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SEMCOM Management & Technology Review

CHIEF EDITOR

Dr. Waheeda Thomas, Principal

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Greetings to Readers !!!

Once again it is a pleasure to present before you the new issue of SMTR. This issue too, like others, offers you the pleasant experience of reading variety of articles in the areas of finance, banking, economy, marketing, HR and use ICT with innovative pedagogy.

A study on financial performance analysis of Gujarat state seeds corporation limited is an attempt by researcher for determining financial performance of GSSCL as Gujarat State Seeds Corporation Limited plays a significant role in the socio economic development of the farmers of our country. In a study on commonalities and differences among CSR approaches of selected leading private sector banks of India authors have attempted to understand the CSR practices, its approaches, difference and commonalities among four leading private sectors bank in India. The issue also presents a study of credit risk management of Bank of Baroda. This study will help to find the causes for financial losses of the bank and help to examine bank's financial future based on bank's credit risk management tools. A study on usage and satisfaction of plastic money is a study that tries to identify the usage status and satisfaction level of plastic money users.

A study on impact of union budget on share market focuses on new policies and laws of government for the upcoming year, new agendas for development and effort for strengthening weaker one for growth of the economy of India as presented in Union Budget 2018. The issue also presents research deliberations on two recent major reforms in Indian economy, Demonetization –its impact and effects on Indian economy and digital India and its impact on Indian economy

In the area of marketing, three studies are, respectively, on brand awareness and preference for FMCG products in rural markets, consumers' perception towards Green products: a study with special reference to Anand city and an impact of economic variables on Indian stock market indices

On HR front, a study examines the role of Human Resource Management in operations management for successful Make in India Campaign. Another study is on Human Resource Management trends, challenges and opportunities in a changing global business environment. A Study on Employee Retention Strategies and Reasons for leaving the job is an article in which researcher has made an attempt to study the various Human Resource (HR) practices that help employee retention and encourage employee commitment in the organization.. One more study is on work life balance among teachers in arts, commerce and science colleges

It is encouraging that every issue presents research papers on academics, use of ICT in academics and innovation in pedagogy. This issue contains a study on activity based learning with special reference to Green Business and Technology Fair, a blueprint of Design and Development of Android-based/accessible Content and Language Integrated Learning (CLIL) System for professional courses aiming to facilitate learning of discipline specific content prescribed in syllabi of technical subject of professional courses and to demonstrate that how such system can be used to reveal benefits/impacts of such system in an objective manner. ICT now-a-days, have influenced in many different ways to assist people in teaching learning environment. Further, the study on Impact of Elastic Computing, Scalability and Data Analytics on the Learning Environment presents the effect of digitalization on education sector towards utilization of global resources.

I hope readers have enjoyable reading experience. I wish the readers academically enriching experience. Keep researching.

Waheeda Thomas

About SEMCOM

Sardar Gunj Mercantile Cooperative Bank Ltd. (Anand) English Medium College of Commerce and Management (S G M English Medium College of Commerce and Management) popularly known as SEMCOM was established in the year 1997 with the aim/vision to impart quality education to students who desire to graduate in commerce, management and IT. The college has successfully completed

18 years. Its alumni has established themselves in various walks of life across the globe. The college has been established by Charutar Vidya Mandal (CVM), an educational trust with a vision to regenerate society through education. SEMCOM was set up with the generous donation of Rs. 35 lakhs against the total project cost of Rs. 150 lakhs by Sardar Gunj Cooperative Bank Ltd. (Anand) on self- finance basis keeping in mind the changing policy of the government in inviting private institutions to supplement the government's efforts in higher education. The college has an ISO Quality System since 2004, which upgraded to 9001:2008 in September 2009. The college is re-accredited grade "A" by NAAC with a CGPA of 3.01 on 4 point scale. The college, within a short span of time has made its presence felt in India and abroad.

The college is affiliated to Sardar Patel University, Vallabh Vidyanagar.

Objectives / Goals

◈ To focus on integral development of students.

◈ To offer courses and programs in tune with changing trends in the society as a whole.

◈ To update the curriculum as per the need of the business and industry.

◈ To create unique identity in the educational world at the national as well as international level.

◈ To institutionalize quality in imparting education.

◈ To incorporate innovations on a continuous basis in the entire process of education at institutional level.

◈ To create platform for the students for exhibiting their talent and for development of their potentials.

◈ To generate stimulating learning environment for students as well as teachers.

◈ To build cutting edge amongst the students to withstand and grow in the competitive environment at the global level

Our Dream :
To establish a unique identity in the emerging Global Village.

Our Vision :
To contribute to the societal enrichment through quality education, innovation and value augmentation.

Our Mission :
To build up a competitive edge amongst the students by fostering stimulating learning environment.
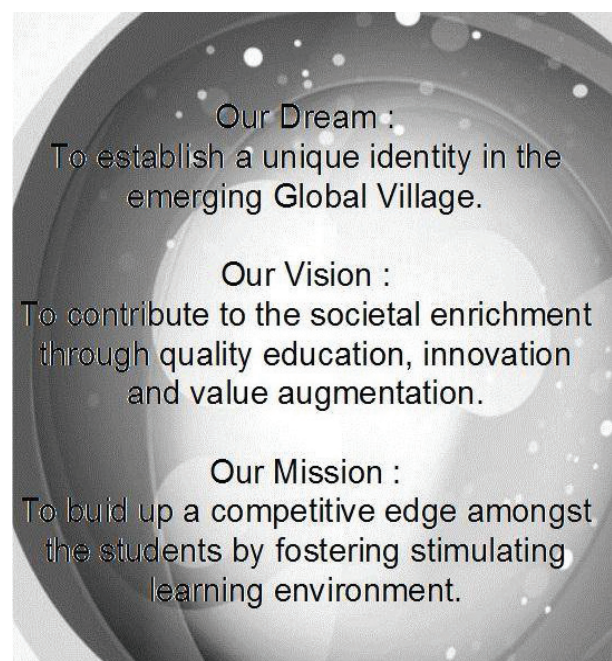
A study on Brand awareness and preference for FMCG products in rural markets

Dr. Hitesh D. Vyas

Abstract

'Go rural' is the slogan of marketing gurus after analyzing the socio-economic changes in villages. The Indian rural market today accounts for only about Rs. 8 billion of the total ad pie of Rs 120 billion, thus claiming 6.6 per cent of the total share. So clearly, there seems to be a long way ahead. The purpose of this study is to examine the brand awareness in rural area and to study the interest of consumers in branded products of Fast Moving Consumer Goods (FMCG). Because the rural marketing has been growing steadily over the years and is now bigger than the urban market for FMCGs. Present study is focused on understanding the various aspects of consumer behaviour and brand preference in rural market. The success of a brand in the Indian rural market is always been difficult to gauge. Therefore, marketers need to understand the social dynamics and attitude variations within each village. The rural market has a grip of strong country shops, which affect the sale of various products in rural market. The companies are trying to trigger growth in rural areas. They are identifying the fact that rural people are now in the better position with disposable income. The low rate finance availability has also increased the affordability of purchasing the costly products by the rural people. Marketer should understand the price sensitivity of a consumer in a rural area.

Introduction:

'Go rural' is the slogan of marketing gurus after analyzing the socio-economic changes in villages. The Indian rural market today accounts for only about Rs. 8 billion of the total ad pie of Rs 120 billion, thus claiming 6.6 per cent of the total share. So clearly, there seems to be a long way ahead. Rural branding is bear quite different stand from urban branding. The first step towards rural branding is to research and gain insight into the working of rural markets. Based on this communication campaigns have to be developed with a lot of rural sensitivity. Rural branding is attained by way of opting to a greater percentage of local media and a smaller percentage of the mass media, the rural marketing has been growing steadily over the years and is now bigger than the urban market for FMCGs (Gupta & Mittal). Demand of FMCG products like hair oils, tooth powder, toothpaste shampoos and beauty creams are increased in last three years in the Indian population in rural areas. As in the cities of India middle class's demands growing, its spillover effect also seen in the rural areas.

Brand preference is a decision of a consumer after analysis of information on the brands available in the market. Decision of preference for such brand indicates that consumer holds enough abilities and understanding for it. Accordingly brand preferences in rural market are new and developing concept, because development of rural market in India itself is of one decade old story. Different companies have initiated their efforts in rural area for market their products are found effective for specific rural geography, as HLL with its deep pockets is ensuring that the project will succeed and is planning to scale up the initiative to other markets, E-Choupal's 5 network today reaches out to more than three million farmers in over 35000 villages through 5,050 e-choupals kiosk that ITC has

set up across six states covering 3.5 million e-farmers. Microsoft has set up an ambitious target of over 50,000 broadband connected kiosks across villages covering over 50 percent of the rural population in the next three years under the saksham scheme (Rajan, R. V., 2007).

Review of Literature:

Gupta and Mittal (2009) The Fast Moving Consumer Goods (FMCG) sector is very important for Indian economy. This sector touches every aspect of human life. The FMCG companies are now encashing that opportunity. In rural India, this is the fact about the consumers that their income is increasing and the lifestyles are changing. There are as many middle-income households in the rural areas as there are in the urban. Thus the rural marketing has been growing steadily over the years and is now bigger than the urban market for FMCGs. Globally, the FMCG sector has been successful in selling products to the lower and middle-income groups. Many companies including MNCs and regional players started developing marketing strategies to capture the rural market in depth by using innovative and modern marketing techniques. There is no doubt that consumers in rural markets should be treated differently from urban consumers because they are different on the basis of many variables. Present study is focused on understanding the various aspects of consumer behaviour and brand preference in rural market. . Janmejaya Sinha and Arvind Subramanian (2007) studied the next billion consumers. Rural Indian consumers are now being richer and they are contributing more in the total purchases. B B S Parihar, Sanjay Yadav and Irfan Siddiqui (2007) empirically found that there is a significant difference between the buying behavior of urban and rural consumers with regard to their preference for technology, style, brand image, price and after-sales service. Hansa Research (2006) explored that the preferences in rural India are shifting

from loose to packaged products. Rural India is now buying specialised, branded utensil cleaners, and moving away from the typical ash/soil usage in the past. The penetration of branded items has also increased significantly for the products like toothpaste, detergent cakes, hair oils etc. Ritesh Sud and Pritesh Y. Chothani (2006) studied that there has been a significant rise in the brand awareness among the people in the rural markets. As a result they are becoming choosier and demanding than ever before, so any company has to properly analyze the psychographics before entering this market. Studies indicate that there has been a visible shift in the people's preference for brands. People are upgrading from the use of tooth powders to tooth pastes, and from using traditional mosquito repellants to using mats and coils. Also there is shift from low priced brands to semi premium brands. S Gopalkrishnan (2006) discussed that rural marketing in India has still a long way to go, rural marketers have to understand the fact that rural marketing in India has a tremendous potential in our country. Rural marketers should understand this fact and try to tap the huge untapped potential in our country. Matrade Chennai (2005), studied a lot of aspects related to consumer behaviour in India and found that for Indian consumers are deeply concerned with the traditions, values and they consider their family advice in the purchase decisions. About rural Indian consumer the study revealed that rural consumers in India are changing rapidly related the education, awareness of the products. Rajendhiran N. Saiganesh S. Asha P. (2006) explored that brand ambassadors play an important role in putting an impact on the brand preferences of rural India. Keeping the Literacy scenario in to consideration the promotion of Brands in rural markets requires the special measures. The same becomes the base for brand awareness and preference in the markets. Rao G Srinivas (2002) studied that rural India buys small packs, as they are perceived as value for money. There is brand

stickiness, where a consumer buys a brand out of habit and not really by choice. Brands rarely fight for market share; they just have to be visible in the right place. Even expensive brands, such as Close-Up, Marie biscuits and Clinic shampoo are doing well because of deep distribution, many brands are doing well without much advertising support — Ghadi, a big detergent brand in North India, is an example. Srinivas (2002) further studied that rural consumers have a very high preference for credit in their purchase. Only one tenth of consumers most of them coming from High Income Groups (HIG) and Middle Income Groups (MIG), do not seem to be preferring credit. A properly designed credit facility would boost the rural markets and goes a long way in firming them up. Financial express, (2000) has published the strategy about FMCG majors, HLL, Marico Industries, Colgate Palmolive have formula had for rural markets.

