Party.

From Creditors: -

Credit Period could be COD (Cash on Delivery), 30 days, 60 days or 90 days or 120 days. Sometime it could be 150 or 180 days. Credit Period also depends on Nature, amount of Transaction and Business Relationship with the corresponding Party.

Estimated Profit Margin: -

- Company has a **Gross Profit ratio (GP)** ranging from **7 % to 8.50 %** for past 5 years.
- Company has a **Net Profit after Tax (NPAT)** ration ranging from **2.50% to 2.75%** for past 5 years.

Process of Loan from Bank: -

The process of taking loan from bank includes several steps, documentation and types of collaterals are integral part of it.

Step 1:

Firstly, complete the application form then submit it to bank. Then Bank will start processing the application form which involves checking of credit history of company's Signatories and Company.

For this purpose, they consider the Credit Information Report (CIR) of independent agencies known as the Credit Information Companies. Most popular agencies among banks are TansUnion Credit Information Bureau (India) Limited (CIBIL), Experian PLC, Equifax Inc., CRIF High Mark Credit Information Services Pvt. Ltd. Most probably bank consider the Credit information report from CIBIL.

Based on these reports banks get credit score of the company and then they compare it with internal guideline benchmarks of bank. Based on that bank decide to process the application or rejected it.

Step 2:

Analysis of companies' Historic Financial statement and projected financials to get the relevant Ratios such as Liquidity Ratios, Current Ratios, Debt Service Coverage Ratio, Interest Coverage Ratios are one of the factors for decision making weather to give the loan or not and if yes then how much.

Step 3:

Interview with company owners or top management by the Loan Officer. Generally, loan officer will visit the Office of Borrower and take the informal interview and try to know the company's requirement and their intention to utilize the Loan amount appropriately and repay the same. Based on his understanding and intuition Loan officer will recommend a Loan for sanction or rejection. If the Loan is sanctioned, then the sanction letter is issued to the company which includes pre and post disbursement condition.

Now Management of company will review the terms and conditions and if they agree the conditions to sanction then they will accept the finance from bank or else reject it.

Step 4:

After Completion of Pre-disbursement conditions company can request for disbursement of loan. Then after Disbursement of loan amount Post-disbursement conditions needs to be satisfied by company.

Step 5:

Follow-up – Loan officer needs to keep a track of Project (i.e. Import or Export of Goods Transaction with foreign or domestic Party) that is financed by the loan provided. For this purpose, there is certain requirements of banks which Borrower needs to comply which are as follows: -

1. Borrower needs to submit the stock statement to Bank for the month between 5th to 10th of the next month.
2. When Goods are manufactured and ready for export it is exported to the client then the copy of export documents (i.e. Bill of Lading, Export Invoice, Airway Bill, packing list, Shipping Bill) needs to be submitted to bank for forwarding one copy to the Customer.
3. A Copy of these documents can be kept by bank as a step in follow-up with reference to loan provided to borrower.

Step 6:

Based on Payment Conditions agreed between Buyer and Seller bank can follow-up with the borrower company for repayment of Loan installment. Any delay or default in it will reduce the credit of Borrower company in the eyes of Banks may cause difficulties in future to arrange finances through banks. And on the other hand of the company meet the timelines of installment payments will increase the credit worthiness in records of banks which will help them arranging finance easily and maybe at cheaper than market rate in future.

Documentations: -

1. Application for Loan
2. KYC Document for the Company and Signatories of the Company
3. Company's Memorandum of Association and Article of Association
4. Last 3 years' Audited Financials & next 3 to 5 years' Projected Financials along with Income Tax Return
5. Short explanation on expected utilization of Loan amount i.e. project Report

Types of Collateral security required by bank: -

- **Primary Collateral Securities** – Goods Manufactured (i.e. Inventory)
(Note: - This is the main Reason behind collection of stock statements by bank on monthly basis of Borrower Company to know the valuation of Inventory held by the company.)
- **Secondary Collateral Securities** – Property of Company such as office premises or Factory of company or any Financial Instruments owned by the company.

The Value of the Collateral Security provided must be at least **60% to 80%**. In case of Foreign transactions banks requires the minimum margin of **133%** as collateral securities.

Punjab National Bank vs. Nirav Modi Case: The Scam that Shocked the banking & diamond industry: -

• **Business Background of Nirav Modi & Mehul Choksi: -**

Nirav Modi is the Indian & Belgian Businessman who is well known for his work in Designing & manufacturing Diamond, Gold and other various types of Jewellery. He is also a well-established Jewellery designer for many Bollywood & Hollywood Movie Stars. Nirav Modi grew up in Antwerp the World's Diamond Capital, has his eponymous Jewellery store on Madison Avenue in New York. He owns the premium Jewellery Designing brand “**Nirav Modi**” which he named after himself. He also boasts Bollywood star Priyanka Chopra as his brand ambassador. His Brand Name also owns companies named Solar Exports, Stellar Diamonds and Diamond R US. According to Forbes, Wharton business school dropout Nirav Modi has a net worth of **\$1.73 billion**. He is said to have learned the tricks of the trade from his maternal uncle **Mehul Choksi** who is also the **Chief Managing Director (CMD)** of popular Jewellery brand **Gitanjali Gems Ltd.** which is a part of **Gitanjali Group along with** Gili India & Nakshatra.

In 2010, Nirav Modi became the first Indian jeweller to be featured on the cover of **Sotheby's and Christie's auction catalogues**. Modi's jewels also fetched a whopping Rs 60 crore at the Christie's auction way back in 2010. Also, he has a business expansion plan of having 100 boutique retail stores worldwide by 2025.

• **The Event in which Fraud came into Light: -**

In the Case of Nirav modi & Mehul choksi owned Gitanjali Group the company's employees used to visit the Punjab National Bank's Brady House branch in south Mumbai for the purpose of issue of Letter of Undertaking (LOU) at the time of import of the goods from foreign countries. At that time bank officer asked for the Collateral securities but Employees stated that they have issued such Letter of Undertakings before and never been asked to provide collateral securities. Then the bank officer informed the bank's top management and the scam came in to light which raised the alarm for the bank.

• **Modus Operandi: -**

So, let's say Nirav Modi, who has a well-established business in Trading Diamonds and manufacturing Diamond Jewellery for Bollywood and Hollywood A-list Stars, wants to import diamonds for a new collection. He approaches Punjab National Bank's (PNB) and asks it to arrange for a guarantee in the form of Letter of Undertaking (LOU) for short-term loans from the foreign branches of Indian banks, to pay his diamond supplier. Bank officials promptly send instructions from PNB's Mumbai branch to other overseas banks offering LOUs. The messages are sent through The Society for Worldwide Interbank Financial Telecommunication (SWIFT) — an inter-bank messaging network for securely transmitting instructions for financial transactions. The Swift message can be sent by the bank staff only after completing the standard norms stated by Reserve bank of India & Banking Regulation Laws. The Bank norms include collection of Important documents relating to LOU and Providing Collateral Securities against the same. Documentation part generally includes collection of Import documents for making decision that weather to issue the LOU or not and if yes, then for what limit. Import documents includes Import Invoice, Bill of Entry, Airway bill, Kimberly Processing Certificate (KPC), and if any other documents demanded by bank.

Such SWIFT instructions need to be recorded in a bank's core banking system for the purpose of banks internal Records and management and keeping track of customer's Business record that till now for how much worth of LOUs has been issued to customer and weather they have been settled or not and how much LOUs are still outstanding and for what period. But the connivance of bank officials at Punjab National Bank the standard norms have not been complied and the actual LOUs issued over the past seven years to Nirav Modi managed to escape scrutiny. The Employees issued this LOUs to Gitanjali Group without collecting any primary documentation & Collaterals by way of directly sending SWIFT Message to foreign Bank, and since Foreign banks received guarantee from Punjab National Bank they process the loans for Gitanjali group. These guarantees never figured in the bank's books.

In such case, if Gitanjali group becomes bankrupt then liability to pay entire money will be on PNB which was not known to bank. PNB has suspended 10 officers over the Rs. 11,400 crore scam and referred the matter to CBI for investigation. According to the CBI FIR filed by PNB, a total of 153 LOUs were issued in 2017, amounting to a little over ₹3,000 crores.

• **The actual transaction and its importance: -**

LOUs are important instruments that allow those in the import trade to transact their business. As an importer in India cannot simply buy dollars and send it abroad to make payments to his supplier, various instruments such as LOUs and Letters of Credit are required to carry out the transaction. LOUs,

which are essentially a form of guarantee, have come to be a far cheaper and convenient way for importer to raise credit. Nirav Modi, for instance, essentially had two options to make the payment to his supplier. One, he borrows money from PNB in rupees, converts it dollars, and pays his supplier, probably a diamond or pearl merchant. But here, the interest rate on such loans would be at the higher domestic rate, say 12-13 per cent.

The other way would be through a bank guarantee offered by Punjab National Bank. The bank would simply instruct the overseas bank through SWIFT to remit funds into PNB's overseas account, which is in turn used to pay Modi's supplier. PNB earns a fee and the overseas bank offering the credit charges an interest at a spread over LIBOR. In effect, Nirav Modi gets a cheap line of credit.

So where does the fraud come in? Ethically, having used the imported diamonds to fashion jewellery, Modi should have sold his wares and raised cash to settle the dues against LOUs. In this case though, the loan was not paid back by Nirav Modi at all. By repeatedly rolling over the loan, he ensured that new LOUs were used to repay earlier LOUs. So, there had been no default till now.

POST SCAM SITUATION & ANALYSIS: -

Effect of Scam on Banking Sectors & Diamond Industry: -

- **Banking Sector: -**

If you're a depositor or investor in bank stocks, these instances shake up your already shaky faith in the system. Banks, supposed custodians of public money, have been making headlines for all the wrong reasons. Time and again, the RBI, has been stepping in to flush out the NPA rot in banks' books over the past two to three years. The Nirav Modi - PNB scam has only brought to light another festering issue within PSU banks — absolute failure of control systems and governance structure. And this time, auditors and even the RBI, which scrutinizes banks' books regularly through various audits, are answerable.

- **Diamond Industry: -**

This event caused the operating business environment difficult for the other companies in the diamond Industry. Banks have become more suspicious about Companies which makes it further difficult to arrange finances and maintain working capital requirement for them. Also, the cost of arranging the finance have increased drastically.

The Fraud which involves the bank employees and one of the old and trusted client of bank has shocked the entire banking system and the Diamond Industry. And has a very adverse effect on the business of both the Industries and Indian Economy and general public of India.

Changes in Interest Cost & Other Expenses: -

- **For Packing Credit Loan (RS.): -**

Rate of Interest -

Between @ 10 % to 12 % (Borrowing Rate)
Over Due Interest rate @ Borrowing Rate + 2%

- **For Packing Credit Loan (\$): -**

Rate of Interest -

Borrowing Rate till due date @ (Commission + LIBOR) % p.a.
i.e. 5 % to 6% + 0.75 % = 5.75 % to 6.75% p.a.
Over Due: 2% in addition of what charged earlier at the time of taking loan.
Commission charged by bank: - Borrowing Rate + Additional 2 %

- **For Post Shipment Loan (RS): -**

Rate of Interest -

For First 90 Days: - @ between 10 % to 12 % (Borrowing Rate)
From 91st Day till Due Day: - @ Borrowing Rate + 2% = 12 % to 14 %
For Over Due Period: - @ Over Due Rate i.e. Additional 1 % or 2 % = 14 % to 15 %

- **For Post Shipment Loan (\$): -**

Rate of Interest -

Borrowing Rate till due date @ (Interest + LIBOR) % p.a.

i.e. 5 % to 6% + 0.75 % = 5.75 % to 6.75% p.a.

Over Due: 2% in addition of what charged earlier at the time of taking loan.

Commission charged by bank: - Borrowing Rate + Additional 2 %

- **Letter of Undertaking (LOUs): -**

Reserve bank of India with their circular no. 20 (RBI/2017-18/139) dated **13th March, 2018** has Discontinued the Letters of Undertaking (LoUs) and Letters of Comfort (LoCs) for Trade Credits. This came as a result of the fraud committed in Punjab national bank. The Detailed circular has been given in **Annexure 1**.

- **Letter of Credit (LCs): -**

There have been no significant changes in Letter of Credit charges charged by bank.

Changes in Credit Period in the Industry: -

From Bank: - There has been no significant change in credit period allowed by bank it depends on the type of transaction and terms of payment received from buyer or paid to seller.

To Debtors: - The Maximum Credit period allowed has been reduced from **150 or 180 days to 120 days**. But in some case parties still allowed the **150 or 180 days' credit period** depending on business relationship & mutual trust with the clients.

From Creditors: - The Maximum Credit period allowed has been reduced from **150 or 180 days to 120 days**. But in some case parties still allowed the **150 or 180 days' credit period** depending on business relationship & mutual trust with the clients.

Estimated profit Margin: -

- Company's **Gross Profit ratio (GP)** has reduced to **5.75%** for the **F.Y. 2017-18**.
- Company has a **Net Profit after Tax (NPAT)** has reduced to **2%** for the **F.Y. 2017-18**.

Changes in Process of Loan from Bank: -

The overall process of arranging finance from bank has not been changed but the process of taking informal interview by the Loan officers have become strict. The Suspicion level of Loan officers has increased significantly towards other companies operating in the Diamond Industry. Loan officer may be depending upon the credit score and intentions of the company's management may ask the company to get the Additional Documents relating to the Credit worthiness of their customers. This is in line with to make decision whether to provide finance to the company or not.