Research Methodology

The present study is based on convenient random sampling. Data has been collected from 200 respondents. Data collection has been done at MKB University, Bhavnagar. Convenience random sampling method has been used for selection of respondents. A five point scale questionnaire was used for data collection; it is based on the questionnaire of Gupta and Mittal (2009). The data analysis tools consisted of t-tests, SPSS was used for the analysis.

Objective of the study is to examine factors of brand preferences of rural consumers.

Hypothesis of the study, "there is no significant difference in factors of brand preference of rural consumers".

Reliability test has been done through SPSS:

Table 1 of reliability of scale

Cronbach's Alpha	N of cases	N of Items
0.8142	201.0	14

it shows that Cronbach's Alpha found 0.8142 therefore the scale has higher reliability value as per the Turkey's test. According to the Bagozzi and Yi (1988), if the alpha value is greater than 0.5 or reaching 1.0, the measuring instrument is having high reliability.

Table 2 of respondents profile

Gender		Income of Parents'			Respondents' Education	
Boys	Girls	Upto 300,000	Upto 500,000	500,000 and more	Graduate	Post Graduate
124	76	46	90	64	128	72

Table of respondents' profile indicates that the respondents are different in nature of their variables like gender, income of parents and respondents education.

Table 3 of factors for brand preferences

Factors for preferences	Average
Credit Facility by Shopkeeper	3.76
Popularity of Brand	3.43
Quality	3.43
Discount or Other Benefits	3.09
Brand Name is Important	3.06
Brands means fashion	3.01
FMCG Purchase Decision Important	2.98

Table 3 indicates that the average of score achieved is different and highest score is of credit facility offered by shopkeeper. While popularity of brand and quality factor earned similar 3.43 scores, list score is achieved by decision makings importance for branded one. It is revealed that the shopkeeper is important factor in rural area as per the responses of the study.

Hypothesis of the study, "there is no significant difference in factors of brand preference of rural consumers". To analyze it test of the ANOVA has been run on SPSS 10, the results of it is as under:

Table 4 of ANOVA with Cochran's Test

		Sum of Squares	df	Mean Square	Cochran's Q	Sig
Between People		580.454	199	2.917		
Within People	Between Items	288.455	18	16.025	380.879	.000
	Residual	2437.966	3582	.681		
	Total	2726.421	3600	.757		
	Total	3306.875	3799	.870		

Grand Mean = 2.16

Data of table 4 indicates that the hypothesis testing found significant as Cochran's Q results in 380.879, therefore we accept the alternate hypothesis that "there is significant difference in factors of brand preference of rural consumers" it is may be because the data of profile are different, respondents average score for factors are also different.

Conclusion:

The study concludes that the factors of brand preferences are found different in the area under the study. The rural marketing in Indian market is itself a new concept and rural consumers are now enjoying the brand in FMCG products use in their routine. The marketer has to focus on the factors which found important in responses to implement their strategies for rural market. Moreover, the present study is a small attempt in this direction with limited sample size, time and effort, so it could not be generalized. But while decision making process is been undergoing by the companies they can consider the findings important one for the similar kind of market geography. Now a day's rural consumers also consider branded products good and qualitative, so, marketer also could consider it important in their strategies for rural consumers.

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"Consumers' Perception towards Green Products: A Study with special reference to Anand City"

Dr. Suresh P. Machhar

Abstract

This study aims to put forth the concept of Green marketing. Green marketing is the marketing of products that are presumed to be environmentally preferable to others. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, sustainable packaging, as well as modifying advertising. Customers are changing their perceptions towards the products preferring environment friendly products because there is a growing awareness to protect the environment. As resources are limited, it is important for the marketers to utilize the resources efficiently. Promotion and adoption of green products & technologies is necessary for conservation of natural resources and sustainable development.

For this study the primary data has been collected from 100 respondents of Anand City with the help of structured questionnaire. The data has been tested through Reliability test (Cronbach alpha), KMO test and factor analysis. Factor analysis divided 15 key variables into five groups (influencing factors).

Keywords: Factor Analysis, Green Marketing, Green Products, Anand City

Introduction:

Over the last two decades, public support for environmental protection has waxed and waned. Despite the difference in concern, the green movement is arguably one of the most important social movements in recent history. Many national polls indicate that public concern towards the environment has remained consistently high (Roper, 1992). As compared with a decade earlier, now more people are supporting increase in governmental spending for environmental causes & are willing to sacrifice economic growth for environmental protection (Gallup & Newport, 1990). According to The American Marketing Association, green marketing presume to be eco friendly marketing which involves several activities like production process, change in packaging, product modification as well as advertising modification.

Green product is a term that describes a product that protects the environment and replaces artificial ingredients with natural ones. Green products are also called Eco friendly products. Green products are less harmful to human health and they conserve energy. Some of these going green products when in use, help conserve energy, minimize carbon footprint or the emission of greenhouse gases, and does not lead to substantial toxicity or pollution to the environment. The term "green" and "sustainable" have become synonymous, referring to products and manufacturing techniques that ensure stability for future generations. Sustainability, therefore, is the fundamental principle behind the green movement, comprised of certain ideas that all green products share in common .These products not only cut down on consumer energy consumption, but also alleviate utility production. The federal government's Energy Star program award given to those consumers who recycle outdated appliances as well as those

who install energy-saving solar and wind generators at home. The energy-saving fluorescent bulb is one example of a green product that has become nearly ubiquitous. In addition to saving energy, these products are low maintenance and save money.

Literature Review:

Esther et all,(1998) on their study on "Purchasing behaviours and perceptions of environmentally harmful products". The green movement in newly industrialized countries often lags behind the West. While the green awareness has started to rise rapidly in some of these countries, the ability of attitudes to predict behaviour for environmentally sensitive products is questionable. The results have shown that consumers' environmental concern is not reflected in their purchasing behaviour. This calls for more education and initiative from both the government and businessmen to induce people to channel their attitudes into actions.

Chang and Fong (2010) made a survey of the consumers who had experienced purchasing green or environmental products in Taiwan and found that green product quality and green corporate image could bring green customer satisfaction and green customer loyalty.

Ishaswini & Datta (2011) have found that 98% of the respondents were aware of the eco-friendly products and are knowledgeable about environment related issues.

Sanjeev Kumar., et.al (2012) identified their study the consumer was environmentally concerned and ready to pay high yet they were not aware as to what constitutes environmentally friendly products. Hence, marketers need to consider efforts that are required to convert the environment concern into environmental consumption behavior.

Dr. Krishna kumar veluri(2012) in his study on "Green Marketing: Indian Consumer Awareness and Marketing Influence on Buying Decision". His main objective was consumer

beliefs and attitude on green products. Consumer awareness on the availability of environmentally friendly products and the influence of marketing efforts put by the marketers with reference to consumer non-durable. His study fid that respondents reacted positively about buying brands which are less damaging to environment.

Mohammad Azam(2014) in his study on Green Marketing: "Eco-Friendly Approach". In this article he discuss the some of the key issue of green marketing and challenges for going green and the steps taken by the organization. He was shows that now the corporate people as well as consumers have become more concern with the issue of green marketing at various levels. The corporate have accepted the green production as they have seen the interest of customer was positive with these green products.

Objectives of the Study:

1   To identify the influencing factors affecting consumer perception towards green products in Anand.

2   To study the impact of respondent's demographic profile like age, gender, occupation and education on their satisfaction level towards green products.

2.1 Hypothesis of the Study:

1 H0: There is no significant difference in consumer satisfaction level towards green products among consumer's age, gender, occupation and education.

H1: There is a significant difference in consumer satisfaction level towards green products among consumer's age, gender, occupation and education.

Research Methodology:

4.1   Population of the Study: All the people who are using green products in their daily life in Anand.

4.2   Sampling Technique & Sample Size of the Study:

Non probability convenience sampling method was used for selecting the sample. For the present study researcher selected 100 green products respondents from total population in Anand city.

4.3   Methods of Data Collection:

Primary data is collected with the help of structured close ended questionnaire. In which 15 statements related to the perception towards green products asked to respondents on Likert five point scales. These statements measure the highly agree to highly disagree factor for green products by respondents in Anand city.

Data Analysis & Interpretation:

Respondents' profile as given in following table gives a detailed description of the respondents' demographic variables like gender and education.

In the above table it can be observed that 60% were male and 40% respondents were female. 35% respondents belong to age group 15-25 years, 37% respondents belong to age group 36-45 years and 20% respondents' belong to age group 36-45 of age and 08% respondents belong to more than 45 years of age.46% respondents having graduate degree and 34 respondents having post graduate degree. From 100 respondent's 22% respondents are students, 36% respondents doing job and 32% respondents doing business.

5.1   Reliability Test:

To assess the reliability of the instruments, the Cronbach's (1981) alpha coefficients was calculated and reported in following table:

Table : 2 : Reliability Statistics

Cronbach's Alpha	Nos. of Items
0.872	15

Table: 1 : Profile of Respondents

Demographic Factor	Category	Frequency (N=100)	Percentage
Gender	Male	60	60.00
	Female	40	40.00
Age Group	15-25	35	35.00
	26-35	37	37.00
	36-45	20	20.00
	More Than 45	08	08.00
Education	SSC	08	08.00
	HSC	12	12.00
	Graduation	46	46.00
	Post Graduation	34	34.00
Occupation	Student	22	22.00
	Job	36	36.00
	Business	32	32.00
	Others	10	10.00

[Source: Table computed from SPSS output]

Cronbach's is a coefficient of internal consistency. It is commonly used as an estimate of the reliability of a psychometric test for a sample of examinees. In the table 2 it can be observed that Cronbach's alpha value for 18 statements is 0.872 which indicated that reliability of all 15 statements was quite high. Thus, it can be concluded that the measures used in the present study are valid and reliable.

5.2 Factor Analysis:

Factor Analysis is a data reduction statistical technique that allows simplifying the co-relational relationships between a number of continuous variables (Rao and Sharma). Principal component analysis is a variable reduction procedure. It is useful when anyone obtains data on a number of variables (possibly a large number of variables), and believes that there is some redundancy in those variables. In this case, redundancy means that some of the variables are correlated with one another, possibly because they are measuring the same construct. Because of this redundancy, one believes that it should be possible to reduce the observed variables into a smaller number of principal components (artificial variables) that will account for most of the variance in the observed variables.

Because it is a variable reduction procedure, principal component analysis is similar in many respects to exploratory factor analysis. In fact, the steps followed when conducting a principal component analysis are virtually identical to those followed when conducting an exploratory factor analysis. However, there are significant conceptual differences between the two procedures.