Documentations: -

The Additional documents could be demanded by loan officers are as follows -

1. KYC Documents of Clients
 - a. D & B reports of the customers of the Company
2. Any other document as may be required by Loan officer

D&B reports is **personal credit reports** for businesses and are issued by the credit reporting agency **Dun & Bradstreet**. Banks typically check a **D&B report** when negotiating payment terms and also sometimes to assess a business of borrower.

Change in margins of Collateral Security Provided: -

The Margins of collateral security has significantly increased from **60% - 80% to 80% to 100%**. But in case of Foreign transactions the margin requirement has remain constant to **133%**.

Few companies that went bankrupted due to changes & impact of scam on the industry: -

- **Shrenuj & Company limited: -**

Incorporated on 13 April, 1982, Shrenuj & Company was promoted by the House of Doshis to export polished diamonds. Emkay Drilling Equipment is a subsidiary of the company. The company imports

rough diamonds mainly from the Diamond Trading Company (DTC), London, and gets them cut, processed and polished in Bombay, Surat, Navsari and Bhavnagar, through skilled artisans and exports them to major international markets. It is one of the few sight-holders in India accepted by the DTC, and is assured of direct supplies of rough diamonds regularly. The company has a laser processing unit at Andheri. It diversified into jewellery manufacture by opening a unit at SEEPZ, Mumbai. The company exports diamonds and precious stones to many international markets, mainly Japan, the US, France, Belgium, Hong Kong, New Zealand and Germany. It is a listed company on Bombay Stock Exchange and National stock exchange.

Recently, Bank of India and 17 other financial Lenders have filled the insolvency case against the Company for the dues of Rs. 226 crores to the Bank of India and over Rs. 1,113 crores to the consortium of 17 banks.

Most of the 17 banks are nationalized. The case has been filed in the National Company Law Tribunal (NCLT). The company's debt of Rs. 1,113 crores had turned bad in March, 2016 but since February, 2018 the Nirav Modi – Punjab National Fraud came in to limelight the Bank of India and 17 other Financial Lenders have taken legal action to recover their debts so that they did not suffer the problems like Punjab National Bank is facing.

- **P & S Jewellery limited:** -

P & S Jewellery Limited is another well-known name in the Diamond industry. They are the Manufacturers & traders of the diamond and gold jewellery. They have office located at the Opera house in South Mumbai. The Liquidation of the company has been announced by the National company law tribunal as on 30th July, 2018. Landers of P & S Jewellers have suffered the loss of Rs. 1,000 crores on account of such liquidation. For P & S Jewellery the Resolution Professional have received offer for resolution from promoter of the company Mr. Paresh Shah, Omkara ARC and Mahavir Metal Industries but it has not been considered since some banks has declared tem as willful Defaulter.

The banks Which was filled the Bankruptcy case includes The Union Bank of India which has the highest exposure of Rs 313 crores, followed by State Bank of India at Rs 163 crores, Bank of Baroda at Rs 73 crores, and Andhra Bank at 67 crores. Other banks in the consortium include Canara Bank, Syndicate Bank, Central Bank of India and Vijaya Bank.

This case was also filled by the banks after the Nirav Modi – Punjab National Fraud came in to limelight in February, 2018.

Further, nearly eight companies in the gems and jewellery sector have been referred to the bankruptcy court which includes two of the large fraudulent accounts -- Forever Precious Jewellery and Demands and Winsome Diamonds and Jewellery -- with a combined loan of Rs 12,000 crore.

Remedial measures company is considering to survive & sustain in this phase:

To Fight these situations of uncertainty and difficulties to arrange finance through bank the Company AB limited considered the following steps: -

1. **Business with selected or trusted Customers:** - Company continued to do business with their old and trusted customers on priority basis. And for the new customers they ensured that the other party is genuine through collecting enough information about them by way of KYC documents, meeting them frequently at their work place, getting information about them from the market, also they asked their new customers to provide D & B report to negotiate the terms of business and to assess the business of the customers so that they did not have to suffer from defaults in payments from customers.
2. Avoid Expansion plan of business till the market conditions are favorable and they able to arrange finance at considerable and affordable rates.
3. Focus on the Product that has the highest margin and good returns.
4. Ensure that the Debtors are honoring their due dates and at the same time the company is meeting their due date with creditors. So that operating cycles can run fluently.
5. Cost Cutting: - They are trying to reduce the wastage level in manufacturing process so that they can save the cost. On the other hand, they are trying to cut the cost by reducing the employee strength at both Mumbai and Surat office. Also, they are trying to reduce the administrative and operating cost by giving compulsory leaves to employees on certain days.
6. The Company have also reduced the credit period they provide to their debtors so that they can

recover the payments faster and reduce the interest expense burden on their working capital requirements. Also they can maintain the cash flow in the business.

7. Company is also planning their working capital requirement by way of cash budget in advance so that they can come to know well in advance that when they have excess funds available which they can invest and earn income on it. Also, if they have shortage of funds in any month so that they can arrange it well in advance at affordable cost.

These way company is managing their business to survive and sustain in these tough market conditions.

Study by the Central Vigilance Commission (CVC): -

Further The Central Vigilance Commission (CVC) has released the list of top 100 bank frauds. The Study of CVC was focused on the methods used by the fraudsters, and loopholes noticed by the CVC, and suggested systematic improvements to avoid such frauds. The study has been dividend in to 13 sectors which included the agro industries, media, gem & jewellery, manufacturing and aviation. The study was conducted as a preventive vigilance measure and used a cut-off date of March 31, 2017. The findings of the study had been shared by the CVC with the Reserve Bank of India, Ministry of Financial services and Ministry of corporate affairs. The Table relating to the report has been shown in the **Annexure 2**. The Table also shows that till January, 2019 which measures has been implemented by the RBI.

Measures implemented by Reserve bank of India based of the measures suggested by The CentralVigilance Commission (CVC): -

- RBI has implemented the due diligence for the Manufacturing business under which they make direct visits to the debtors of the borrower, obtain direct balance confirmation, mandatory submission of stock statement to ensure the utilization of funds lend to the borrower and to know the efficiency of the operating cycle of the business.
- Banks also hire the external auditors to verify the stock position and its valuation, further the effectiveness and efficiency of the borrower's business. The External auditor will conduct the audit and check the Inventory management and accounts of the borrower and present the report to the bank. The Expenses for such verification practices needs to bare by the borrower.
- The guidelines mandating a minimum loan component of 40 per cent in fund based working capital finance with effect from April 1, 2019 were issued on December 5, 2018. This level would be revised to 60 per cent with effect from July 1, 2019. Effective April 1, 2019, a mandatory credit conversion factor (CCF) of 20 per cent has been prescribed for the undrawn portion of cash credit/ overdraft limits availed by large borrowers from the banking system. These guidelines intend to enhance credit discipline among the larger borrowers enjoying working capital facilities provided by banks.
- The Reserve Bank introduced a basic cyber security framework for UCBs on October 19, 2018 requiring them to put in place a board-approved cyber security policy distinct from their IT policy. This would standardize technology adoption amongst UCBs and address cyber security breaches more effectively.
- Guidelines were issued in February 2018 to facilitate the transition of MSMEs into the formal financial system by alleviating cash flow problems in the transition. The accounts of MSMEs that are not GST-registered as on December 31, 2018 would be governed by the 90 days NPA norm from January 1, 2019.

Annexure 1: -



RESERVE BANK OF INDIA
Mumbai - 400 001

RBI/2017-18/139
A.P. (DIR Series) Circular No. 20

March 13, 2018

All Authorised Dealer Category – I Banks

Madam/ Sir

Discontinuance of Letters of Undertaking (LoUs) and Letters of Comfort (LoCs) for Trade Credits

Attention of Authorised Dealer Category - I (AD Category - I) banks is invited to paragraph 2 of [A.P. \(DIR Series\) Circular No. 24 dated November 1, 2004](#) and [paragraph No. 5.5](#) of Master Direction No.5 dated January 1, 2016 on 'External Commercial Borrowings, Trade Credit, Borrowing and Lending in Foreign Currency by Authorised Dealers and Persons other than Authorised Dealers' (Master Direction), as amended from time to time, on the issuance of LoUs/ LoCs/ guarantees for Trade Credits for imports into India under delegated powers of AD banks.

2. On a review of the extant guidelines, it has been decided to discontinue the practice of issuance of LoUs/ LoCs for Trade Credits for imports into India by AD Category –I banks with immediate effect. Letters of Credit and Bank Guarantees for Trade Credits for imports into India may continue to be issued subject to compliance with the provisions contained in Department of Banking Regulation [Master Circular No. DBR. No. Dir. BC.11/13.03.00/2015-16 dated July 1, 2015](#) on "Guarantees and Co-acceptances", as amended from time to time.

3. AD Category-I banks may bring the contents of this circular to the notice of their constituents and customers.

4. The aforesaid [Master Direction No. 5 dated January 01, 2016](#) will be updated to reflect the changes. The changes will be applicable from the date of issuance of this circular.

5. The directions contained in this circular have been issued under sections 10(4) and 11(1) of the Foreign Exchange Management Act, 1999 (42 of 1999) and are without prejudice to permissions/ approvals, if any, required under any other law.

Yours faithfully

Ajay Kumar Misra
Chief General Manager

Source: - www.rbi.org.in

Annexure 2: -

• **CVC's suggestions to curb frauds: -**

SECTOR	LOOPHOLES	MEASURES
Gem & Jewellery	Due diligence report on borrowings not obtained before submitting sanction. No credit assessment despite entire group is owned by one person.	Control of financiers on movement of stocks. Execution of tripartite pact with buyer and exporter to remit proceeds to Indian bank account of firms
Manufacturing	Incorrect and non-existing debtors, re-routing of letter of credit payments back to account of borrower company.	Due diligence of major debtors by direct visit, direct balance confirmation, analysis of stock statement etc to ensure end use of funds.
Agriculture	Proportionate sales transaction not touted through working capital limits. Round tripping of funds, no system of preparing sales order.	Right assessment of working capital as per guidelines, proper scrutiny of debtors, confiscation of all bank accounts of promoters once case under CBI.
Media	Banks which were not member of consortiums allowed company to open accounts, transferred money to siphon it off	Banks should scrutinize objective of forming different companies
Aviation	Loans extended to defunct airline under scanner. Conflict of interest of independent directors who had commercial relationship with airlines	Credit extended on brand name which does not form any tangible security. Brand evaluation done by private entities, accepted blindly by banks.
Projects	Signatures of applicants or borrowers not obtained in person	Genuineness of operations should be verified through field visits
Trading	Major transactions took place in bank with two parties on same address acting as customer and supplier	Corporate governance in banks needs to be strengthened, need to review multiple banking arrangements
Information Technology	Disposal of hypothecated stocks	Adequate credit monitoring measures, finalization of major vendors at the time of sanctioning loan
Export Business	Banks didn't verify shipping bills from custom authorities	There should be no over-confidence on the basis of statue of borrowers.
Discounting of cheques	Accounts opened without 'know your customer' details	Centralized processing center for a/c openings for cross verification of documents
Fixed deposit Frauds	Private person falsely represented to government organization as bank representative and to bank as financial advisor of the govt.	Bank's Systems and procedure should be diluted for govt. sector or corporate while opening bulk deposit accounts
Frauds by staff for Demand Loan	Anti-money laundering provisions not adhered to and fictitious demand loans were allowed to be opened by branch managers	Controlling offices should critically go into quality of business
Frauds by staff for letter of Comfort	Society for Worldwide Interbank Financial Telecommunications (SWIFT) transactions not linked to core banking solution	SWIFT-core banking solution should be integrated, every log-in to swift only through biometric system.

Source: - Hindustan Times News Paper dated 17th October, 2018

Conclusion

The case highlights the loopholes of the funding structure and the liquidity management procedures of banking sector in India. It is a classic case of how a lag in decision making by management and government policy can lead to the downfall of a diamond industry. The fall of a vast organisation will create a serious ripple effect on the connected sectors and the economy as a whole. It does not fall on its own, rather can cause the collapse of the financial segment itself. With respect to growing economies like India, where the shadow banks play a complementary role in bridging the gap of financial inclusion, their contribution to the economy cannot be ignored. With respect to the strategies to counter liquidity crunch, can new liquidity fill the crunch gap? An improper handling of liquidity crisis may lead to solvency problem. The basic fundamental of appropriate measures and approach towards short term cash flows, working capital and reserves may help even a giant conglomerate to manage its derailing.

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Rare Association Rule Mining for Hyper-Linked Data Structure

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ABSTRACT: The most widely used technique to discover interesting patterns in data sets is Association Rule Mining. Association rule mining mainly focusses on the discovery of frequent itemsets. Rare association rule mining is an emerging field that aims at finding out rare cases in item set behavior. The proposed algorithm provides an efficient way of mining rare patterns from the transactional database. The algorithm employs a hybrid data structure which will overcome the existing algorithms.

Keywords: Association Rule Mining, Rare Association Rule Mining, Hybrid-linked data structure

I. Introduction

The most widely used technique to discover interesting patterns in data sets is Association Rule Mining. Various areas such as telecommunication networks, risk and market management, inventory control, medical diagnosis/drug testing [6] etc the most widely used technique is association rule mining. The Association rule mining focuses on the frequent item-set. Rare association [7,8] algorithms are also equally important to capture a rare scenario. The paper focuses on the rare and interesting association rule mining.