5.2.1 KMO and Bartlett's Test

Table : 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.874
Bartlett's Test of Sphericity	Approx. Chi-Square	878.841
	Df	198
	Sig.	.001

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) for individual variance was studied and it reveals that there is sufficient correlation among all the variables. To test the sampling adequacy Kaiser-Meyer-Olkin MSA is computed which is found to be 0.874 and it indicates that sample is good enough and can be used for further analysis. The overall significance of correlation matrices is tested with Barlett's Test of Sphericity .It provides support for the validity of the factor analysis of the dataset. The above Table shows that the sample is appropriate and significant for the study.

5.2.2 Extraction Method: Principal Component Analysis

Table: 4: Communalities of Different Variables Related Make in India Campaign

Statements	Initial	Extraction
I always prefer product with reusable container	1.000	.865
I specifically check recycle label on products	1.000	.848
Eco- friendly products feature motivates me to buy a products	1.000	.896
I prefer a product with environment safety prospective	1.000	.752
I am ready to pay higher price for green products	1.000	.767
I don't like to buy product with plastic packaging	1.000	.860
I never buy a products having toxic chemical	1.000	.912

I prefer to buy organic vegetable from the market	1.000	.618
I prefer to used CNG based vehicles	1.000	.728
Eco-friendly products are less expensive with compare to usage life	1.000	.734
I like to used eco-friendly products	1.000	.846
I prefer to used electronic vehicles	1.000	.754
When I am confused I am going for green products.		
I am avoiding to use plastic bags	1.000	.862
Normally ecological products having batter quality	1.000	.774

[Source: Table compiled from SPSS output]

The proportion of variance in any one of the original variables, which is being captured by the extracted factor, is known as communality (Nargundkar, 2002). Communalities Table tells us that after seven factors are extracted and retained in rotated component matrix the communality is 0.865 for variable 1, 0.848 for variable 2 and so on.

5.2.3 Rotated Component Matrix:

Loading on factors can be positive or negative. A negative loading indicates that this variable has an inverse relationship with the rest of the factors. The higher the loading the more important is the factor (Rao & Sharma). Factor analysis was conducted with varimax rotation to examine how the selected measures loaded on expected constructs. Five factors were recovered from the analysis with Eigen value greater than 1. The Eigen values represent a partition of the total variation in the multivariate sample. They sum to the number of variables when the principal components analysis is done on the correlation matrix. As per the table number 4 Eigen values for five factors were 3.97, 2.84, 2.53, 1.39 and 1.18. The total cumulative variation explained by factor analysis was 65.93 percent. The first factor explained 20.65% of total variance; whereas the second factor 16.50%, the third factor 11.55%, the fourth factor 9.93% and the fifth factor 7.30% of total variance.

Table : 4 : Rotated Component Matrix

Measures	Factors				
	F1	F2	F3	F4	F5
Desire:					
I always prefer product with reusable container	0.983				
I specifically check recycle label on products	0.932				
Eco- friendly products feature motivates me to buy a products.	0.907				
I prefer a product with environment safety prospective	0.894				
Reliability:					
I am ready to pay higher price for green products		0.845			
I don't like to buy product with plastic packaging		0.844			
I never buy a products having toxic chemical		0.818			
Preferences :					
I prefer to buy organic vegetable from the market			0.877		

I prefer to used drive CNG based vehicles			0.798		
Eco-friendly products are less expensive with compare to usage life			0.791		
Self-Initiative:					
I like to used eco-friendly products				0.890	
I prefer to used electronic vehicles				0.870	
When I am confused I am going for green products.				0.834	
Awareness:					
I am avoiding to use plastic bags					0.786
Normally ecological products having batter quality					0.727
Eigen Value	3.97	2.84	2.53	1.39	1.18
Variance Explained (%)	20.65	16.50	11.55	9.93	7.30
Cumulative Variance Explained (%)	20.65	37.15	48.70	58.63	65.93

[Source: Table Computed from SPSS output]

[Rotation Method: Varimax with Kaiser Normalization]

Naming of Factors:

The First Factor: Desire
The first factor that can be named as Desire which including four key variables, they are I always prefer product with reusable container, I purchase product with environment safety perspective, I check recycle label on product, eco-friendly products motivates me to buy a product.

The Second Factor: Reliability
The second factor named as Reliability which is considered the second most important factor with respect to green product consumer in Anand City. This factor comprising of three variables I am prefer to pay higher price for the green products, I don't like to product with plastic packaging and I am not prefer to buy products having toxic chemicals.

The Third Factor: Preferences
The third important factor named as Preferences which includes three variables. These variables are I prefer to buy organic vegetables, Green products become less expensive with respect to their usage life and I used to drive CNG vehicles.

The Fourth Factor: Self-initiative
The fourth factor named as self-initiative which is again very important factor with respect to green product consumer in Anand City.. This factor comprises of three variables like I prefer to use electronic vehicles, I like to use green products, and purchase confusion I always prefer to purchase green products.

The Fifth Factor: Awareness
The fifth important factor named as Awareness, which includes two variables. These variables are I am always avoiding using plastic bags and normally green products having batter quality then non green products.

Reliability Test for Factors:

Table No. : 5 : Reliability test for Factors

Factor No.	Factor Name	Cronbach's Alpha Value	No. of Variables
01	Desire	0.832	4
02	Reliability	0.862	3
03	Preferences	0.766	3
04	Self-initiatives	0.868	3
05	Awareness	0.768	2

[Source: Table Computed from SPSS output]

It can be observed from the above table that for all five factors the Cronbach's Alpha value is higher than 0.7, which indicates the significance of the model.

5.2 Hypothesis Testing:

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. To find the significant difference for overall satisfaction level towards online shopping and demographic profile of respondents such as gender, age, occupation and education One-way ANOVA test is performed in SPSS software to test the above framed hypotheses:

Table No. : 6 :One Way ANOVA -test

Sr. No.	Demographic Variables	F Value	d.f.	P-Value	Significance	Hypothesis Result
1	Gender	2.456	1	0.457	No	Null Hypothesis is not Rejected
2	Age	2.828	3	0.459	No	Null Hypothesis is not Rejected
3	Education	29.395	3	0.001	Yes	Null Hypothesis is Rejected
4	Occupation	24.541	3	0.003	Yes	Null Hypothesis is Rejected

Source: Compiled from SPSS Output

From the above table it can be observed that p-value for gender and age are greater than 0.05. So, here null hypothesis is not rejected and thus it can be inferred that demographic variables like gender & age have no significant difference in satisfaction level towards green products while in case of education and occupation p-value is less than 0.05 so here null hypothesis is rejected and thus it can be inferred that there is a significant difference in satisfaction level towards green products among respondents education and occupation.

Conclusion:

The Green marketing is a tool for protecting the environment for the future generation. Now this is the right time to select "Green Marketing" globally. It will come with drastic change in the world of business if all nations will make strict roles because green marketing is essential to save world from pollution. Green marketing is a tool for protecting the environment for the future generation. From the study it can be concluded that the important factor for satisfaction towards green products in Anand City are desire, reliability, preferences, self-initiatives and awareness. Study also indicated that demographic variables like gender & age have no significant difference in satisfaction level towards green products but there is a significant difference in satisfaction level towards green products among respondent's education and occupation. This study is expected to help other researchers to concern deeper about the factors which influence consumers` perceptions towards green products in India.

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A Study on Activity Based learning with special reference to Green Business and Technology Fair 2018

Dr. Jaimin Trivedi, Dr. Swaty R Parab

Abstract

One of the major concerns that our world is facing nowadays is regarding the environmental problems. It can be related to cutting down trees, limiting supplies, over development of land for construction purposes, extreme weather conditions, etc. Even the water today in most of the localities is not fit for drinking as most of the industries emit toxic material into pure water. They not only damage the purity of water but also kill the marine life. Promoting a greener and healthier environment is the only solution for the above mentioned problems. In order to increase the awareness among the students and the people of Anand District about the eco-friendly products and technology, 'Green Business and Technology fair' was organized at SEMCOM. The institution tries to enhance the entrepreneurial skills among the students along with creating a sense of responsibility on their part for saving the environment. The present study tries to find out the learning of the students during this event.

Key words: Eco-friendly products, Technology, Organic Food

Introduction

The world has evolved into a global village where pollution, disasters, diseases have spread to a maximum range. Our planet is nearly dying because of the situations like cutting down of trees, exploitation of natural resources, emission of toxic waste by industries, erosion of soil, etc. In order to save our planet we need to promote self-sustainability and self-sufficiency. In this type of chaos, it is very necessary to preserve the earth and the living things that exist on it.As human beings and the dwellers of Mother Nature we have forgotten that we serve a responsibility to earth and by that it means keeping it safe and protecting its environment from such events. These issues have grown to a much greater extent and in contrast with this; the concept of eco-friendly has progressed. In order to promote the very concept of eco-friendly we can always use eco-friendly products.

Eco-friendly products guarantee a healthier lifestyle. They even improve the environment and also the quality of life in terms of mortality, age, diseases, etc. The main aspect of going eco-friendly is about sustainability. In order to promote the factor of sustainability and to conserve Mother Nature, it is important to deviate from the conventional ways of greed and exploitation and look for a better and brighter future. Using eco-friendly products will aid in improving the efficiency and effectiveness. They are the basis of Going Green and conserving our environment for a change. If we as individuals take the initiative of Going Green for a change, there will be better drive for development in the areas which are related to green energies.Academic institutions are the best place to start with such initiatives.Keeping this in mind, 'Green Business & Technology Fair' is initiated by SEMCOM.

Product at Green Business and Technology Fair

A number of eco-friendly products were included in the Green Business and Technology Fair. Some of the products included were hand-made items made like photo frames, key chains, show pieces, woolen footwear, woolen clothes for god, woolen toys, etc made from eco-friendly material. There were also products made from bamboo like lamps, bamboo toothbrush, bamboo speaker, bamboo desk organizer, bamboo notepad, bamboo straws, bamboo cotton ear buds, bamboo pen set, etc. The fair also included other products like organic soap, shampoo, holi colour, etc. There were many more products like eco-friendly pencil, car garbage bag, canvas bag, vermi compost, jute pouch, handicrafts, Eco friendly bricks, unused cardboard trays, jute pen stand holder, jute earrings, sling bags, jewellery boxes, Jute Bags, wooden plates, sugarcane plates, paper glass, wooden spoos, wooden round bowls, wooden square bowls, and so on.

The technologies included in this fair were mulching, rain water harvesting, solar lanterns, havan kund, etc.

Objectives of the study

- To understand the business goals of the students

- To understand the basis of pricing strategies adopted by the students

- To know the marketing strategies used by students

- To know the problems faced by the students from inception to implementation of the business

- To understand the key learning of the students from the projects undertaken

Research Methodology

We have received responses from 18 teams registered for Green Business and Technology fair 2018 which was organized on 5th and 6th February, 2018 by SEMCOM College. Data were collected with the help of a questionnaire which was to be filled by a team member after the event was competed. The study is analytical and based on primary data, the scope is limited only up to the student of SEMCOM College only. Pie charts have been used to show the analysis of the data.

The analysis and interpretation of the same are as below.