II. Related Work

The process[1] of finding a relationship among the attributes and the attribute values in larger database is association rule mining. It is very important task of data mining and knowledge discovery in the database. Huge sets of data are stored in data base, within these data bases there can be relationships between many attributes. Discovering this kind of relationships could greatly affect the decision making. The association rules are represented as $A \rightarrow C$, where A and C are the antecedent and the consequent respectively. The frequent item-set mining in large transactional database lead to association and correlation among items. In the recent past lot of focus on the rare association rule mining is growing in market. In research area association rule mining is an challenging technique to implement. Identifying the relationship between items using methods called support and confidence plays a vital role. The applications which use this rare associations rule mining are fraudulent credit card usage, detection of failures in the network, educational data or medical diagnosis. The major aspect is to find out rare associations from large dataset. Various rare association rule mining are given in table 1.

Table 1: Comparison of various Rare Association Rule Mining algorithms

III. Methodology

Progressive Rare Association Rule Mining

Progressive Rare Association Rule Mining PRARM is an efficient method which can generate rare pattern in the given data base. The proposed approach employs a hyper-linked data structure for extracting rare patterns. The proposed method implements a hybrid-linked queue-based data structure in order to fetch rare patterns from large datasets. Frequent items increase in case of large dataset,

Method	Mechanism	Limitation
Apriori – Inverse [11]	Make use of Max_Support instead of Min_Support to generate candidate itemset.	Works in the Apriori way and generate candidate item sets
Apriori – Rare [14]	Make use of Sup_Count to find out support of an itemset.	Works in the Apriori way and generate candidate item sets
MSapriori[12]	Uses the concept of minimum item support (MIS).	Increases computational complexity
RSAA[11]	Uses the concept of minimum permissible relative support count.	Works in the Apriori way and generate candidate item sets
Genetic Algorithm[17]	Uses the concept of	In case of Association

	Genetics, calculates the fitness function	rule mining, it might not give desirable output
Grammar Guided Genetic Algorithm[16]	Along with fitness function it focusses on the grammars.	In case of Association rule mining, it might not give desirable output
RP - Tree[15]	Uses the concept of Tree based data structure	Not suitable for large data sets.

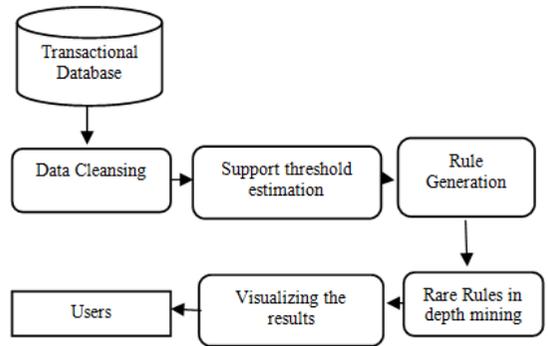


Fig 1: System Architecture

i.e., relationship between item and item set will result into higher impact in finding rare associations. Algorithms like level wise and pattern growth can be outraged with Hybrid-Linked Data structure and does the experimental results convey in this paper. Hybrid link method uses a technique called memory-based queue instead of a tree data structure which can provide efficiency in mining large datasets and provide less space overhead. The proposed method also shows that computational overhead for constructing tree structures is more as compared to simple queue data structures.

System Architecture

T ID	List of items	Rare Item Set
10	i,g,f,e,d,c	i,e,c
20	m,e,d,c,a	e,c,a
30	k,g,e,d,b	e,a,b
40	h,d,c,a	h,c,a

The data comes from various data sources like csv files or flat files or even data stored in some relational RDBMS tables. Through the concept of ETL the data is loaded into the database. Once the data is in the data se we need to clean the data. The process of data pruning is very important in the data mining process. The next step is to set the correct support threshold for the algorithm. Based on the support threshold the Rules are mined by the PRARM algorithm. Once the rules are obtained it to be visualized, analysed and interpreted and provided to the users.

Input : Database D

Output: Rare patterns – A Complete Set

- 1 Set the Support Counts for all the items I in the DB
- 2 for each item $I \in DB$, do
- 3 $Sup(freq) > Support (Rare Item) > Sup(rare)$
- 4 $I \rightarrow RareItem$

Consider three fields named a) item id b) hybrid-link c) support count to store the following details such as Trans.Create separate queues, Qu with two parameters such as hyper-link and item id to store details of rare pattern or rare items.

Hybrid-link method is used to link transactions with the same first item. For each item x in T, generate the rare item in the x-projected.

This technique will perform its operation every scan since initial scan of database and generate support count each occurrence of every item. During the second phase of scan in order to build hybrid-link data structure, transactions will be considered which have at least one rare item and creates a link i.e., transactions having frequent items will never have rare items during rare pattern mining process. Two Supports are used to differentiate between frequent items and rare items such as Support(frequent) & Support(rare) is used in this method.

Support(frequency) > Support (RareItems) > Sup(rare)

Using Hybrid-Link the transactions with same initial item will be stored in queues and link together. Head of the quie is represented by items of the below table

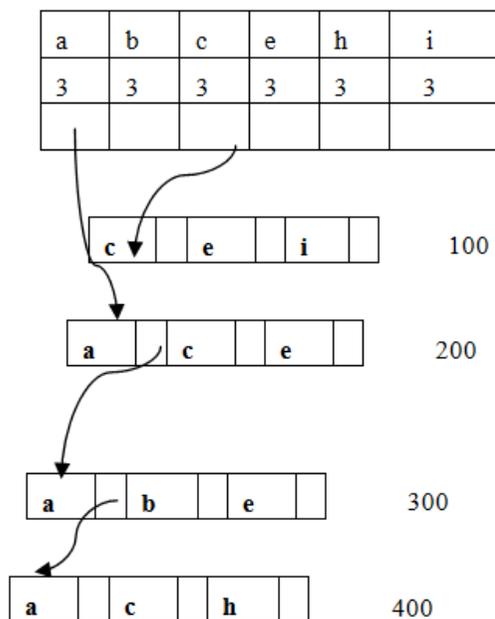
T ID	List of items
10	i,g,f,e,d,c
20	m,e,d,c,a
30	kg,e,d,b
40	h,d,c,a

Algorithm Explanation

Let's consider the following transactions for the analysis The Support for each item is defined as {a:3, b:3,c:3,d:4,e:3,f:4,g:2,h:3,i:3,k:2}. According to the algorithm we have to consider the items based on the condition **Sup(freq) > Support (Rare Item) > Sup(rare)**. According to the condition the reduced datasets are as follows.

Based on the reduced item set we can form the queue according to the F-list (Alphabetical order) as The header table will have the three fields the item set, support count and hyper link .This can be linked to the reduced rare item sets

a-b-c-e-h-i



Three major fields such as item-id, sup_count and Hybrid-link will be kept in header table H. As and when rare items are projected they will be loaded into memory location, the order of first item will be linked in queue and entires are made in header H table which will act as head of queues.

For example, the entry of item is done in header table H, a link rare-item trasactions such as 20, 30, 40 is connected. These become the first rare item to be named as first rare item. Similarly, frequent

item transaction 10 is linked to c_queue in H. The i, h, e, b queues will be empty as no rare items are found.

Sl No	Number of Transactions	Rare Items	Execution time (second)
1	1000	52	679
2	3000	113	702
3	6000	206	996

IV. Results and Discussion

The data set that we have taken into consideration is data of a Retail shop. In order to develop the algorithm, we are taking into consideration two data sets. The first data set has the # of transactions and the items which are used in each transaction. The second data has the profitably of each items in the transaction data.The test data which are using for the testing is given in the table below. This table will have the number of transactions, Number of Items and the support count as the Input. Based on these inputs we will give the test cases for testing the records.

Sl No	Number of Transactions	No of Items	Support Count
1	1000	26	35
2	3000	26	55
3	6000	26	85

In the test data the Number of transactions has been increased in each of the data sets. The items have been kept constant as the retail we have selected deals with only 26 items. The Support count also changes incrementally with the inputs which are given.The Input data can be represented in the graphical way as follow.

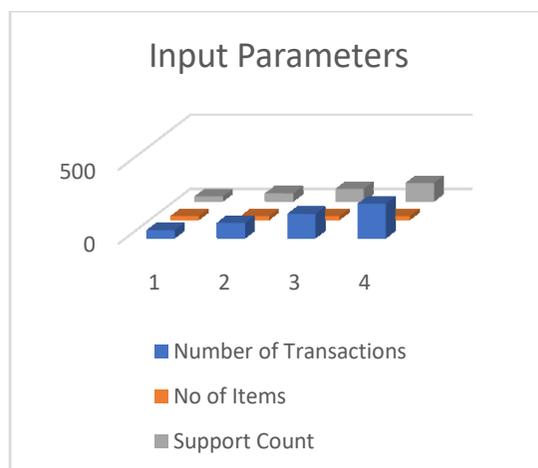


Fig 2: Input Parameters

The consolidated output can be given as

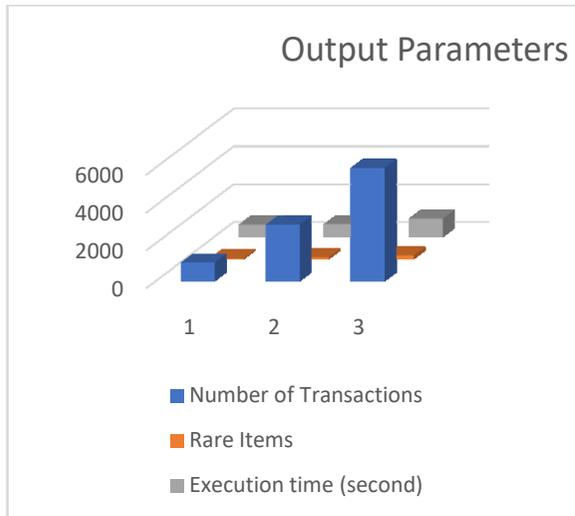


Fig 3: Consolidated Output

Major impact of the proposed algorithm is that # of times scanning the database are less than the max-number of rare item scanning. Consider data blocks are divided and scanning is initiated, it will be the times of scanning the database is only twice and all the rare itemsets will be found.

Conclusion and Future Scope

The proposed algorithm helps in mining large data sets for generating rare association rules. The algorithm helps in identifying reduced set of rules which are easy and accurate. The quality of data generated is also very high. The algorithm had been designed in such a way that it can tackle huge number of data without reducing the accuracy and maintain the diversified solutions. This optimized algorithm which can handle Big data can generate rare association rules which can prove to be very useful in applications like health care or in credit card sector.

The header table they used in the algorithm used to mine rare patterns is not efficient. But the initial processing of the rare 1-itemsets and trimming the transaction to contain only rare 1-itemsets can be improved to be more efficient. This technique should be extended to mine rare patterns in streaming data and sparse data sets. The challenge in streaming data is that the complete dataset is not available for calculating support of itemset. Transactions are read sequentially in either sliding window or other windowing techniques and the approximate rare

itemset are mined. Streaming data mining is the current trend.

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Role of Digitalization in Social Work

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ABSTRACT: *This article explores some of the ways in which ICT can impact on the individual, families and communities and have provided frameworks to make sense of what is happening around us as we enter the digital society. The level at which technology can enhance social-work practice and the potential benefits of the technology will not be realized unless social workers engage creatively with the tools that are already available.*

Keywords: *Digitalization, Social Work Practice, Community*

Introduction

We live in a digital society which has notably changed the information landscape influencing every aspect of our lives. The current wave of technological innovation is part of the context in which social-work practitioners and service users and careers operate. Technology can improve the quality of our lives and learning and can potentially enrich social-work practice, but the extent to which it does so depends on our active involvement. It will not happen without social workers moulds technology developments and uses to their own and service users' needs. However, the technology can also pose challenges and dangers.

Objective

In this article, some of major issues when thinking about the digital society from a social-work perspective is discussed.

Scope

Social work is one of the few occupations that allow a person to do actual good in the world. To plateful below poverty families, children those who need for care and consolidation, geriatric car for the needy citizens and heaps of inimitable circumstances of woe, social workers tryto help theirbuddy traverses in the world by introducing them to necessary programs and services, providing developmental work and counseling. Unfortunately, most communities have a desperate shortage of social employees. As a result of the economic recession, more people are grappling with social, emotional, behavioral, and psychological issues, and the need for caring and professional social workers only continues to grow. Mercifully, technology permits several social employees to perform masterly despite the shortage. Though the necessity for human social employees can ne'er stop, school solutions facilitate social employee's well-being a lot of expeditiously and skilled.

Review of Literature

In 2005, the **National Association of welfare workers (NASW)** and **Association of Social Work Boards (ASWB)** created variety of technology standards to assert trained social employees were congruously competent to serve an increasingly tech-savvy population. More and a lot of welfare work shoppers' gift with tech-related issues, and social workers must be capable of understanding the tech and search the solutions. Thus, as NASW and ASWB suggest, social workers of the future must be proactive in their research of emerging trends, constructive in their reactions to tech innovations, and rejecting of technology providing it fails to produce edges to their cause or their shoppers.

Cathy N. Davidson, scholar and winner of many awards for her works promoting techno-literacy, writes in her book *Now You See It*, “65% of children entering grade school this year will end up operating in careers that haven't even been mythical nonetheless.” Yet, Davidson argues, traditional education often fails to prepare students for their futures, thanks in no small part to a dearth in tech-related instruction. Neglecting to include common devices and systems, like tablet computers and video games, serves to delay familiarity with technology that can do real good in the realworld. It makes quite a difference to someone's quality of life whether they spend an hour online to increase their employability by e-learning new skills or to increase their social networks by catching up with old friends and 'weak ties'(Granovetter,1983), or by playing online games, browsing pornography or chatting with unknown partners in a chat room.

Research on internet use amongst Swiss households found that its use for entertainment varied across socio-demographic groups. Less-educated people used the Internet predominantly for entertainment, while more educated people use it in a more information-oriented way (Bonfadelli, 2002)

Discussion

To prepare for the incipient tech revolution within socialwork, students should seek programs that prepare them with hands-on experience of the technologies they will need. Online schools inherently require some tech skill, and they are usually rather adopting at providing instructions and involvement with emerging tech tools, like those social workers can use to find more success in their positions.

Starting from the position of individuals or households, three issues emerge:

1. The digital divide (which can sometimes be a bridge);
2. Digital literacy;
3. The new information environment.

- Digital Divide

To make progress in using ICT for social work and social care requires practitioners, service users and careers to be digitally literate and to have access to technology. In 1995, the North American magazine Newsweek described the average internet user as politically conservative, white, male, single, native English-speaking, living in North America and a professional, manager or student. Much has changed, mainly through the widespread availability of the Internet in Western countries. Technological innovation has rarely undergone such a rapid dispersing process. Although the speed of scattering seems to be slowing down, the community of internet users still grows. Amidst rapid issuance of computers and the Internet, we should remember that there are huge inequalities concerning who virtue from innovations.

The digital divide is impermanent fluidity. Gender is one of the seven indicated fault lines and used to be a very strong divide. However, there has been a shift, and gender is no longer a strong indicator for access to technology. Men and women have similar levels of access to, for example, mobile phones and internet connections. While some divides narrow, others increase.

Over the past quintuple years there has been a considerable shift away from income and education level a prime factor in the digital divide towards age. While younger age groups earlier indicated high costs and opportunities elsewhere (school and work) as a remarkable reason not to have home internet access, older age groups cite lack of both interest and digital skills. This raises the distinction between diversity and a divide.

If older people are comfortable using the old media and see no interest in acquiring access to new media, should we still define this as a digital divide or as an informed choice? Benefiting from computers and the Internet is not only based on access but also relates to usage. It is reasonably safe to state that, on average, time spent using the Internet continues to increase. (However, one has to bear in mind that people's responses are notoriously unreliable when asked about how they spend their time, and time-diary surveys are complex and expensive.)

Technical attainment is currently a cultural competence, emerging into awareness much like the need for multiculturalism in the '60s or continuous ethical training of the late twentieth century. The shoppers we have a tendency to serve integrate technology into their lives just like the weaving of thread in a very cloth. Technology is another colour of thread. If we have a tendency to don't seem to be assessing the impact of technology on our consumer populations, then this is a disservice to them and our profession.

Some of our population flourish with technology and yet others are in technology deserts, falling behind further in a digital divide in which they may not recover. Such developments go together with the shift from metered to unmetered access, from dial-up connections to broadband or cable. It also generates a debate on time displacement, whether the Internet is taking time from 'television time', 'social time' or 'work time'

Proactive behavior happens with reading concerning current technologies that have an effect on evidence-based practices, client populations, ethics, agency processes, and advocacy solutions. Being privately followed, I work to stay up to date on technologies affecting adolescents and families.

There is an area unit on-line service to assist "catch" articles of interest to coach my follow. If there's a particular drawback in a very family system, I look online for alternative approaches, including technological solutions. There is an area unit things within which the main target changes to reactive. This is wherever crucial pondering technology is very important. An adolescent girl, in therapy for inappropriate relationships with boys, discussed a conversation on Snap chat.

At the time, I had never heard about this application. During my investigations, I found how easily Snap chat could be used inappropriately and place her at risk. An overall discussion with the foyeys on a way to decide phone app safety ensued while not breaking confidentially of the female offspring.

Issues of safety and victimization apps in a very positive manner helped the female offspring along with her communication. Rejecting technology will be available in several forms, but always from an educated understanding of the benefit derived from the action.

They may, however, embody analysis into cheap or free net service for low-income populations. This loops back to the proactive/advocacy a part of the equation. Start with Associate in nursing assessment of “how technology affects the client’s system.”

An individual assessment of your follow and center analysis helps to extend awareness of best practices with technology. The digital divide is changing into ever increasing through welfare workpopulations.

Advocacy for literacy, technology inclusion, and access is a need now. NASW ethics, cultural competency, or the need for technology to be basic human rights - they all point toward change for social workers. The change in the digital divide starts with you. Finally, to understand the balance of benefits from computers and the Internet, in addition to quantity of usage, we also need to look at ‘quality’ of usage.

This finding related to low-income after reviews households being surprisingly well represented among broadband users as a consequence of peer-downloading music or movies. In attempting to ‘deconstruct’ internet usage, the Dutch Dialogic company has constructed a typology of usage.

Their ICET-model differentiates between four categories:

1. Information gathering.
2. Communication, sending messages between people.
3. Entertainment, whether online or offline, alone or multi-player.
4. Transactions, such as e-banking or shopping

There is a digital divide when exclusion from internet access coincides with exclusion from other resources such as education or income. Fortunately, access to technology can also be a compensation for exclusion elsewhere. Here it can form a ‘digital bridge’. Example illustrate technology’s liberating potential. where technology helps to compensate for exclusion resulting from mobility impairment. With the lack of ‘access for all’, people with impaired mobility can benefit from online services. These can be for work (dispersed call centre’s, translation work), shopping (e-commerce) or for education (off-campus e-learning), Where people reduce loneliness through technology. There are, however, certain groups of people who are extroverts but still face loneliness. In Eindhoven, in the Netherlands, an experiment was carried out with older people experiencing loneliness because of chronic illness. By providing them with computers, broadband internet access and training and support, feelings of loneliness dropped. This was because, for some participants, it was lack of mobility rather than being introverted that was causing weak social networks. This illustrates when technology can play an important role and is one reason why it is important for social workers to understand its potential for service users and careers.

Effective Technology for Social Work

As social employees widen their ability to address a dynamical technological landscape, most are adopting several tech tools for themselves. While plenty of social work techs relies on older technologies, like desktop computers, many of the most exciting and practical tools make use of the newest tech trends, like mobile apps.

Apps are a unit convenient, which make them ideal for busy social workers. An app that features a searchable reference list of symptoms and aspect effects of pharmaceutical medicine helps social employees higher treat mentally or physically unwell purchasers. Additionally, an app that allows for quick input of client data to include health symptoms, mood ratings financial security, and more, can keep social workers organized on-the-go. Having info like this continually on the market permits social employees to be additional economical in their jobs.

What’s additional, social worker can utilize apps within sessions to learn about and help their clients. For example, there already exist a number of apps to assist with speech therapy for children and adults.

- **Digital Literacy**

The digital revolution has reached the stage where people need technological literacy to participate fully in society. The range of possibilities for engaging electronically with society continues to grow whether in social interactions such as keeping in touch with friends through e-mails and text messaging, accessing formal or informal learning opportunities, working in the office (word-processing, presentations) or

consuming goods and services (e-tourism, e-banking, e-shopping).

The need for updated skills in the wake of the diffusion of new technologies is not new and is certainly not specific to computer technology. When the bicycle was introduced, people had to learn how to cycle. Even when the telephone was introduced, Bell trained women in the USA to make short and factual calls rather than holding long social conversations (Fischer, 1992).

Telephones were, after all, intended for short business communications. Following a similar pattern, the same is happening with current waves of innovations, especially computer and internet technology. Public-sector initiatives to support digital literacy include computer-technology centres and training courses organized through public libraries or community centres.

Education at primary, secondary and tertiary levels has also encompassed digital literacy within its formal curriculum. Digital literacy differs in some ways from traditional literacy. In order to clarify the concept of digital literacy, we distinguish three forms of skills: instrumental, structural and strategic skills refer to more strategic uses of information and include the ability to proactively seek information, the ability to critically analyze available information and act on it and the continuous scanning of the environment for information relevant to work or personal life, sometimes referred to as organized serendipity. These skills become more critical in society as the information landscape permeates our daily activities, but they are not essentially digital. They are very similar for non-digital media and have a strong relationship to media literacy. They are relevant to developing a research-minded approach to social-work learning and practice.

- **Digital Practice**

Digital practice will require extending the instrumental skill set as it will be difficult to undertake online if your typing skills are very slow, though that will probably be overtaken by the increasing simplicity of using the compute see, each other through audio and visual applications. More importantly, it also requires extension of practice skills. The method communication can influence not only what is discussed but also how.

Sentences are often sent in shorthand and SMS text language used. Young people are used to texting and communicating in an abbreviated form, a skill easily transferable to the computer of visual information can create uncertainty and result in rapid exchange conversations to avoid delay.

This means that in this there is a tendency to dispense with the normal formalities of greeting. It is this 'in your face' approach that is so different to might take weeks of face to face work before a young person might disclose abuse whereas through the computer it might well sentence. (Waldman and Storey, 2004)

- **Social Work Practice**

Improvements to the way information is exchanged within and between agencies are imperative if children are to be adequately safeguarded. Staff must be held accountable for the quality of the information they provide. Information systems that depend on the random passing of slips of paper have no place in modern services. (Laming, 2003)

- **Social Constructivist or Technological Determinism**

Social workers are not just routine professionals who carry out the tasks they are asked to do. Like most modern professionals, they are reflexive practitioners who perform their job while innovating. This idea applies to most social interventions, and, hence, also to those involving technology.

From that perspective, any apparent reluctance of social workers to engage too optimistically with technology in daily practice can be seen as healthy when their focus is on improving the use of technology and its relevance to social work. Such an 'innovation-through-resistance' attitude is probably more suitable for the social-work context than uncritical technology fascination.

Conclusion

This article explored some of the ways in which ICT can impact on the individual, families and communities and have provided frameworks to make sense of what is happening around us as we enter the digital society. The level at which technology can enhance social-work practice and process is not a given, and the potential benefits of the technology will not be realized unless social workers engage creatively with the tools that are already available.

They need to work with the technology and its developers to ensure future developments enhance quality of life and work for service users, careers and practitioners, as well as providing data for management and policy purposes. Preparing practitioners for this role requires curriculum changes that take account of the digital age we live in and the skills required to take this agenda forward as well as developmental research

on both a micro and macro scale to analyze which uses of technology are beneficial to the social-care process.

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Outsourcing of Logistics Services and Supply Chain Efficiency – with special reference to Automobile Sector in analysis with VUCA

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ABSTRACT: *The paper is worried with however outsourcing impacts overall structure performance normally, while not lightness a selected sector or trade. It additional examines the assorted approaches and terminologies employed by organizations on the attainable adoption of such approaches. This market is then analyzed and mentioned concerning the impact of outsourcing on organizations especially the automobile sector with variety of outsourced activities and designated sector-led organizations are additionally investigated and analyzed in reducing the volatility, uncertainty, complexity and ambiguity of supply and the way choices are reached at, in respect to deciding what to source and what to not outsource. This can be compared with elaborate literature on the identical within the developed world before recommendations are created. The paper concludes by jutting the possible future trends within the field of outsourcing normally and makes recommendations and conclusions on however organizations will move forward with the outsourcing ventures and strive to reduce the volatility, uncertainty, complexity and ambiguity.*

Keywords: *Outsourcing, Logistics, Supply chain, Volatility, Uncertainty, Complexity, Ambiguity*

Introduction

In recent years outsourcing has become a serious consider for organizations' performance and will no longer be unheeded (Tomas, 2010). Since the Industrial Revolution, firms have been involved with however they will exploit their competitive advantage to increase their markets and their profits (Handfield, 2006). Corporations have sought-after improved performance by outsourcing activities not thought of a core ability of the business. The outsourcing of a range of services locomotive from improvement, logistics, and compound maintenance among others has become a vital force in world outsourcing trend services, nonetheless there exists some queries regarding the degree to that outsourcing results in a positive outcome and also the conditions supporting it, though several corporations source to scale back prices, they typically fail to try and do therefore and will truly increase if not handled properly (Meixell, 2008).

With the dynamic changes that are going down within the market in terms of reduced product life cycle (PLC), turbulent technologies, global competition and exaggerated client demands, markets became volatile, uncertain, complicated and ambiguous (VUCA) golf stroke organizations below large pressure in terms of demand and supply. These phenomena are visible in most of the buyer markets travel from mobiles to cars. Presently, client tastes are ever-changing very fast. New markets are gap at regular intervals displacing previous ones. Similarly, new technologies are rising decimating the present ones. All these destructive changes are transferal tremendous quantity of stress on the provision chain of the organizations. As automobile firms face these challenges, in turn, the automobile part firms on with all the players in backward offer chain face the strength. It is according that worldwide, every year, the imbalance between supply and demand prices firms billions of greenbacks by method of stock-outs, excess inventory or in providing immense discounts to customers. Promotions, new product launches and ever-changing demand patterns may also produce mayhem on the demand and provide designing process.

In such eventualities, Sales and Operations designing method are considered in concert of the most effective solutions for organizations. It is considered as an efficient communication method that puts the strategic, military science and monetary plans of a business into one unified operating arrange to optimize the allocation of essential resources like people, capacity, materials, time and cash. (Hitachi Consulting,2007) in respect to auto-component sector.