Data analysis and interpretation

Business Goal

Data was collected to find out the motive of the students behind their business. The results are shown in the graph below.
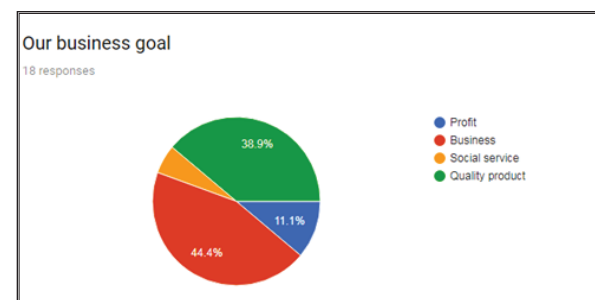
The above pie chart reveals that out of total number of respondents, 44.4% are having business motive whereas 33.9% are participating for providing quality product. 11.1% are participating to earn profit and only 5.6% are participating for social service motive and creating awareness about eco-friendly products and technology.

Selection of the product
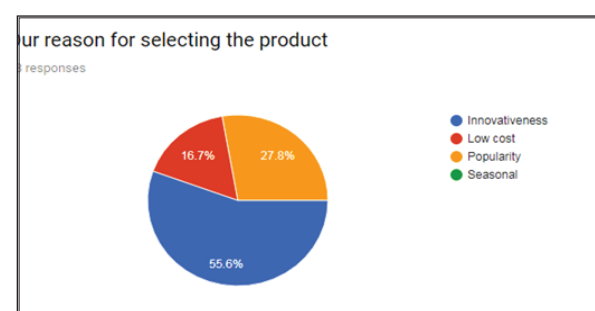
It is seen in the above graph that innovativeness is significantly affecting the selection of product. The second preference goes to the popularity of the product and the last one is the cost factor.

Pricing strategy
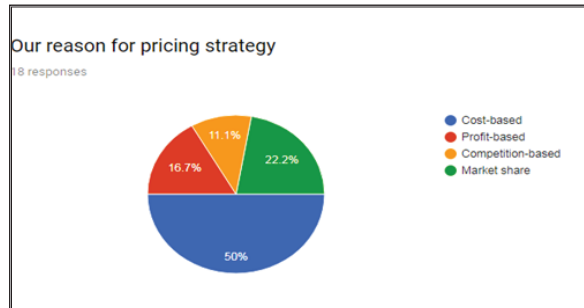
The above diagram reveals the basis adopted by the students for their product pricing strategy. 50% of the respondents focused on cost based pricing, 22% focused on the market share, 16.7% went for profit based pricing and the least that is 11.1% were considering competition for their pricing strategy.

Logistics and supply chain management
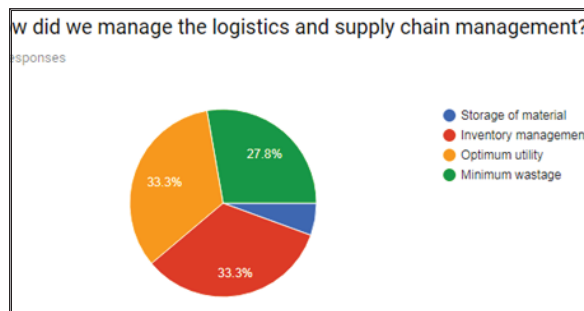
The above chart reveals the way in which students have managed the logistics and supply chain management. Out of total respondents 33.3% have followed inventory management and optimum utility to deals with the logistics and SCM whereas 27.8% emphasized on minimum wastage and the remaining emphasized on the storage of stock to satisfy the demand.

Unique selling proposition
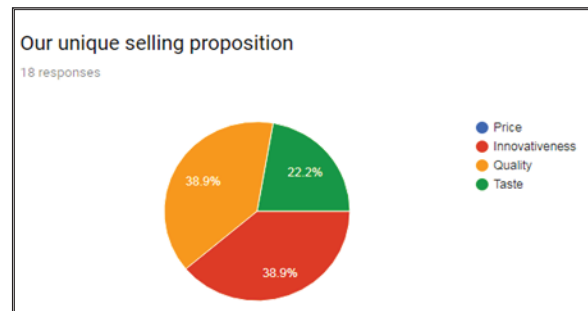
The above chart reveals the unique selling propositions of the various teams participated in green business and technology fair. Equal weightage of 38.9% was given to Innovativeness and quality as their USPs where as 22.2% was for taste as their USPs.

Marketing strategy
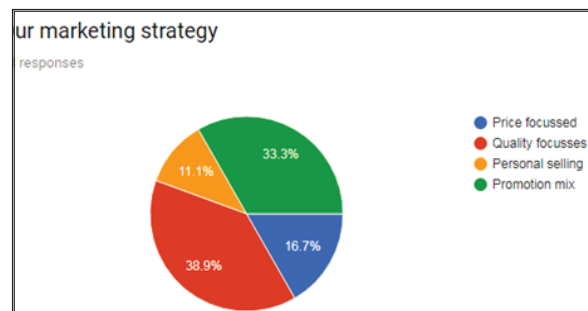
The above chart reveals that 38.9% are emphasizing on the quality based marketing, 33.3% are emphasizing on the promotion mix, 16.7% are following price based marketing strategy, and 11.1% are following personal selling strategy for increasing their business.

Inventory management practices
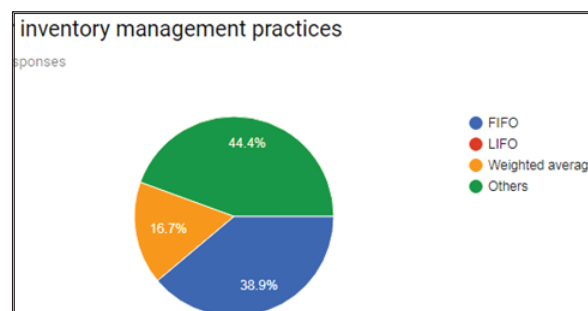
The above chart indicates that 38.9% are following FIFO method for inventory management whereas 16.7% are following

weighted average method and remaining all are following any standardized method for inventory management practices.

Problems faced
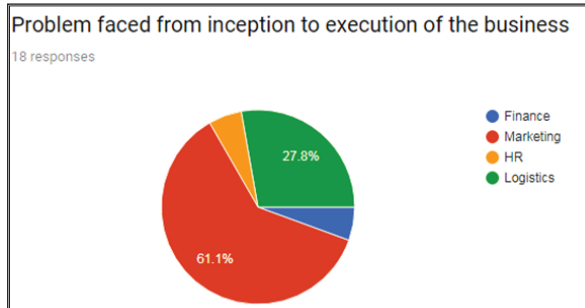
The above chart indicates that majority of the respondents faced the problem of marketing their products during the event. Whereas 27.8% faced the problem of logistics and remaining faced problem of finance and HR but both of them are insignificant.

Overcome the problems
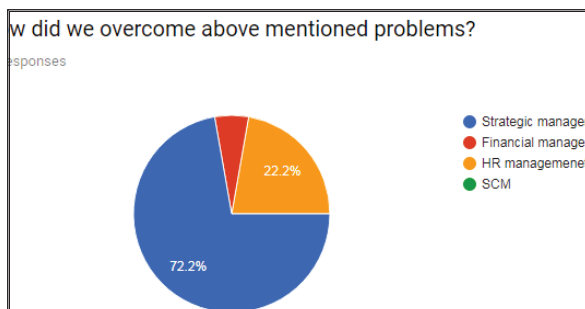
It was observed that majority of the participants, i.e. 72.2% overcame their problems by using strategic management where as 22.2% emphasized on the Human Resource Management and remaining emphasized on the financial management.

Key learnings
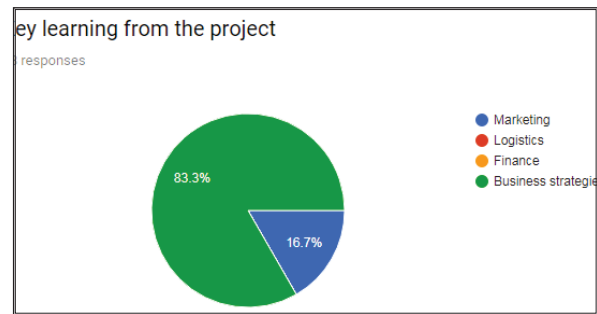
The key learning of the event was business strategies and marketing. The above chart reveals the fact that majority i.e. 83.3% were able to learn the business strategies practically whereas 16.7% could learn the marketing techniques during this event.

Overall experience
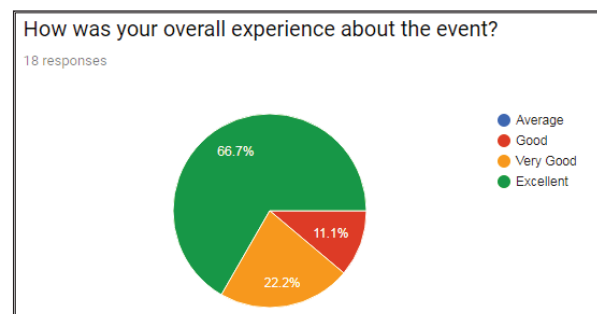
The above chart reveals that, out of total number of respondents 66.7% says that their experience for participating in the event was excellent whereas 22.2% said that it was a good learning experience for them.

Conclusion

The above analysis and interpretation says that the overall event was excellent and it was successful in providing the practical experience to the students of commerce and management along with creating a sense of responsibility on their part for saving the environment. Moreover it was a platform for all the participants to learn various aspects of business and the key learning for majority of the students was business strategies.

Hence, it is very important for the colleges working in the area of commerce and management to organize such kind of events to give practical training to the student and SEMCOM is such kind of a model which is frequently organizing various types of events for the practical exposure of students.

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An Impact of Economic Variables on Indian Stock Market Indices

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Abstract

The study has been undertaken to know impact of economic variables, namely, Gold price, Crude price and (USD/INR) exchange rateon Indian stock market indices Sensex and Nifty.For the purpose of study secondary data for 20 years have been collected from 1998 to 2017. The statistical tools like correlation and multiple regressions are used to analyze the data with the help of SPSS. A study was also conducted to find the influence of Economic variables with respect to the changes in political environment.

Key words: Gold, Crude price, (USD/INR) exchange, Sensex, Nifty

Introduction

Stock market indices reflect the health of any country's economy. The rising index or steady growth in the index is the sign of growing economy. The indices are declining or highly fluctuating gives the impression of instability in the economy of the country.These indices are used as a benchmark for the investors or portfolio managers. The stock markets of developing economies like Indiais directly related to the economic variables like Gold price, crude oil prices, Exchange rate, GDP, Foreign Direct Investment, Inflation, Interest rate and many others. Also it is highly affected by the changes in political and international economic environment.

India is heavily importer of crude oil as the most important energy resource for India is crude oil. An increase in the global oil prices over the period of time damage the Indian currency and the economy. Gold has been considered as the safest investment and a protector against bad times which have pushed Indians to buy it as investments.India is importer of gold so the Indian economy is greatly affected by gold price.As a medium of financial transactions between the countries, exchange rate plays crucial role. The entire import and export process of any country depends upon the exchange rate of its currency. The stock market will get benefit when the domestic currency value is appreciating.

The present study consist of economic variables such as Gold price, crude oil prices, Exchange rate to check its relationship with monthly market indices Sensex and Nifty on closing basis.

Review of Literature

Many academic researchers, financial and industry analysts have carried out the investigation to study

the relationship between economic variables and stock market movements from the past decades. They have used many statistical tools to check the effect of economic variables on stock market indices. The different conclusions have been drawn by the various about the relationship among market indices and selected economic variables. Here, we discussed some research works and their outcomes that have relevance with our research work.

Srivastava (2010) demonstrated the effect of Macroeconomic factors like IPI, WPI, Interest Rate, Foreign Exchange Rate and MSCI World Equity Index on the Indian Stock. He showed that the impact of domestic variables on the performance of the stock market was more as compared to global variables. Singh (2010) showed that IIP was having bilateral causal relationship with BSE Sensex, while WPI was found to be related to stock market unidirectional. Hosseini (2011) investigated the nature of the relationships between the stock prices and the key macroeconomic variables of India and China for the period January 1999 to January 2009 using monthly data. Kalra (2012) observed that Forex Rate, Whole Sale Price Index, Inflation Rate and Gold Price were the most significant variables.

Patel (2012) analyzed the effect of macroeconomic factors on the Performance of the Indian Stock Market from January 1991 to December 2011. He found that a long run equilibrium relationship between stock market indices and all macroeconomic factors exists. Sabunwala (2012) found that interest rate, money supply, inflation rate and the exchange rate have considerable influence on the stock market movement in the considered period, while fiscal deficit and foreign institutional investment have very negligible impact on the stock market.

Bhunia (2013) studied the relationship among crude price, gold price and financial variables. The study showed that there exist a long term co integration and causality between the financial variables taken for the study of both NSE and BSE for the period of 1991 to 2012. Venkatraja B (2014) studied that inflation, inflow of foreign institutional investment, exchange rate and gold price significantly impact the Indian stock market performance over the period April 2010- June 2014 using monthly data.

Bhunia and Ganguly (2015) considered the influence of two commodity indicators, namely gold and crude oil, GDP growth rate and exchange rates on the stock market index in India. They were found that there is a significant long-term relationship between the respected variables for the period 1991 to 2013.Vishal Geete (2016) studied that both dollar and gold prices have positive effect on the Indian stock market indices by considering time period 2011 to 2014.

Objectives

The main objectives of this study are the impact of:

1. Gold price, Crude price and (USD/INR) exchange rate on Indian stock market indices Sensex and Nifty during NDA Government.

2. Gold price, Crude price and (USD/INR) exchange rate on Indian stock market indices Sensex and Nifty during UPA Government.

3. Gold price, Crude price and (USD/INR) exchange rate on Indian stock market indices Sensex and Niftyduring both the government NDA and UPA.

Methodology

The study has been conducted to know the influenceof Gold price, Crude oil priceand US dollar/Indian rupee (USD/INR) exchange rate on Sensex and Nifty. Sample consists of monthly data for a long period of 20 years from 1998 to 2017. For the purpose

of the study second¬ary data have been collected through various web sites and close prices were considered. The period of 20 years has been divided into two parts, namely, NDA Government (March 1998 to May 2004, May 2014 to December 2017) and UPA Government (June 2004 to April 2014). The study has been carried out to know the impact of economic variables during NDA and UPA government as well as for a long term (whole period) on Sensex and Nifty. The statistical tools like correlation and multiple regressionsare used to analyze the data with the help of statistical software SPSS.

Source of Data

The monthly data for SENSEX and NIFTY indices have been taken from BSE of India and NSE of India websites. The USD/INR exchange rates have been procured from https://in.investing.com/currencies/usd-inr-historical-data. The gold prices and Crude Oil prices data have been taken from World Gold Council, https://www.gold.org/research/download-the-gold-price-since-1978, which is adjusted in Indian currency per gram. The sample for the study comprises 240 observations over the period of 20-year from 1998 to 2017.

Hypothesis

H01: Economic variables have no effect on Sensex and Nifty during considered period.

H11a: Economic variables have effect on Sensex and Nifty during considered period.

H02: Economic variables have no effect on Sensex and Nifty during NDA Government.

H12a: Economic variableseffect on Sensex and Nifty during NDA Government.

H03: Economic variableshave no effect on Sensex and Nifty during UPA Government.

H13a: Economic variableshave effect on Sensex and Nifty during UPA Government.

Results and Discussion

Table 1 shows descriptive statistics of the 240 observations of selected indices and economic variables included in the study.

Table 2a represents R and R2 values, the simple correlation (R) is 0.896, which indicates a high degree of correlation. The R2 value indicates how much of the total variation in the dependent variable, Sensex, can be explained by the independent variable, Gold price, Crude oil price and Exchange rate. In this case, 80.3% can be explained, which is very large.

Table 2b reports how well the regression equation fits the data. Here, $p < 0.005$, which is less than 0.05. Hence null hypothesis (H01) is rejected and conclude that, overall, the regression model statistically significantly. This table indicates that the regression model predicts the Sensex significantly well. Table 2c shows that the Gold price p-values < 0.005, is indicating significant effect of Gold in the model. The crude price and exchange rate contributing in the model but have no significant influence in prediction of Sensex during period 1998 to 2017. Predicted regression model can be written as

Sensex = 8030.97 + 7.705 (Gold price) + 8.856 (Crude price) − 2785.61 (Exchange rate)

Table 3a shows that high degree of correlation (0.989) between Sensex and economic variables. The value R^2 is 0.978 indicating 97.8 % of the total variation is explained by independent variables. Table 3b reports how well the regression equation fits the data. Here, $p < 0.005$, which is less than 0.05, therefore null hypothesis (H02) is rejected. It indicates that, it is a good fit for the data. In Table 3c, p-value < 0.005 for the Gold price, is indicating significant contribution of Gold price in the model while crude price and exchange rate have no major influence in prediction of Sensex during the period of NDA government. Predicted regression model can

be written as,

Sensex = -8408.831+12.201 (Gold price) + 8.725 (Crude price) + 3039.708 (Exchange rate)

Table 4a represents highly positive correlation (0.892) between the Sensex and economic variable, and variance explained by economic variables is 79.6%. The null hypothesis (H03) is rejected as p-value < 0.05 in the Table 4b. P-values of the Table 4c shows that Gold price, crude price and exchange rate are significantly contributing in the model during the UPA government. Predicted regression model can be written as,

Sensex = -19026.721+4.785 (Gold price) + 103.936 (Crude price) + 8461.022 (Exchange rate)

Table 5, 6 and 7 shows regression analysis summaries for the impact of economic variables on Nifty. Table 5a indicates that correlation between economic variables and Nifty is highly positive (0.898). The independent variables are explaining 80.7% variation ($R^2 = 0.807$). The p-value in Table 5b is less than 0.005, therefore null hypothesis (H01) is rejected. It indicates that good fit of model to the data. In Table 5c, p-values indicate that Gold price and Exchange rate have significant contribution in the model during period 1998 to 2017. Predicted regression model can be written as,

Nifty = 3182.510+ 2.256 (Gold price) -1157.827 (Exchange rate) + 2.113 (Crude price)

Table 6a shows that high degree of correlation (0.987) between Nifty and economic variables. The value R^2 is 0.975 indicating 97.5 % of the total variation is explained by independent variables. Table 6b shows $p < 0.005$, hence null hypothesis (H02) is rejected. It indicates that, it is a good fit for the data. In Table 6c, p-value < 0.005 for the Gold price, is indicating significant contribution

of Gold price in the model while crude price and exchange rate have no major influence in prediction of Nifty during the period of NDA government. Predicted regression model can be written as,

Nifty = -950.844+3.578 (Gold price) + -3.183 (Crude price) + 298.391 (Exchange rate)

Table 7a shows that high degree of correlation (0.915) between Nifty and economic variables. The value R^2 is 0.836 indicating 83.6% of the total variation is explained by independent variables. Table 7b shows $p < 0.005$, hence null hypothesis (H03) is rejected. It indicates that, it is a good fit for the data. The null hypothesis (H03) is rejected as p-value < 0.05 in the Table 4b. P-values of the Table 7c shows that Gold price, Crude price and Exchange rate are significantly contributing in the model during the UPA government. Predicted regression model can be written as,

Nifty = -5375.55+1.371 (Gold price) + 33.620 (Crude price) + 2320.543 (Exchange rate)

Findings

1. Gold prices have significant impact on Indian stock market indices Sensex and Nifty during NDA Government.

2. Gold price, Crude price and (USD/INR) exchange rate, all three have significant impact on both Indian indices Sensex and Nifty during UPA Government.

3. Only Gold prices have significant impact on Sensex while Gold price and Exchange rate have impact on Nifty during the whole period from 1998 to 2017.

4. Economic variables influence varies with the changes in political environmental.

Limitations

1. Study is limited to three variables only.

2. Limitation of secondary data.

Future Scope

1. Impact can be studied with more economic variable

2. Impact can be studied with international markets.

3. Sectorial impact on indices can be studied.

Conclusion

It has been observed that only Gold prices have significant impact on Sensex while Gold price and Exchange rate have impact on Nifty during the whole period from 1998 to 2017. Gold prices have significant impact on both indices Sensex and Nifty during NDA Government. This leads to the conclusion that Gold price, Crude price and exchange rate have significantly impact the on Indian stock market performance. Further, it is also concluded that economic variables influence is varying with the changes in political environment.

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Appendix

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Sensex	240	2810.70	34056.80	13736.4313	9038.26856
Nifty	240	809.00	10390.35	4127.3827	2725.75577
Gold	240	356.40	3060.60	1412.3917	942.82358
Crude	240	11.30	133.90	57.3613	29.40291
E1	240	1.458	2.551	2.04083	.299135
Valid N	240				

Table 2a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.896a	.803	.801	4035.09658	.073
a.	Predictors: (Constant), E1, Crude, Gold, b. Dependent Variable: Sensex				

Table 2b: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	15681428294.06	3	5227142764.687	321.038	.000b	
	Residual	3842553047.194	236	16282004.437			
	Total	19523981341.25	239				

Table 2c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8030.971	3977.976		2.019	.045
	Gold	7.705	.682	.804	11.302	.000
	Crude	8.856	13.569	.029	.653	.515
	E1	-2785.608	1736.101	-.092	-1.605	.110
	a. Dependent Variable: Sensex						

Table 3a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.989a	.978	.977	1773.29428	.302
Selecting only cases for which Government = NDA					

Table 3b: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	16119089541.068	3	5373029847.02	1708.668	.000
Residual	361625847.852	115	3144572.590		
Total	16480715388.920	118			
b. Selecting only cases for which Government = NDA					

Table 3c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8408.831	4293.107		-1.959	.053
	Gold	12.201	.615	1.058	19.846	.000
	Crude	8.725	12.807	.014	.681	.497
	E1	3039.708	1837.488	.084	1.654	.101
a. Dependent Variable: Sensex						
b. Selecting only cases for which Government = NDA						

Table 4a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.892a	.796	.790	2228.67879	.323
c. Selecting only cases for which Government = UPA					

Table 4b: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2262544096.397	3	754181365.46	151.838	.000c
1	Residual	581140071.681	117	4967009.160		
	Total	2843684168.078	120			
b. Selecting only cases for which Government = UPA						

Table 4c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-19026.721	3506.922		-5.425	.000
	Gold	4.785	.465	.803	10.288	.000
	Crude	103.936	11.865	.482	8.760	.000
	E1	8461.022	1365.128	.432	6.198	.000

a. Dependent Variable: Sensex

b. Selecting only cases for which Government = UPA

Table 5a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.898a	.807	.804	1205.20561	.069

a. Predictors: (Constant), Crude, E1, Gold

b. Dependent Variable: Nifty

Table 5b: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	1432914088.000	3	477638029.333	328.834	.000b
1	Residual	342794851.091	236	1452520.555		
	Total	1775708939.091	239			

a. Dependent Variable: Nifty   b. Predictors: (Constant), Crude, E1, Gold

Table 5c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3182.510	1188.145		2.679	.008
	Gold	2.256	.204	.780	11.080	.000
	E1	-1157.827	518.540	-.127	-2.233	.026
	Crude	2.113	4.053	.023	.521	.603

a. Dependent Variable: Nifty

Table 6a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.987a	.975	.974	575.11513	.309

Statistics are based only on cases for which Government = NDA.