VUCA

The quality of the worldwide supply chain operations has not been additional apparent than throughout the monetary crisis of recent times. It diode to raised awareness regarding the vulnerability of the complicated operations that span over variety of continents. Trends in business indicate that there's a movement to restrain and even reverse outsourcing and back shoring to test volatility,

uncertainty, quality and ambiguity (VUCA) that characterize international business these days. during this we have a tendency to discuss however business performance measures like price, quality, client satisfaction, security, access to plug and innovation are stricken by VUCA and the way insourcing and back shoring have recently emerged on prime as they lower the impact of VUCA on these business measures. This ends with a word of caution—the speedily dynamical world business atmosphere needs that the performance measures be monitored keeping the VUCA factors in mind as markers.

Ever since the Industrial Revolution and also the evolution of free enterprise, businesses have sought-after new ways in which to exploit their competitive benefits to increase their markets and growth. This meant sourcing the correct materials and elements at the foremost value effective value and managing the processes to deliver the final product and services to the market. The twentieth century fully fledged the emergence of massive, integrated, and world firms that controlled and closely-held their assets, requiring multiple divisions and departments with advanced and multi-layered management structures. In step with Handfield (2006), the model for many of the twentieth century was a massive integrated company that will “own, manage, and directly control” its assets. In the 1950’s and 1960’s, the rallying cry was diversification to broaden company bases and take advantage of economies of scale. According to on the market literature by most authors for example Masson-Franzil, 2005, Troaca & Bodislav, 2012;

Outsourcing Institute, 2002 among others, they say that by diversifying, corporations expected to defend profits, even although growth needed multiple layers of management. Afterward, organizations making an attempt to contend globally in the Seventies and Nineteen Eighties were unfit by an absence of gracefulness that resulted from puffy management structures. Handfield any adds that to increase their flexibility and power, several massive corporations developed a new strategy of focusing on their core business that needed distinctive important processes and deciding that may be outsourced.

Outsourcing, that started in the early 90’s as a revolutionary development of causation unskilled work from developed countries to developing countries, has fully fledged tremendous growth over the past ten years. These firms became lumbering giants with rigid and over puffy management structures that lacked the gracefulness to address challenges in their markets and to exploit rising opportunities. ways emerged wherever corporations targeted on their core business that entailed distinctive which processes were important to the company and which of them may be outsourced. Organizations shrunk with rising service corporations to deliver accounting, human resources, knowledge process, internal mail distribution, security, and plant maintenance.

Outsourcing elements to have an effect on value savings in key functions was another space in that to improve their finances. Emergence of latest business functions: The use of contact centers and tele commerce rose to prominence at roughly the same time as outsourcing. It created sense for corporations in delivery on board a new business operate or strategy to use outsourcing to deliver that practicality. For instance, most native Australian BPO suppliers such as UCMS cluster restricted (now Aegis Australia Limited) and Salesforce started with voice work in the Nineties, managing decision centers and a variety of client service functions for service organizations such as banks, airlines, and telecommunication suppliers. a lot of recently, with the increase of Social Media and huge knowledge analytics, outsourcing and BPO suppliers were terribly fast in establishing practices to supply their purchasers services in these areas.

Today each trade faces a troublesome competition essentially for the customization and within the method it faces ton of uncertainty in terms of demand quality, in terms of shopper satisfaction and ambiguity in selecting the proper product from the right place by the right producer at the right worth. The outsourcing by the mixing of logistics and supply chain and also the provision might cut back VUCA. During this study, we’ll be discussing concerning however outsourcing and its model on par will increase the productivity by meeting the demand of the shoppers and also the customers in demand. A collection of resources associated statement providing an introduction to produce supply chain management and connected systems for industries, practitioners, and anyone else inquisitive about learning a lot of about the outsourcing, manufacturing, transporting, storing, delivering, and managing merchandise.

Typical VUCA - signifier for today's logistics and supply chain

While we are going to find out the result of customization, increasing demand viz. on Supply Chain, We found this term quite attention-grabbing within the diary written by Trevor Miles. to offer background concerning Trevor, he's vice chairman of Thought Leadership, associated is an knowledgeable supply for Kinaxis.

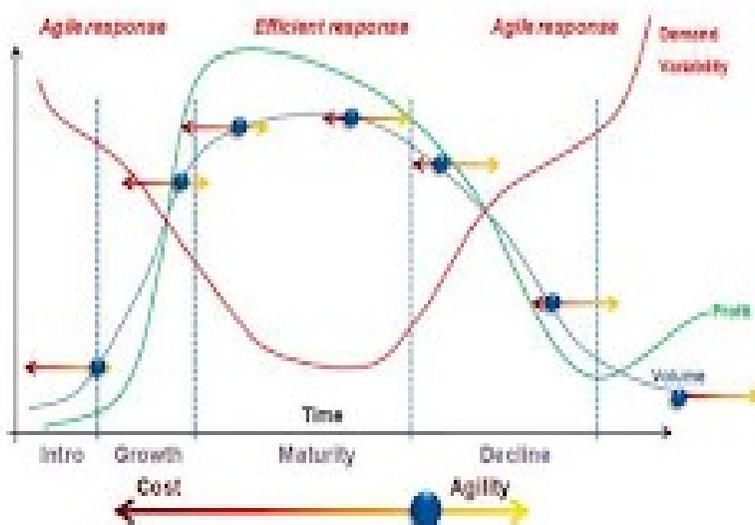
In the article he mentions **VUCA** - Volatility, Uncertainty, Complexity, and Ambiguity. in step with Trevor, this can be what defines the proper market situation, the businesses are acting on the way to improve profits whereas handling the uncertainty and volatility they face within the market. This might lead them to give some thought to not solely product innovation however conjointly provide logistics and supply chain innovation.

Volatility in step with him (Trevor Miles) is that the active ingredient, whereas quality, uncertainty, and ambiguity looks to be the massive effects. Economic process is that the key to volatility leading more to product quality, that once combined with outsourcing ends up in provide chain quality. Today it is the need of hour to understand the impact of VUCA in the businesses of automobile industry that depends mainly on outsourcing of logistics and supply chain in more wide aspects of reaching the customers demand and eventually leading to optimality of overcoming volatility, uncertainty complexity and ambiguity

Because of volatility concerned in mass customization, company has terribly little demand for every variant resulting in high uncertainty concerning the demand especially in the automobile sector Whereas multi-sourcing and outsourcing has crystal rectifier to longer and a lot of variable lead times, creating it unsure concerning the latent period to the demand.

He conjointly mentions concerning the necessity of solutions by frontline folks too.

Agility is that the solely approach that we'll follow as per the author. From the below diagram



And in step with the author legerity is that the best choice. As shown within the figure on top of, the time spent by company within the Maturity section is {increasingly| progressively| more and a lot of} decreasing and is shifting more towards the "Agile Response", instead of "Efficient Response".

The 3 main steps toward legerity that he steered looked as if it would Pine Tree State the sole strategy to realize profitableness in today's world.

They are:

- **Knowing sooner that markets have modified**
- **Analyzing the profitableness and various approaches prior anyone else**
- **Acting quicker towards demand shifts**

We bring this up as a result of the article by Matt Davis within the Logistics and Supply Chain followed at Gartner titled "Frameworks to style and change Supply Chain Segmentation",2011. This builds upon an associate earlier article by Matt and Wayne McDonnell titled "The Seven Steps of the Supply Chain Segmentation Journey" 2011. Several observations from each articles, comprehensive, to finding the degree

of segmentation may be a bit too advanced for most or some corporations with terribly refined supply chain functions. It's perpetually sensible to possess lofty aspirations, however our suggestion would be to travel through many iterations beginning with a pair of, maybe, configurations, the competitive operational levers typical in any supply chain method of price, speed, and repair, all the weather of which might be seen within the account.

The History of Indian Automobile Industry

The automobile business in Asian country has been recognized as a core manufacturing sector with the potential to enhance economic process and promote technological development through its powerful backward and forward linkages. (Parhi, 2008)

Indian motor vehicle business started in an exceedingly little method within the pre-independent India in Nineteen Forties. The primary company, Hindustan Motors was started in 1942 with collection of Ambassador Cars supported the look of British Morris Oxford III model and in 1944 Premier Automotives Ltd; began building edict cars. A year later, Mahindra and Mahindra began assembling Jeep-CJ models. After independence, Government of Asian country (GoI) extended support to leading entrepreneurs to make AN motor vehicle element producing industry to produce parts to existing markets. Throughout 1950's and 1960's, GoI initiatives like nationalization and license dominion hurt the growth of the business to some extent. (Parhi, 2008, Wikipedia, 2014).

Subsequently, the business began to witness quick growth throughout 1970-1980, chiefly due to domestic makers like telephone company, Ashok Leyland, Mahindra and & Mahindra, Hindustan Motors, Premier Automobiles, Bajaj Tempo and Bajaj motor vehicle WHO arranged the inspiration for entrepreneurship . throughout this era, tractors, trucks and scooters were the most keep of the business.

In 1980's, major changes started sweeping the Indian motor vehicle business. It is not out of place to say that railway car manufacturer , Maruti was accountable for conveyance in dramatic changes within the motor vehicle and auto component business with the in a position support of GoI initiatives like phased producing programme (PMP) and Foreign Direct Investment (FDI).

Later, the bonus to Indian motor vehicle business was received with international auto firms getting into Indian market. Between 1980-1990, makers like Suzuki, Honda, Kawasaki, Yamaha and Mitsubishi of Japan entered into collaboration with domestic entities. The Indian automotive business began a replacement journey in 1991 with GoI de-licensing the world and after permitting one hundred per cent FDI through automatic route. Through out 1991-2000, General Motors and Ford of US, Hyundai of Republic of Korea, Toyota of Japan and Mercedes from Germany started their operations as subsidiaries taking the extent of production of auto from two million in 1991 to nine.7 million in 2006. (AMP 2006-16).

To entrench powerfully as quality makers these overseas motor vehicle manufacturers, mostly, Japanese and Korean firms brought in few of their own suppliers to line up base in Asian country with Indian partners. Thus began the success heroic tale of Indian motor vehicle element business.

Currently, Indian motor vehicle business is among the highest 10 within the world production holding second position in 2 wheelers, sixth largest in cars, 8th in industrial vehicle and largest in tractors section, it's additionally home to 15 firms producing traveler cars and multi-utility vehicle, nine firms of economic vehicle, sixteen firms of 2/3 wheeler, 14 firms of tractor and five engine makers. (Kakkar, 2010, ACMA, 2015).

The Indian industry is very capital and technology intensive generating giant employment. The car element business is the key downstream link to the identical. each are vital drivers of Indian economy in terms of contribution to gross domestic product.

Accordingly, the car Policy 2002 ordered the vision, "To establish a globally competitive automotive business in Republic of India and double its contribution to Indian economy by 2010", (GOI, MHI & letter, 2002). Few main objectives were as follows

1. Exalt the arena as a lever of commercial growth and employment and to achieve a high degree important addition within the country;
2. Promote a globally competitive automotive business and emerge as a global supply for car components;
3. Further incessant modernization of the business and facilitate indigenous style, analysis and development;

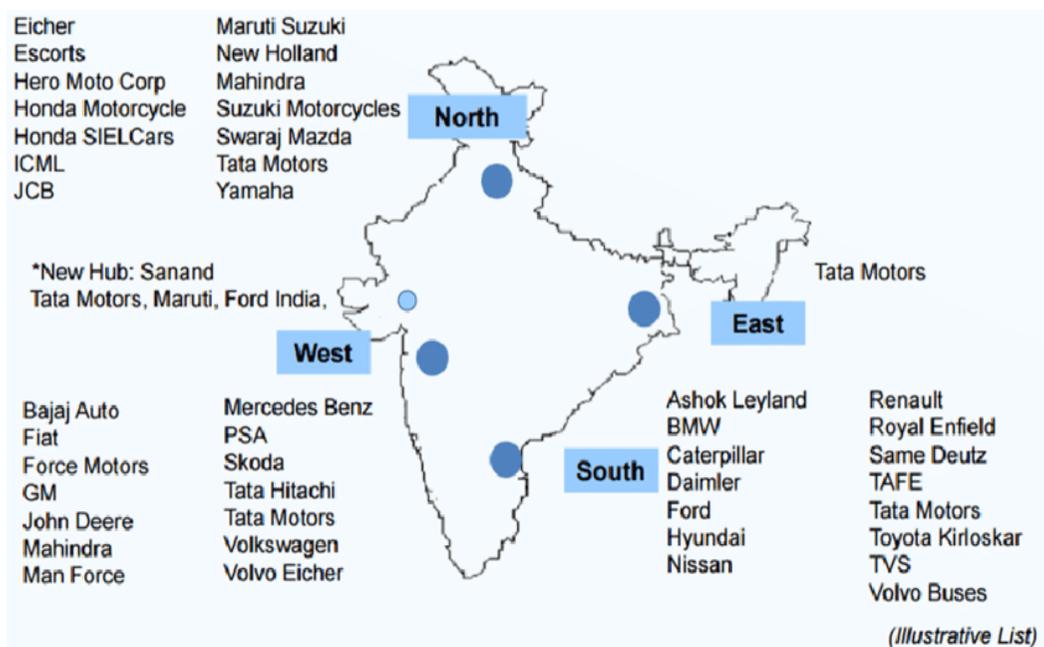
Automobile Production Trends in India

Category	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Passenger Vehicles	3231058	3087973	3221419	3465045	3801670	4010373
Commercial Vehicles	832649	699035	698298	786692	810253	894551
Three Wheelers	839748	830108	49019	934104	783721	1021911
Two Wheelers	15744156	16883049	18489311	18830227	19933739	23142057
Grand Total	20647611	21500165	23358047	24016068	25329383	29073892

Source: Society for Indian Automobile Manufacturers, 2018.