Table 6b: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1470182258.453	3	490060752.818	1481.632	.000c
1	Residual	38037102.570	115	330757.414		
	Total	1508219361.023	118			

b. Selecting only cases for which Government = NDA

Table 6c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-950.844	1392.341		-.683	.496
	Gold	3.578	.199	1.026	17.945	.000
	E1	298.391	595.934	.027	.501	.618
	Crude	-3.183	4.153	-.017	-.766	.445

a. Dependent Variable: Nifty b. Selecting only cases for which Government = NDA

Table 7a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.915a	.836	.832	597.76926	.387

b. Dependent Variable: Nifty,Statistics are based only on cases for which Government = UPA.

Table 7b: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	213613346.118	3	71204448.706	199.269	.000c
	Residual	41807386.973	117	357328.094		
	Total	255420733.091	120			

a. Dependent Variable: Nifty b. Selecting only cases for which Government = UPA

Table 7c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5375.550	940.616		-5.715	.000
	Gold	1.371	.125	.768	10.990	.000
	E1	2320.543	366.150	.395	6.338	.000
	Crude	33.620	3.182	.521	10.564	.000

a. Dependent Variable: Nifty   b. Selecting only cases for which Government = UPA

Correlations (NDA)

		Sensex	Nifty	Gold	Crude	E1
Sensex	Pearson Correlation	1	.976**	.772**	.779**	-.464**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	121	121	121	121	121
Nifty	Pearson Correlation	.976**	1	.791**	.813**	-.493**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	121	121	121	121	121
**. Correlation is significant at the 0.01 level (2-tailed).						

Correlations

		Sensex	**Nifty**	**Gold**	**Crude**	**E1**
Sensex	Pearson Correlation	1	.998**	.989**	.744**	-.945**
	Sig. (2-tailed)		.000	.000	.000	.000
Nifty	Pearson Correlation	.998**	1	.987**	.729**	-.948**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	119	119	119	119	119
**. Correlation is significant at the 0.01 level (2-tailed).						

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A Study on Financial Performance Analysis of Gujarat State Seeds Corporation Limited

Mr. Jitendra Patel and Dr. Yash Rajpara

Abstract

Gujarat State Seeds Corporation Limited play a significant role for the socio economic development of the farmers. It is situated at Gandhinagar District in Gujarat. One of the best Government Profit Making Sector, It Prepares the Profit and loss A/c, Balance Sheet and also income and expenditure Statements. For the analysis of financial performance various ratios can be used and computed on the basis of putting term of GSSCL. Various ratios like Net profit ratio, Gross Profit Ratio, Return on InvestmentRatio, Operating Ratio, Return on Shareholder fundsRatio, Return on total asset ratio, are use to measuring financial performance of GSSCL. In short this paper is an attempt by researcher for determining financial performance of GSSCL.

Key Words: GSSCL, Financial Performance of GSSCL.

Introduction:

Seed is those essential and The majority basic information for economical farming worker. Those reaction about all other inputs relies on calibre from claiming seeds with an extensive degree. It will be assessed that the regulate commitment of nature seed to sit unbothered to the aggregate generation is regarding 15 – 20% depending upon those crop What's more it could be further brought up dependent upon 45% for productive management from claiming other inputs. The developments in the seed business to India, especially in the keep going 30 years, would precise noteworthy. A real re-structuring of the seed business by administration of India through the national seed venture Phase-I (1977-78), Phase-II (1978-79) Also Phase-III (1990-1991), might have been conveyed out, which reinforced those seed base that might have been practically required and pertinent around the individuals times. This Might a chance to be termed as An principal defining moment On forming for an composed seed industry. Prologue from claiming new seed improvement approach (1988 – 1989) might have been yet an alternate noteworthy mile stone in the Indians seed Industry, which converted those thick, as character of the seed industry. The approach provided for entry on Indians farmers of the best about seed and planting material accessible anyplace on the globe. The approach fortified calculable ventures Eventually Tom's perusing private individuals, Indians corporate Furthermore MNCs in the Indians seed division for solid R&D build for item improvement to each of the seed organizations with more stress for secondary quality hybrids about oats What's more vegetables Furthermore howdy fi items for example, such that Bt. Cotton. Concerning illustration a result, rancher need a totally result decision and seed business today may be situated

on fill in with a 'farmer centric' approach Furthermore will be showcase determined. However, there may be a Dire compelling reason to the state seed enterprises likewise on change themselves done tune with those business As far as infrastructure, technologies, methodology and the oversaw economy society to have the capacity on survive in the focused market What's more should upgrade their commitment in the national try of expanding sustenance processing to accomplish sustenance & dietary security

About of Gujarat State Seeds Corporation Limited :

Gujarat satiate Seeds Corporation Ltd. , created clinched alongside April 1975 prominently referred to Eventually Tom's perusing its brand name "GURABINI" will be serving in the bigger interest of farmers starting with more than three decades for farmer's confidence brand loyalty, personal satisfaction assurance, committed administration What's more maintainable commitment for upliftment about farmers for Glorious achievements.

GURABINI is primarily engaged in production, processing and marketing of seeds of more than 30 crops and 100 varieties and hybrids in almost all categories i.e. Cereals, Pulses, Oilseeds.

GURABINI is having its Head office at Gandhinagar , and 13 Branches across the Gujarat and one Sales Depot. The Chairman of Gurabini is Principal Secretary (Agriculture) to Government of Gujarat and Managing Director is also a senior technical officer from Government of Gujarat.

The sanctioned impart money about company Similarly as on will be Rs. 4 Cores isolated under just as stakes about Rs. 100 every. Similarly as against that, those paid dependent upon impart money is Rs. 3. 93 Crore. The greater part have been held by taking after Classes for allotmentholders:.

Objective of The Study:

The main objective of corporation to provide timely high quality seeds at reasonable prices to the state's farmers as well as establishing strong seed industry in the state. And core objective the study is measure the level of financial Performance of GSSCL.

Research Methodology:

This research study is analytical nature. The sample of the study is only one GSSCL in Gujarat state. GSSCL of Gandhinagar district. The study based on secondary data. And it collected from the annual reports of the GSSCL. For the measurement of financial performance in this research study, five years are considered from 2011-12 to 2015-16 .Various ratios like Net Profit Ratio, Gross Profit Ratio, Operating Ratio, Return on Shareholder funds Ratio, Return on Total Asset Ratio, Return on inventory Ratio are use to measuring financialPerformance of the GSSCL.

Financial Performance Analysis of Gujarat State Seeds Corporation Limited
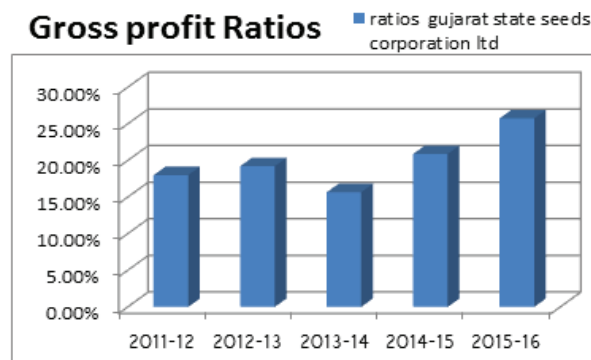
(A)   Gross Profit Ratio

Gross profit ratio are derived from the cost of goods sold and revenue. Analysis are the given to the depressedprofit margin of the firm. Ratios are the indicate of the can decline of the sales.

Gross Profit Ratio = Gross Profit/Sales×100

Table 1.1: Gross Profit Ratio

Chart 2.1: Gross Profit Ratio

The table depicts to the Gross profit ratio of the Gujarat state seeds corporations ltd from the period of the 2011-12 to 2015-16 .we can observe the gross profit of the firm as year 2011-12 is 18% and 2012-13 was the 19.22% it may increase in compare to the previous year of gross profit ratio. There was the gross profit ratio of the firm 2013-14 was the 15.66% , the ratio are the indicate that lowest gross profit ratio of the firm. And the year 2014-15 gross profit ratio was the 20.89% and year 2015-16 gross profit ratio was the 25.76% due to highest among the all 5 year's gross profit ratios.

(B) Operating Ratio:

This ratios are the relations between the net sales and operating costs. These ratios are indicate the operational efficiencies and profit earning capacity of the firm. They are the operating ratios are considers as the 75% to 85% are the standard manufacturing of the firm.

Table 1.2 Operating Profit Ratio

Year	Operating Ratio
2011-12	76.38%
2012-13	75.07%
2013-14	78.17%
2014-15	73.26%
2015-16	72.85%

Operating ratio = Cost of goods sold ±
Operating expenses
Net Sales

Chart 2.2: Operating Profit Ratio
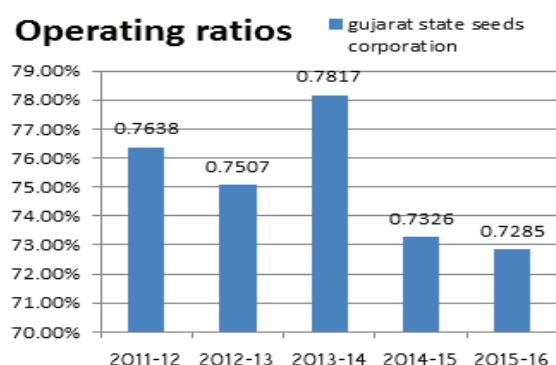
The table of Operating ratio of the Gujarat state seeds corporation as given below. This operating ratio are indicate the efficiency of the firm as periods of 2011-12 to 2015-16 five year data. The operating ratio of the 2011-12 was 76.38% ,2012-13 was 75.07% , 2013-14 was 78.17% ,2014-15 was 73.16%, 2015-16 was the 72.85%. the operating ratio are indicate that the year 2013-14 operating ratio are highest among the five year and lowest ratio are the firm during the year 2015-16 was 72.85% all five years.

(c) Net Profit Ratio:

Net profit ratio are obtained after the deducting of all the expenses interest and tax from the gross profit.

Net profit ratios are direct relationship with the return on investment.

Net profit ratios = $\dfrac{\text{Operating profit}}{\text{Sales}} \times 100$

Table 1.3: Net Profit Ratio

Year	Net Profit Ratio
2011-12	9.535711%
2012-13	10.6267%
2013-14	8.08578%
2014-15	11.76191%
2015-16	15.57503%

Chart 2.3: Net Profit Ratio

The table of Net profit ratio of the Gujarat state seeds corporation as given below. This Net ratio are indicate the efficiency of the firm as periods of 2011-12 to 2015-16 five year data. The Net Profit ratio of the 2011-12 was 9.54% ,2012-13 was 10.63% , 2013-14 was 8.085% ,2014-15 was 11.76%, 2015-16 was the 15.57%. the Net Profit ratio are indicate that the 15.57% of the year 2015-16 and Net profit ratio are highest among the five year and lowest ratio are the firm was 2013-14 was 8.085% all five years.

(C) Return on Investment:

Return on investment is the most popularly used to measuring the overall efficiency and Profitability of the business.