It can be seen from the above table that 2 to 3 wheelers are produced in large quantities forming 82% of the total volumes, out of which 83% are 2 wheelers. Over the period considered, the CAGR of passenger cars was 4%, commercial vehicles was (-) 2%, 2 to 3 wheelers was 8% during 2012-2013 to 2017-18. It is obvious that for such huge production, the number of components required is gargantuan and warrants lot of commitment and discipline on the part of both original equipment manufacturers (OEM's) and component manufacturers.

Automotive Clusters in India



Source: Automotive Components Manufacturers Association Of India Presentation, 2018.

The Challenges for the business

With VUCA setting, auto-component firm's supply to different OEM's and in several segments notice it troublesome to satisfy the demand often and systematically. The explanations may well be any of the following:

1. Poor prediction.
2. Market uncertainty.
3. Capability constraints.
4. Unreliable sub-vendors.
5. Shorter product life cycle.
6. Low flexibility in producing.
7. Dependence on foreign raw materials.
8. Less time obtainable for model switch-over.
9. Disruption in provides thanks to natural calamities.

The Auto-Components- Tiers, Suppliers and Roles for OEM’s who are essentially the makers of cars, motorcycles, commercial vehicles, tractors etc., the availability of elements comes from four sources as follows:

10. OEM’s manufacturer them in-house.
11. Procure domestically from approved sub-contractors or vendors.
12. Procure bought-out elements from market.
13. Import from overseas suppliers.

Discussions

Auto part business is classed into 3 tier structure:

1. Tier-1 is concerned in manufacture of high added preciseness engineering elements, Integrated systems and are key enablers to OEMs,
2. Tier-2 firms offer automotive vehicle elements to Tier-1 suppliers and use IT in producing and,
3. Finally, Tier-3 corporations offer stuff and single elements to Tier-2 firm’s victimization ancient ways.

In some cases, Associate in Nursing auto-component company could act as a Tier-1 company, during which case it’d offer elements to OEM’s and at the same time might even be a Tier-2 company by virtue of being supplier to Tier-1 company. (Bhasker, 2013)

In several cases, the strategy typically followed by international corporation’s (MNC’s) like General Motors, Ford, Hyundai, Honda, Toyota, Volkswagen etc is to enter Indian market with existing models, mercantilism essential elements that are already developed overseas and later because the volumes increase, begin to indigenize some of them , to scale back producing price.

The process of changing into a provider, additionally known as a sub-contractor or a vendor to Associate in Nursing automotive vehicle OEM is initiated once an agreement is formed to supply a component(s) of highest quality as per the specifications at a mutually acceptable value.

Usually there would be 2 to 3 suppliers of one part depending on the volumes. For essential and low volume elements usually one provider is chosen. Sub-contractors are evaluated regularly in terms of price reduction, quality and delivery. (Uchikawa & Roy, 2011-12).

Conclusion

The study can be concluded as to process of development of elements by supply chain involving few methods as follows:

1. **Co-development with OEM’s:** The OEM and also the part supplier put together work together in developing the desired elements.
2. **Recurrent interaction with OEM engineers:** The suppliers have regular interaction with style engineers of OEM programmes organized by ACMA: The nodal agency of Indian auto-component makers association provides needed technical programmes for cluster of corporations in a very particular industrial zone associated with a specific technology or process.
3. **In-house R&D:** The part provider includes a sturdy analysis and development wing to style and develop the specified components.
4. **Training provided by suppliers of machineries:** In bound cases like plastic components and CNC machines, the machine manufacturers offer the tooling’s in developing the components for OEM.
5. **Cluster development programmes** organized by ACMA: The nodal agency of Indian auto-component makers association provides needed technical programmes for cluster of companies in a very particular industrial zone associated with a specific technology or process.
6. **Foreign technical collaboration:** this can be a route followed by component provider once the technology needed isn’t available in India and whereby the OEM insists for such special technological inputs as a necessity for being a provider.
7. **Mergers and acquisitions:** This route is followed by financially strong Indian firms who acquire or merge with a domestic or overseas company that isn’t faring well within the market however have strong technological skills helpful for the effort company (supplier).

Further, as a provider or merchandiser, the firm has got to meet 3 essential requirements that they need to perpetually work for method improvements, adopt new technology and increase production rate. These needs are termed as QCD- Quality, price and Delivery on time.

1. High responsibility in quality supplies: The OEM’s expect suppliers to maintain quality altogether

their elements by following quality systems as advised by them. Consistent maintenance of quality provides facilitate suppliers to become „Green Channel“ members by that elements are delivered on to assembly without scrutiny for every and each delivery during this method ton of inspection time is saved by the OEM“s.

2. Deduction each year: The OEM“s expect the suppliers to improve productivity year-on-year, thus, reducing price of manufacture. With the rise in volumes each year, the OEM“s seek for deduction from suppliers that varies from three to five each year.
3. High commitment to timely delivery: All the OEM“s work on the principle of Just-in-Time (JIT),that necessitates delivery of components at the correct place at the right time. Sometimes, the deliveries are created thrice/twice/ once on a daily basis looking on the number of elements needed per vehicle. As such, it becomes obligatory for part suppliers, also referred to as suppliers or vendors, to own offer points in terms of assembly plants, warehouses, and third party logistics (3PL) near OEM plants.

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Integer-N Charge pump Phase locked loop with an improvised design for the reduction of current mismatch

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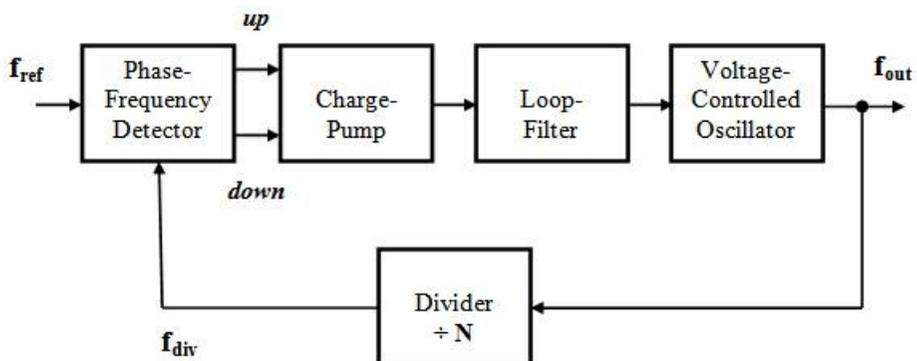
ABSTRACT: This article presents the design of a phase locked loop based on Integer-N charge pump architecture, with special consideration on the reduction of current mismatch. The current steering method along with a unity gain amplifier, the replacement of switches with the transmission gates, and the usage of a two-stage opamp as compensation method, is found to be substantially reducing the mismatch of current, when compared to the conventional design. The conventional charge pump has an average mismatch of 6.31%, and the current steered one with the unity gain amplifier has it as 1.66%, whereas the proposed design is found to have 0.93% average current mismatch, for the range of control voltage in between 0.1 V and 1.7 V. In addition, there is negligible current mismatch in the mid-region of the transition curve, in the case of the proposed design. By utilizing the NAND based Phase Frequency Detector and the current starved Voltage Controlled Oscillator, the PLL is designed for a 2.4 GHz application. The circuit is implemented in 180 nm technology, at the supply voltage of 1.8 V, and the designed PLL consumes 10.98 mW of power.

Keywords: Current mismatch, Charge pump, Loop filter, Voltage controlled oscillator, Phase locked loop, Phase frequency detector.

INTRODUCTION

The present electronic designs that require either frequency multiplication or phase synchronization or clock data recovery, utilize the Phase Locked Loop as an essential component. The traditional design that is being used for Phase Locked Loop, since the last three decades, is based on charge pump along with loop filter [1], [2]. For lower frequency ranges, the Integer-N architecture is preferred due to its reduced spur content, and the general block diagram of the same is shown in Figure 1. The radio signal that is required for the electronic and/or communication applications is generated by the VCO. In general, ring oscillator based VCO is preferred for the low frequency applications, as it has a wider tuning range, and as it occupies a lesser area on the chip [3]. The prime requirement of the generated radio signal is its highly stable phase. But phase noise gets built up at the output of the VCO, because of the device as well as the switching noises. To alleviate this issue, a divider is utilized in the feedback path, and the output of the divider is compared with the reference frequency, which is from a stable source such as crystal oscillator. Whenever the divider's output lags or leads, the PFD respectively produces UP or DOWN pulses.

These pulses are made use of, either to source or to sink the charge pump's current. The current pulses are smoothed by means of a loop filter. The output of the loop filter is used as control voltage to VCO, to bring the radio signal back in phase accurately [4]. The general architecture of PFD with CP is shown in Figure 2. The UP and DOWN pulses are produced by means of two D flip-flops. When both the pulses are at logic "1", the flip-flops are reset. A small delay t_d is internally generated within the PFD, for the purpose of avoidance of the dead zone [5]-[7].



The charge pump primarily consists of two MOSFET switches, along with the additional circuitry of current mirroring. The switching of MOSFET from ON state to OFF state causes charge injection, and the switching of the same from OFF state to ON state causes charge sharing. In addition, the rise and fall times of the UP and DOWN pulses cause the occurrence of clock feed through. These non-ideal effects cause mismatch of current in the source and sink values, which leads to uneven ripple in the control voltage. In addition, the channel length modulation contributes to the difference in the source and sink currents. Ideally, the values of source and sink currents should remain the same. Therefore, in order to obtain a smooth control voltage to VCO, it becomes necessary to reduce the current mismatch.

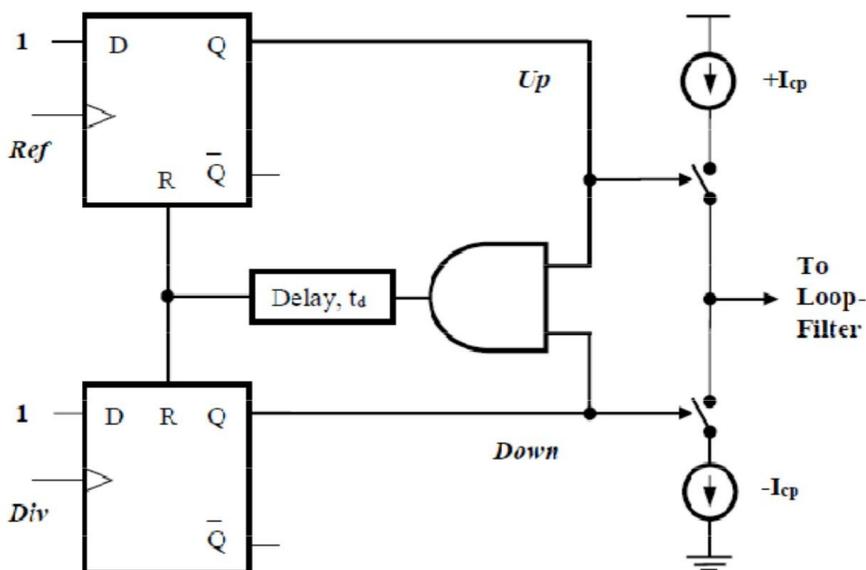


Figure 2: Phase Frequency Detector and Charge-pump

This paper is organized as follows – Section 2 discusses the related previous work with respect to the charge pump's design. The proposed charge pump's design, along with its comparison with the conventional charge pump, is presented in Section 3. The PLL's overall functional results are discussed in Section 4, accompanied with the discussion of the other blocks. Section 5 concludes the article, along with the future enhancements.

2. RELATED PREVIOUS WORK

In order to obtain good source and sink current matching in the charge pump, cascode topology was used, which in addition, helps in reducing the reference spurs [8]. Along with the cascode configuration, the self-biased high-swing current mirror was used. Transmission gates were made use of, to remove the clock feed through [9]. Differential topology was used for reducing the common mode noise rejection [10], and to reduce the mismatch further, the bulk driven cascode current mirrors were utilized [11].

In the charge pump, the turning ON of the upper switch causes increase in V_{ctrl} , which in turn causes reduction in V_{Dsp} and increase in V_{Dsn} , ultimately resulting in the reduction of I_{Dsp} . To suppress the current mismatch, the charge pump is split into two branches, and an opamp is used as a buffer amplifier in between these branches [12]. Further to this technique, to reduce V_{Tp} along with overcoming the effects of channel length modulation, adaptive body bias tuning of the MOSFETS was utilized in the differential design of the charge pump [13].

Alternatively, the opamp was used in open loop configuration in the charge pump, and to eliminate the channel charges, dummy switches were included [14]. This work was enhanced further, by removing the dummy switches and by including a miller compensation network [15]. A low glitch current switch is proposed as an application to PLL charge pump [16]. To overcome the effects of charge sharing, without using a replica charge pump, steering the current to a side branch through complementary driven switches, was also suggested [17].

Thus, for the reduction of the current mismatch in the charge pump, three main techniques are being followed – cascode configuration, current steering with unity gain amplifier, and open loop configuration. The observations are that, because of the larger device dimensions, the cascode configuration consumes

larger power along with larger area. The open loop configured opamp affects the stability, and therefore, additional compensation circuitry is required, for maintaining good stability in the overall circuit. In this particular work, a combination of some of the methods is utilized, to overcome all of the limitations.