Return on Investment =
$$\frac{\text{Net Profit before interest and taxes}}{\text{Capital employed}} \times 100$$

Table 1.4: Return on Investment

Year	Return on Investment
2011-12	31.25213
2012-13	38.37868
2013-14	26.93119
2014-15	20.58872
2015-16	17.64794

The table of return on investment ratio of the Gujarat state seeds corporation as given below. This ROI ratio are indicate the efficiency and profitability of the firm as periods of 2011-12 to 2015-16 five year data. The ROI ratio of the 2011-12 was 31.25% ,2012-13 was 38.37% ,2013-14 was 26.93% ,2014-15 was 20.58%, 2015-16 was the 17.64%. the ROI ratio are indicate that the 38.37% of the year 2012-13 and ROI ratio are highest among the five year and lowest ratio are the firm was 2015-16 was 17.64% all five years.

Chart 2.4: Return on Investment
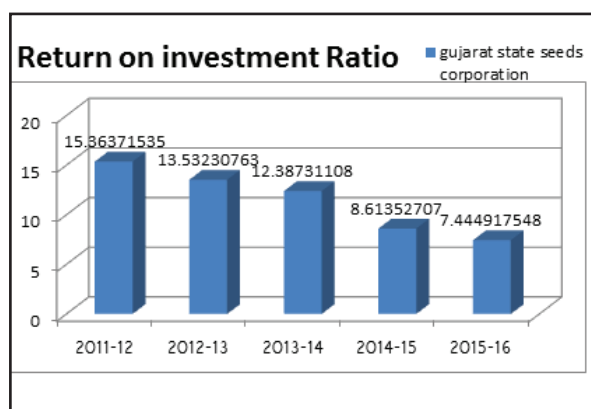
(D) Return on total assets:

Profitability can be measured by establish the relation between net profit and total assets of the business. These ratios are indicating the

managerial efficiency of the business term.

Return on total asset =
$$\frac{\text{Net Profit before interest and taxes}}{\text{Total Asset}} \times 100$$

Table 1.5: Return on Total Asset

Year	Return on total assets
2011-12	15.36372
2012-13	13.53231
2013-14	12.38731
2014-15	8.613527
2015-16	7.444918

The table of Return On total asset ratio of the Gujarat state seeds corporation as given below. These Return On total asset ratio are indicate the efficiency of the firm as periods of 2011-12 to 2015-16 five year data. The Return On total asset ratio of the 2011-12 was 15.36% ,2012-13was 13.53% , 2013-14 was 12.38% ,2014-15 was 8.61%, 2015-16 was the 7.44%. the Return On total asset ratio are indicate that the year 2011-12 Return On total asset ratio are highest among the five year and lowest ratio are the firm is 2015-16 was 7.44% all five years.

Chart 2.5: Return on total Assets
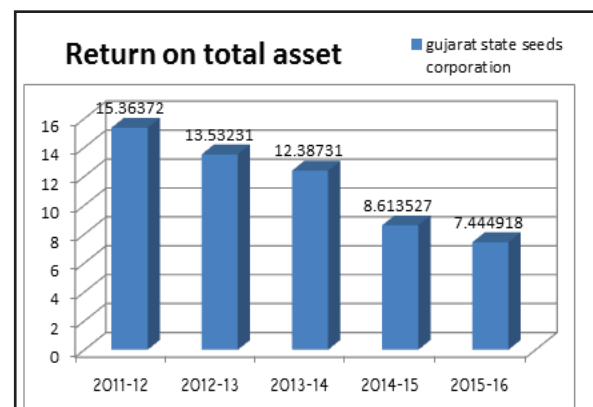
(E) Return on Shareholder funds:

Return on shareholders' fund ratios are the indicate of the measuring of overall profitability of the business .this ratio also known as the Return on total equity ratio..

Return on shareholders' fund =

$\dfrac{\text{Net Profit after interest and taxes}}{\text{Shareholders funds}} \times 100$

Table 1.6: Return on Share holders' Fund

Year	Return on Shareholder funds
2011-12	23.26
2012-13	26.94
2013-14	17.52
2014-15	12.45
2015-16	12.87

Chart 2.6 Return on Share holders' Fund

This table indicate the ratio of the Return on shareholders fund ratio on Gujarat state seeds corporation ltd. This ratio are the measuring a profitability of the business. Return on total shareholders fund ratio are the following data as given below. There ratio are the 2011-12 was 23.26% ,2012-13 was 26.94% , 2013-14 was 17.52 %,2014-15 was 12.45 %and 2015-16 was 12.87%. this are the highest profitability of company in year 2012-13 was 26.94% and lowest profitability of the company in year 2014-15 is 12.45%.

Finding And Suggestions:

1. Gujarat state seeds corporation limited should bargain with their suppliers to get higher credit for better liquidity.

2. Gujarat state seeds corporation should manage its FIXED ASSET to manage fixed asset debt ratio.

3. It should be increase to the debt to equity by increasing its EQUITY and OWNERS FUND.

4. They should be comparison of current asset over the current liabilities.

5. Gujarat state seeds corporation limited as apply to the new techniques of the financial management for better performance in future

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A Study on Employee Retention Strategies and Reasons for leaving the job in Selected Diamond Units in Gujarat

Dr. Dipal R. Patel

Abstract

In this article Researcher has made an attempt to study the various Human Resource (HR) practices that help employee retention and encourage employee commitment in the organization. Now a day's employee retention is one of the important tasks for the organizations due in this competitive world. For managers, to have a happy passionate workforce will help them in achieving individual and organizations performance. But manager's job is not only to hire best employees but also retain them in the organization. HR practice consists satisfaction of the employees, commitment of employees towards the organization, building a healthy competitive and cultural environment. Practice can be in the form of an activity, a rule, a process, a system or it's just a simple technique to get work done through other people. Healthy HR practices affect the overall performance of the organization. Good Human Resource practices are those that contribute to one or more of the three C's: Competencies, Commitment, and Culture. They need to be identified and implemented effectively in terms of cost of expenses, reviewing and revising them with a proper interval to enhance their effectiveness.

Keywords: Employee retention, Job satisfaction & HR Practices

Objective of the study:

1. To find different reasons for leaving the job in selected Diamond Units
2. To study the factors that influenced to remain in the selected diamond units.

Scope of the study:

A study on human resource retaining problems of diamond units, for this purposes the human resource retaining problems of selected units, have been examined from 2015. An attempt is made to identify human resource retaining problems of selected diamond Units.

Research Methodology:

For this study purpose, the sample data is collected from primary sources and used questionnaire for collecting data. The respondents of the primary data are the employees of the selected diamond units in Gujarat. The primary data were obtained based on demographic distribution and Employee Retention Strategies. Secondary data were also used for this study, relevant data and information has also been collected from Human resource management articles, review, research papers published in various journals or periodicals on the topic of study.

Data Analysis and Interpretation:

The raw data which was collected with the help of the structured questionnaires was coded in the SPSS statistical software, to convert the raw data into a suitable form. Once the data was transferred into the software the data analysis was initiated. Different data analysis techniques have been used to get the meaningful outcome from the data. The statistical tools used are descriptive statistics Kruskal-Wallis Test and Mann-Whitney Test wherever applicable.

Review of literature:

Patel D. R. has concluded in his research article "A Study on Employee Retention Strategies and Its Impact on Employees Job Satisfaction in Selected Textile Units in Gujarat." (2017) that It was found that age group and working experience differences does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company, Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization.

Deshmukh N. concluded in his study "HR challenges & strategies to attract and retain talent for green field projects" (2015) that freedom of job due to less chain of command and variety of jobs that may give good exposure of recruitment, administration and development for the future development. Proper space is available for the growth by delivering good and timely performance and that helped employees if it has been noticed by management. At Greenfield sites need to provide high performance work practices at new sites, despite of all this HR challenges to attrition, local legislation, administrative problems at sites and HR strategies to retain and attract talented employees. We need to appreciate new projects increasing employment opportunities, living standards and improving economy. From this article it is easy to find out that to retain the talented employee is really a difficult task for Greenfield projects.

Singh S., Sharma G., & Mahendru M. observed in their research paper "a study of employee retention in ITeS industry: a case of north India" (2010) that employee retention can be of two categories, first one is monetary includes performance wise incentive, rewards, increment and second one is non monetary to retain the employees include job rotation, job enrichment, exit interviews, participation in management, public recognition of achievements. Even age and education is also play an important role in employee retention in the industry, and fair and competitive salaries and performance related incentives emerged as the important factors of retention, even most of the firms put in specific women related practices in order to retain the female employees, women need fair treatment along with a security at work place and provision for concession in the number of night shifts for them was not felt to be a vital importance in relation to the other factors that were examined in the study.

Das B. L. & Baruah M. has found out in his paper "Employee Retention: A Review of Literature" (2013) that Human resources are complex and not easy to understand. These are the assets which can help in making or breaking of an organization. Retaining employees will help in the long run of an organization and will also add to their goodwill. But the most difficult task faced by an organization is retaining as well as satisfying their workers. factors like compensation practices, leadership and supervision, career planning and development, alternative work schedule, working conditions, flexible working hours need to take care by HR professionals for employee retention, from this article it has been observed that most of the firms or units are facing employee retention problem.

Patel K. C. has analyzed in his study "A Soci-Economic Condition of Diamond workers: With special Reference to Navasari city" (2002) that the condition of workers are not up to the mark like their parents are not so educated so this affect their children too and due to this they are not getting more benefit for the future scope, as per their study author did not find any relation between education and caste, due to bad economic condition of family they don't get enough education and

they join the business or start working in very small age so this also affect their future so from this article it has been observed that workers are facing problem since last 2 or more decades and the reason behind this is education only.

Bremen J & Das A. N. concluded in his study "Behind the glitter, down and out laboring under capitalism" (1996) that workers are facing problem of misbehaviour of their owners, and due to this they left the job and join other industry or factory, workers feeling suffocation due to bad location layout for ghanties, lack of toilet, ventilation and working environment create a dissatisfaction among the workers and that force them to left the job. Even many owners watch their workers constantly while they are doing their job or work from their cabin window. From this article it has been observed that workers are facing problem of wages, behaviour of employer and working environment.

Leininger J. mentioned in their blog "Foreign companies in China are increasingly finding that compensation alone does not guarantee that employees will stay" (2008) that most important factor for the success of business is attraction and retention of the talented employees, local labour market is facing problem of higher turnover rates and high salary increases, thus HR manager are looking to find the way by gaining a competitive edge in retention and for that he mentioned Watson Wyatt survey to retain the best employees, organization need to motivate by giving programs which help in deeper commitment than monitory benefits like decentralization, job satisfaction, effective leadership, fair performance evaluation system and positive working condition. He describes challenge faced in retention and also why do employees leave? Reason behind leaving the job is salary increases are levelling off, city to city salary differences are narrowing, pay differ by entity, domestic competition is on the rise and apart that it affected the commitment and drivers for the same are clear communication, job satisfaction, effective performance management system and positive work environment

Data Analysis:

Table 1: Showing Ranking of Reasons for leave the job

Sr. No.	Descriptive Statistics	N	Min.	Max.	Mean	Std Deviation	Rank
1	Quality of the production change	220	1	7	5.05	1.918	1
2	Due to Residential address change	220	1	7	5.03	1.919	2
3	Getting higher salary in other company	220	1	7	4.04	1.666	3
4	Having differences of opinion with superior	220	1	7	3.14	1.736	6
5	Working on the machine is unfavorable	220	1	7	2.82	2.054	7
6	Getting other job easily	220	1	7	4.01	1.724	4
7	To go to native place during summer	220	1	7	3.91	1.862	5

Source: Primary Data

Interpretation:

From the above table of different Reasons to leave the job, respondent gives their rank and on that basis Quality of the production change is ranked first for the reason to leave the job, second one is Due to Residential address change, third is Getting higher salary in other company, forth one is Getting other job easily, then fifth is To go to native place during summer, sixth one is Having differences of opinion with superior and last one Working on the machine is unfavorable.