3. THE PROPOSED CIRCUIT OF THE CHARGE PUMP

Figure 3 shows the conventional charge pump, in which the DOWN signal and the inverted UP signal are utilized to switch the lower and the upper transistors respectively. The other transistors are utilized for the current mirroring and current sourcing purposes. The figure also contains the second order loop filter. The switching characteristics of P-type and N-type devices are governed by equations (1) and (2), and because of the switching differences between the two types, the conventional charge pump has poor current mismatch properties.

$$\begin{aligned}
 & \frac{1}{C_1} \frac{dV_{out}}{dt} = \frac{V_{DD} - V_{out}}{R_0} - \frac{V_{out}}{R_0} \\
 & \frac{dV_{out}}{dt} = \frac{V_{DD} - 2V_{out}}{R_0 C_1} \tag{1} \\
 & \frac{dV_{out}}{dt} = -\frac{2V_{out} - V_{DD}}{R_0 C_1} \tag{2}
 \end{aligned}$$

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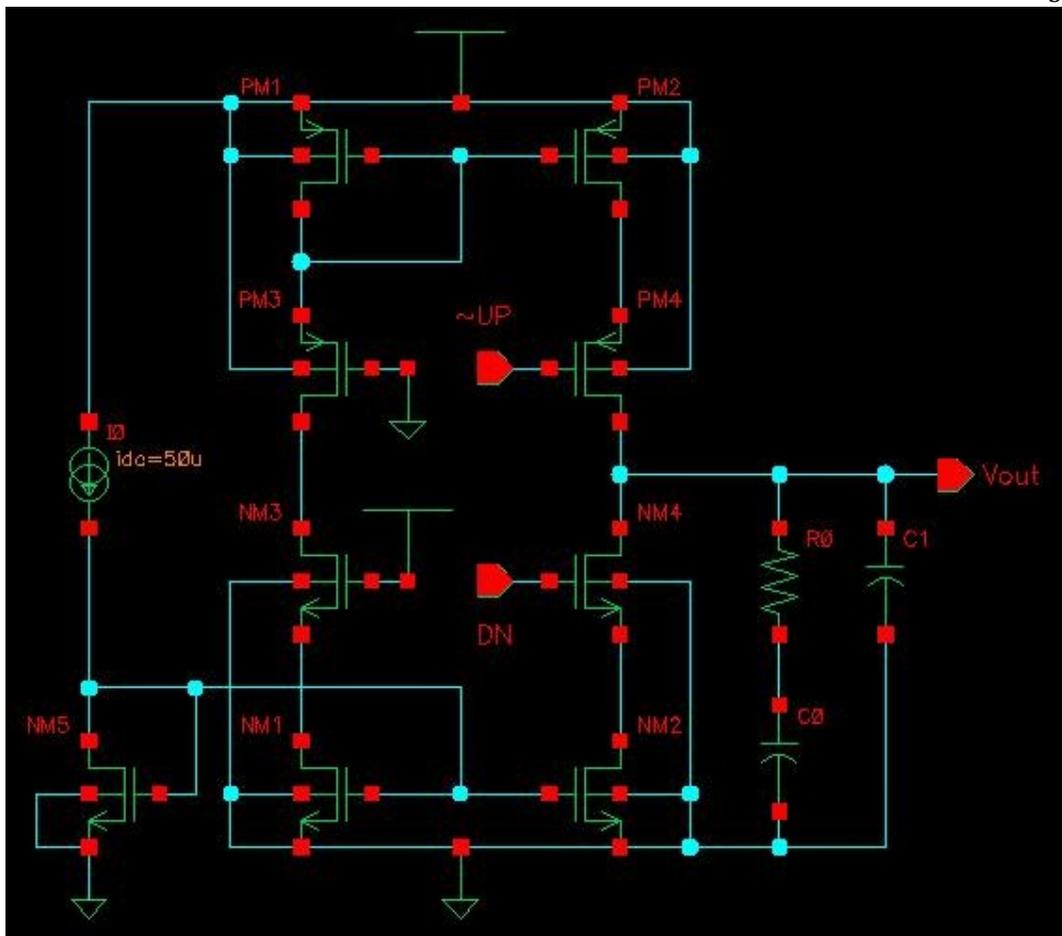


Figure 3: Conventional Charge pump’s circuit diagram

The conventional Charge pump has the “switch at the drain” topology, which is the fastest when compared

to “switch at the source” or “switch at the gate”. Dead zone can be reduced further, if the switching speed is increased. This is made possible by means of current steering, in which the Charge pump is split into two limbs, which is as shown in Figure 4.

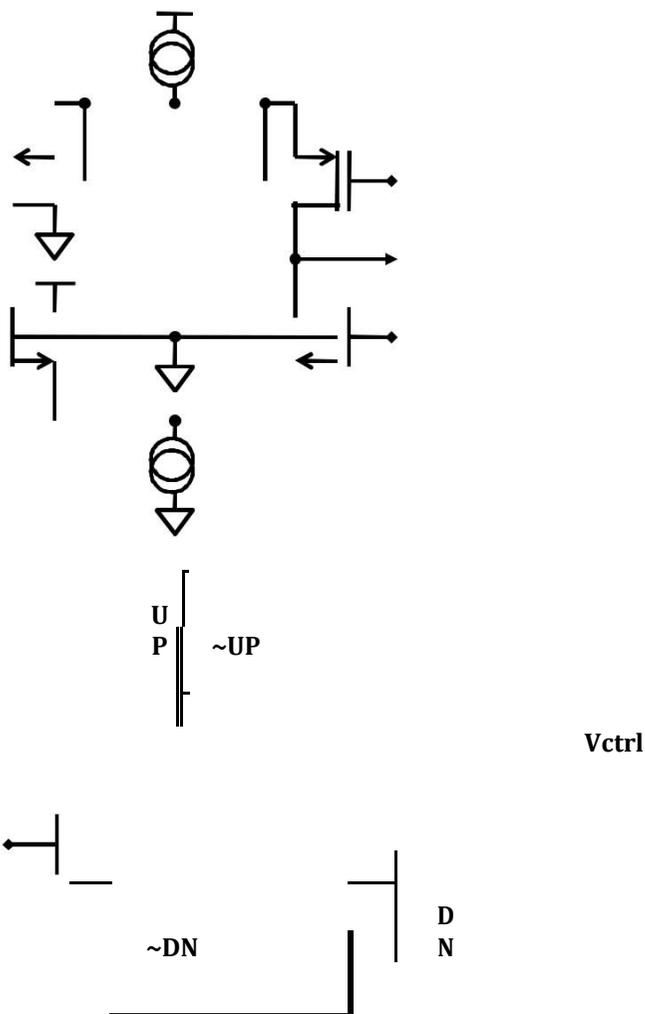


Figure 4: Current steering technique in Charge pump

As both control signals are mutually exclusive, their complementary signals are also utilized in this method, for the reduction of the switching time. Whenever a switch at the right side of the circuit turns OFF, the respective switch at the left side turns ON, thus helping in the faster turning OFF of the other switch. The converse also becomes true, when the switch turns ON. In this way, the associated switching pair helps in the faster switching of the current.

To reduce the charge sharing at the output, a unity gain amplifier is used in between the two limbs. As the charge sharing occurs when the switch at the right side turns ON, the respective switch at the left side can be utilized to prevent the same. This is implemented by connecting the unity gain amplifier in between, as shown in Figure 5.

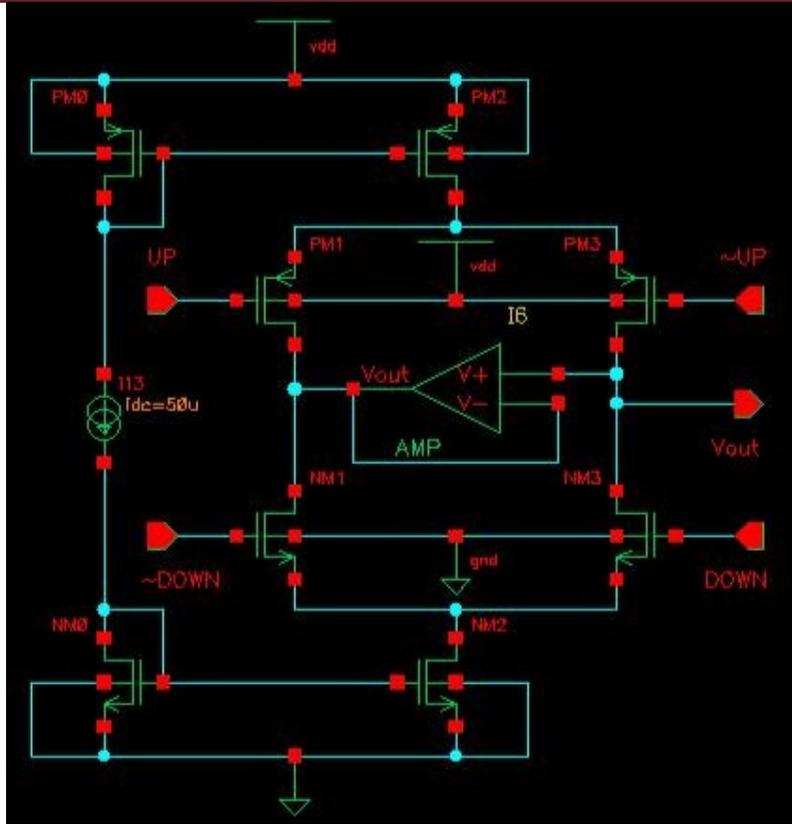


Figure 5: Charge pump with current steering and with unity gain amplifier

For the purpose of unity gain amplifier, the basic differential amplifier is utilized [18]. Here, when NM3 is OFF, NM1 is ON at that time, and hence the voltage at the drain of NM2 is set to that at the output node, because of the buffer amplifier in between. Thus, when NM3 turns ON, the effect of charge sharing gets reduced. Similarly, when PM3 is OFF, PM1 is ON at that time, and hence the voltage at the drain of PM2 is maintained as the same as that at the output. Therefore, the current steering method clubbed with the usage of a unity gain amplifier ensures faster transient response, along with the reduction in charge sharing.

But this circuit has the limitations of charge injection, clock feed through, and current mismatch due to channel length modulation. To overcome the first two limitations, placing the switches away from the output node has been one solution; but as it becomes of “switch at the source” type, the switching speed gets reduced, which makes the charge sharing to increase. Another solution of using dummy loads requires good matching of rise and fall times. Therefore, we have used transmission gates instead of switches, as shown in Figure 6. With this method, within the transmission gate, when one switch is ON, the other switch will be OFF, and hence, the non-ideal effects get cancelled out. Thus, the usage of transmission gates will overcome the first two limitations. However, the requirement of the transmission gates is that, both of the control signals have to be precisely controlled, in order to avoid the mismatch. This issue is taken care in the design of the PFD by adding additional transmission gates for the equalization of the delay.

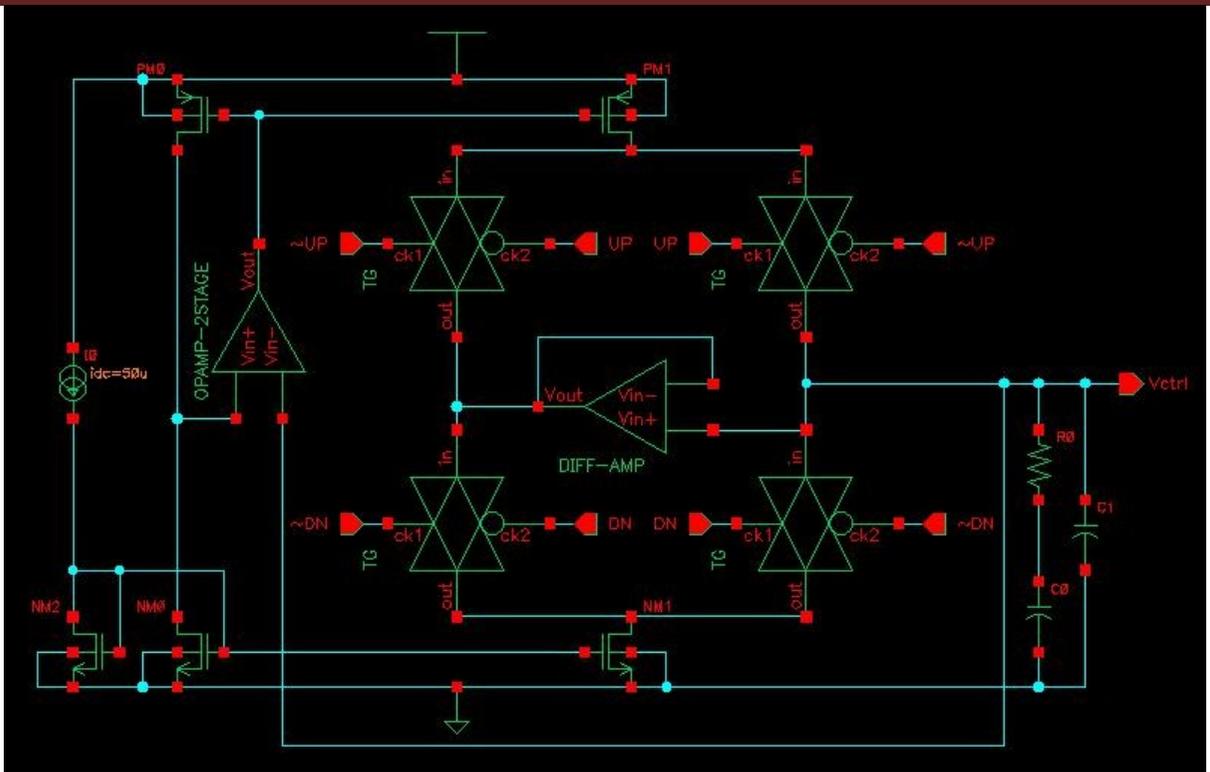


Figure 6: Proposed Charge-pump's circuit diagram

To overcome the third limitation of current mismatch due to channel length modulation, either the cascode method or the compensation method can be chosen. The cascode method does not have a large dynamic range, due to the increased output resistance. But as the intended PLL is meant for a low voltage application, the cascode method does not suit our purpose. Hence, we are choosing the compensation method, in which an opamp used in the open loop configuration. Because of the open loop, the opamp is required to have a very large gain. Therefore, a two-stage opamp is designed, and its schematic diagram is shown in Figure 7. As the reference frequency for our designed PLL is 100 MHz, the specifications of the two-stage opamp are carefully chosen, and are summarized in Table 1.

For the basic differential pair in the two-stage opamp, the allowable value of ICMR is bound [19], as indicated in equations (3) and (4).

$$\frac{V_{DD} - V_{GS1} - V_{GS2}}{2} \leq V_{CM} \leq \frac{V_{DD} - V_{GS1} - V_{GS2}}{2} + V_{GS1} \quad (3)$$

$$V_{CM} \leq \min \left[\frac{V_{DD} - V_{GS1} - V_{GS2}}{2}, V_{GS1} \right] \quad (4)$$

With reference to Figure 5, equations (3) and (4) can be rewritten as,

$$\frac{V_{DD} - V_{GS1} - V_{GS2}}{2} \leq V_{CM} \leq \frac{V_{DD} - V_{GS1} - V_{GS2}}{2} + V_{GS1} \quad (5)$$

$$V_{CM} \leq \min \left[\frac{V_{DD} - V_{GS1} - V_{GS2}}{2}, V_{GS1} \right] \quad (6)$$

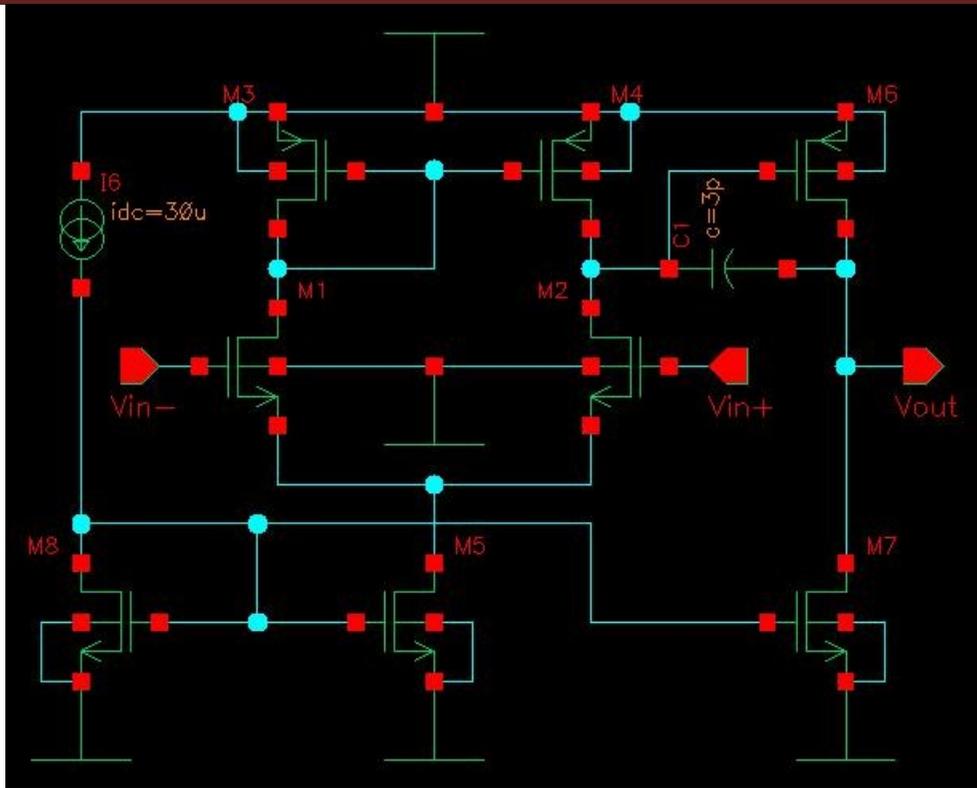


Figure 7: Schematic diagram of the two-stage opamp

FACTOR	VALUE
Gain	10,000
Bandwidth	0.1 Hz till 100 MHz
Load capacitance	10 pF
Slew Rate	10V / μ s
ICMR	-0.8 to 1.4 V
Unity gain-BW product	10 MHz

Table 1: Specifications for the two-stage opamp

Using equations (5) and (6), the common mode range can be specified as -

$$V_{CM} = V_{DD} - V_{DSAT} - V_{GS} = 1.8V - 0.1V - 0.7V = 1.0V$$

$$V_{CM} = V_{SS} + V_{DSAT} + V_{GS} = -1.8V + 0.1V + 0.7V = -1.0V$$

The two-stage opamp is designed as per the standard procedures [20], and the design steps are elaborated as follows, for the supply voltage of ± 1.8 V. By considering a minimum phase margin required as 60° , the compensating capacitor's minimum value is given by,

$$C_c = \frac{1}{\omega_{GBW} \times \text{PM}} = \frac{1}{2\pi \times 10^7 \times 0.6} = 1.33 \text{ pF} \quad (9)$$

Let the compensating capacitor's value be 3 pF. Then, the bias current's value is obtained as,

$$I_{DC} = \frac{C_c \times \omega_{GBW}}{10} = \frac{3 \times 10^{-12} \times 10^7}{10} = 30 \text{ nA} \quad (10)$$

For 180nm technology, the device specifications are obtained as listed in [21], and the threshold voltage ranges are given for the TSMC process as, $V_{tn} = 0.372$ V and $V_{tp} = -0.387$ V. The value of V_{SD3} is obtained from equation (7), and the aspect ratios for M_3 and M_4 are obtained in equation (11), as follows.

$$S T = \frac{UV}{5 WV [XV]} = 0.72$$

The transconductance of M_1 is given by,

$$DG\$ = Z [J = F = 188.49 \text{ QM} \tag{12}$$

In equation (1), ignoring the last term, the transconductance of an N-MOSFET is given by,

$$DG- = - S \frac{2}{-'} T \tag{13}$$

Therefore, the aspect ratios of M_1 and M_2 are obtained as,

$$S T = \frac{W'}{U b} = 4.39 \tag{14}$$

In general, from the drain current equation of the MOSFET, V_{GS1} can be obtained as,

$$\# = \frac{U b}{c b + '$} \tag{15}$$

Using the equations (15) and (8), the value of V_{DS5} is obtained, and then the aspect ratio of M_5 is obtained as,

$$S T = \frac{U d}{W d [X d]} = 1.01$$

Using equation (13), the transconductance of M_4 is given by, $DGe = -2 e' e ST_e = 38.88 \text{ QM}$

The transconductance of M_6 has to be at least ten times greater than that of M_1 . Hence, let $g_{m6} = 1.88 \text{ mS}$. Using this value, the aspect ratio of M_6 is obtained as,

$$S T_f = S T_e J \frac{ag}{ah} = 34.81 \tag{18}$$

At the second stage of the opamp, the load device's current is obtained using equation (13).

$$\frac{ag}{i} \tag{19}$$

$$f = W_g S_j T_g = 725.24 \text{ QR}$$

Thus, the aspect ratio of the driver device of the second stage is obtained as,

$$\frac{S_1}{S_2} = \frac{U_1}{U_2} \quad \frac{S_3}{S_4} = \frac{U_3}{U_4} \quad d = 24.41 \quad (20)$$

Finally, the device sizes can be approximated and summarized as, $S_1 = 4.5, S_2 = 4.5, S_3 = 1, S_4$
 $[1] S_5 = 1, S_6 = 35, S_7 = 25$ and $S_8 = 1$.

Using these device sizes, the two-stage opamp circuit was simulated, and then was utilized in the charge pump’s design that is being proposed. The designs of three architectures of Charge Pump are simulated, and results are plotted in Figure 8. The red colored curve is that of conventional charge pump, the blue colored curve is that of the current steered one with active amplifier, and the green colored curve is that of the proposed Charge Pump with transmission gates and two-stage opamp.

For the range of control voltage in between 0.1 V and 1.7 V, the conventional charge pump is found to have an average current mismatch of 6.31%, and the current steered one with the buffer amplifier is having the current mismatch of 1.66%, The proposed design with transmission gates and two-stage opamp is having 0.93% average current mismatch. In addition, in the case of the proposed design, it can be seen that, there is negligible current mismatch in the mid-region of the transition curve.

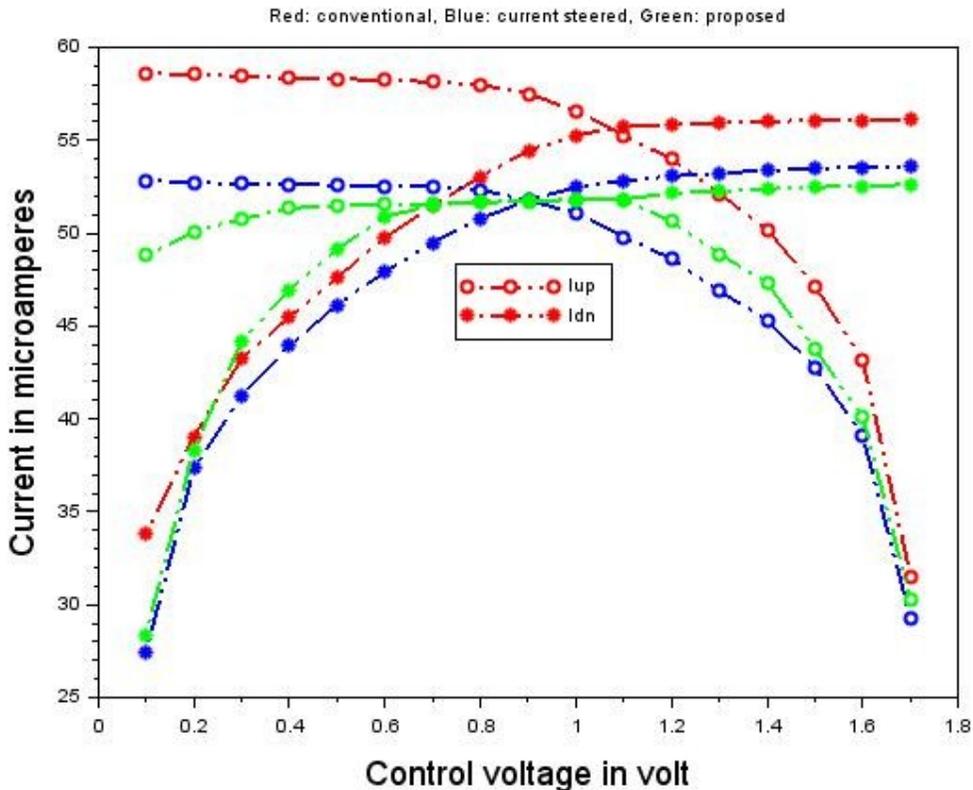


Figure 8: Current mismatch curves of conventional and proposed Charge pumps

4. RESULTS OF PLL SIMULATION

Now to verify the complete functionality of the Phase Locked Loop, all the locks need to be simulated individually, and then have to be connected as per Figure 1. Work was done earlier by the authors to annihilate the blind zone and dead zone issues, by implementing a new design of PFD [22]. But as far as this particular work is concerned, the focus is on the reduction of current mismatch, and hence, the popular NAND based PFD is chosen, with additional transmission gates at the output, in order to have equal delay with regular as well as complementary signals. The second order loop filter’s design is performed as elaborated in [23]. The 3-stage ring oscillator based current starved type VCO is used for the radio

frequency generation, in the range of 2.4 GHz [24], [25]. The divider is designed using TSPC D flip-flops, with the divider modulus being 24. The results of simulation are summarized and compared in Table 2.

PARAMETER	[9]	[11]	[13]	THIS WORK
Process technology	180 nm	130 nm	180 nm	180 nm
Frequency output	5 GHz	2.4 GHz	2.44 GHz	2.4 GHz
Supply voltage	1.8 V	1.3 V	1.0 V	1.8 V
CP Current	50 μ A	50 μ A	100 μ A	50 μ A
CP type	Cascode	Current steered	Open loop	Dual method
Power consumption	13.4 mW	10.7 mW	9.1 mW	10.98 mW

Table 2: Summary of the results

5. CONCLUSION

A Phase Locked Loop based on Integer-N Charge pump is designed for a 2.4 GHz application, and the results are obtained by means of simulation. In order to reduce current mismatch of the conventional charge pump, A two-stage opamp was utilized in the charge pump's differential design. The PLL consumes 14.84 mW power at 1.8 V supply voltage.

An effort can be made in future, to obtain a still lesser current mismatch in the charge pump, by adopting novel techniques to reduce the charge injection effects, charge sharing effects, and clock feed through. The phase noise and the reference spur of the PLL can be measured, so as to verify an improved performance.

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