Kruskal-Wallis Test

Table 2: Showing factors that influenced to remain in the selected diamond units based on Age groups

H_{0A}: The ranking of employees in different Age groups on various factors that influenced to remain in the selected diamond units are same.

H_{1A}: The ranking of employees in different Age groups on various factors that influenced to remain in the selected diamond units are not same.

	Ranks			Test Statistics a,b		
	Age	N	Mean Rank	Chi-Square	df	Asymp. Sig.
Quality of the production change	Less than 18	11	87.64	6.659	3	.084
	18 to 25	110	105.05			(NS)
	26 to 35	86	122.89			
	36 to 45	13	94.00			
	Total	220				
Due to Residential address change	Less than 18	11	94.14	7.461	3	.059
	18 to 25	110	107.78			(NS)
	26 to 35	86	121.20			
	36 to 45	13	76.58			
	Total	220				
Getting higher salary in other company	Less than 18	11	130.68	1.580	3	.664
	18 to 25	110	107.60			(NS)
	26 to 35	86	110.45			
	36 to 45	13	118.31			
	Total	220				
Having differences of opinion with superior	Less than 18	11	137.59	6.263	3	.099
	18 to 25	110	105.91			(NS)
	26 to 35	86	108.10			
	36 to 45	13	142.31			
	Total	220				
Working on the machine is unfavorable	Less than 18	11	129.86	1.501	3	.682
	18 to 25	110	109.01			(NS)
	26 to 35	86	111.37			
	36 to 45	13	100.96			
	Total	220				
Getting other job easily	Less than 18	11	96.36	3.512	3	.319
	18 to 25	110	114.57			(NS)
	26 to 35	86	103.87			
	36 to 45	13	131.85			
	Total	220				

To go to native place during summer	Less than 18	11	110.50	5.955	3	.114
	18 to 25	110	118.56			(NS)
	26 to 35	86	98.05			
	36 to 45	13	124.62			
	Total	220				

a. Kruskal Wallis Test
b. Grouping Variable: Age
Source: Primary Data

Interpretation:

As per above Table the employees were grouped based on Age Group. Chi-square test was applied. Since the significance value is greater than 0.05 for all the factors, it may be inferred that ranking of employees in different age group on various factors that influenced to remain in the selected diamond units were same.

Table 3: Showing factors that influenced to remain in the selected diamond units based on working experience

H_{0B}: The ranking of employees in different working experience on various factors that influenced to remain in the selected diamond units are same.

H_{1B}: The ranking of employees in different working experience on various factors that influenced to remain in the selected diamond units are not same.

Ranks				Test Statistics^{a,b}		
	Expreince	N	Mean Rank	Chi-Square	df	Asymp. Sig.
Quality of the production change	Less than 1 year	23	88.91	9.862	4	.043
	1 to 3 years	77	105.08			(S)
	3 to 5 years	64	118.36			
	6 to 10 years	8	162.00			
	More than 10 years	48	110.47			
	Total	220				
Due to Residential address change	Less than 1 year	23	101.63	3.180	4	.528
	1 to 3 years	77	106.21			(NS)
	3 to 5 years	64	109.25			
	6 to 10 years	8	136.50			
	More than 10 years	48	118.97			
	Total	220				
Getting higher salary in other company	Less than 1 year	23	110.76	.953	4	.917
	1 to 3 years	77	114.58			(NS)
	3 to 5 years	64	107.11			
	6 to 10 years	8	121.44			
	More than 10 years	48	106.52			
	Total	220				

Having differences of opinion with superior	Less than 1 year	23	126.57	3.127	4	.537
	1 to 3 years	77	109.52			(NS)
	3 to 5 years	64	102.13			
	6 to 10 years	8	107.81			
	More than 10 years	48	115.99			
	Total	220				
Working on the machine is unfavorable	Less than 1 year	23	133.26	9.028	4	.060
	1 to 3 years	77	111.65			(NS)
	3 to 5 years	64	97.66			
	6 to 10 years	8	80.88			
	More than 10 years	48	119.81			
	Total	220				
Getting other job easily	Less than 1 year	23	101.00	2.803	4	.591
	1 to 3 years	77	108.01			(NS)
	3 to 5 years	64	120.33			
	6 to 10 years	8	94.50			
	More than 10 years	48	108.61			
	Total	220				
To go to native place during summer	Less than 1 year	23	112.13	6.689	4	.153
	1 to 3 years	77	115.14			(NS)
	3 to 5 years	64	118.93			
	6 to 10 years	8	72.94			
	More than 10 years	48	97.30			
	Total	220				
a. Kruskal Wallis Test						
b. Grouping Variable: Experience						

Source: Primary Data

Interpretation:

As per above Table the employees were grouped based on working experience. Chi-square test was applied. Since the significance value is greater than 0.05 for all the factors except for Quality of the production change, it may be inferred that ranking of employees in different working experience on various factors that influenced to remain in the selected diamond units were same. However, the ranking of employees in different age group on factor like Quality of the production change with respect to factors that influenced to remain in the selected diamond units is not same.

Mann-Whitney Test

Table 4: Showing factors that influenced to remain in the selected diamond units based on Marital Status

H_{0C}: There is a significant difference in ranking of unmarried and married employees on various factors that influenced to remain in the selected diamond units are same.

H_{1C}: There is a significant difference in ranking of unmarried and married employees on various factors that influenced to remain in the selected diamond units are not same.

	Ranks				Test Statisticsa			
	Marital Status	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Quality of the production change	Unmarried	107	105.86	11327.00	5549.000	11327.000	-1.077	.282
	Married	113	114.89	12983.00				(NS)
	Total	220						
Due to Residential address change	Unmarried	107	104.46	11177.50	5399.500	11177.500	-1.408	.159
	Married	113	116.22	13132.50				(NS)
	Total	220						
Getting higher salary in other company	Unmarried	107	112.04	11988.50	5880.500	12321.500	-.355	.722
	Married	113	109.04	12321.50				(NS)
	Total	220						
Having differences of opinion with superior	Unmarried	107	107.92	11547.50	5769.500	11547.500	-.601	.548
	Married	113	112.94	12762.50				(NS)
	Total	220						
Working on the machine is unfavorable	Unmarried	107	112.43	12030.50	5838.500	12279.500	-.457	.648
	Married	113	108.67	12279.50				(NS)
	Total	220						
Getting other job easily	Unmarried	107	109.44	11710.00	5932.000	11710.000	-.245	.807
	Married	113	111.50	12600.00				(NS)
	Total	220						
To go to native place during summer	Unmarried	107	117.94	12619.50	5249.500	11690.500	-1.725	.084
	Married	113	103.46	11690.50				(NS)
	Total	220						
a. Grouping Variable: Status								

Source: Primary Data

Interpretation:

As per above Table the employees were grouped based on unmarried and married employees. Since the significance value is greater than 0.05 for all the factors, it may be inferred that ranking of different unmarried and married employees on various factors that influenced to remain in the selected diamond units were same.

Table 5: Showing factors that influenced to remain in the selected diamond units based on Status/level

H_{0D}: There is a significant difference in ranking of Status/Level of employees on various factors that influenced to remain in the selected diamond units are same.

H_{1D}: There is a significant difference in

ranking of Status/Level of employees on various factors that influenced to remain in the selected diamond units are not same.

	Ranks				Test Statisticsa			
	Status	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Wilcoxon W**	**Z**	**Asymp. Sig. (2-tailed)**
Quality of the production change	Middle Level	42	109.71	4608.00	3705.000	4608.000	-.091	.927
	Floor Level	178	110.69	19702.00				(NS)
	Total	220						
Due to Residential address change	Middle Level	42	107.80	4527.50	3624.500	4527.500	-.315	.753
	Floor Level	178	111.14	19782.50				(NS)
	Total	220						
Getting higher salary in other company	Middle Level	42	113.44	4764.50	3614.500	19545.500	-.338	.735
	Floor Level	178	109.81	19545.50				(NS)
	Total	220						
Having differences of opinion with superior	Middle Level	42	124.94	5247.50	3131.500	19062.500	-1.679	.093
	Floor Level	178	107.09	19062.50				(NS)
	Total	220						
Working on the machine is unfavorable	Middle Level	42	106.65	4479.50	3576.500	4479.500	-.453	.651
	Floor Level	178	111.41	19830.50				(NS)
	Total	220						
Getting other job easily	Middle Level	42	119.02	4999.00	3380.000	19311.000	-.982	.326
	Floor Level	178	108.49	19311.00				(NS)
	Total	220						
To go to native place during summer	Middle Level	42	103.11	4330.50	3427.500	4330.500	-.856	.392
	Floor Level	178	112.24	19979.50				(NS)
	Total	220						
a. Grouping Variable: Status/Level								

Source: Primary Data

Interpretation:

As per above Table the employees were grouped based on Status/Level of employees. Since the significance value is greater than 0.05 for all the factors, it may be inferred that ranking of different Status/Level of employees on various factors that influenced to remain in the selected diamond units were same.

Findings and Conclusions

Kruskal-Wallis Test

It was found that ranking of employees in different age group on various factors such as Due to Residential address change, getting higher salary in other company, having differences of opinion with superior, Working on the machine is unfavorable, getting other job easily and to go to native place during summer influenced to remain in the organization were same.

The Ranking of employees in different working experience on following factors that influenced to remain in the organization such as Due to Residential address change, Getting higher salary in other company, Having differences of opinion with superior, Working on the machine is unfavorable, Getting other job easily , To go to native place during summer

Similarly, the Ranking of employees in different working experience on factors such as Quality of the production change is influenced to remain in the organization are not same.

Mann-Whitney Test

It was found that there is a significant difference in ranking of unmarried and married employees. Since the significance value is greater than 0.05 for all the factors, it may be inferred that ranking of different unmarried and married employees on various factors like Quality of the production change, Due to Residential address change, Getting higher salary in other company, Having differences of opinion with superior, Working on the machine is unfavorable, Getting other job easily and To go to native place during summer that influenced to remain in the organization were same.

It was found that there is a significant difference in ranking of employees in different status/level. Since the significance value is greater than 0.05 for all the factors, it may be inferred that ranking of employees in different status/level on various factors like Quality of the production change, Due to Residential address change, Getting higher salary in other company, Having differences of opinion with superior, Working on the machine is unfavorable, Getting other job easily and To go to native place during summer that influenced to remain in the organization were same.

Reasons for leaving the job

1. Quality of the production change
2. Due to Residential address change
3. Getting higher salary in other company
4. Getting other job easily
5. To go to native place during summer

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A study on work life balance among teachers in arts, commerce and science colleges with special reference to Navi Mumbai

An International Peer Reviewed Research Journal (ISSN-2321-5968) Vol-5, Issue-02, March 2018

A study on work life balance among teachers in arts, commerce and science colleges with special reference to Navi Mumbai

Dr. Shaheda Sheikh

Abstract

Today's work life is much different when it comes to technology and competition. Teachers are the milestone of our society which make them special and therefore there wellbeing and consideration is needed. The level of stress and other issues of life is managed by employees is very challenging. They therefore find it sometimes to be multi-tasking to handle situations at office or home. In this study researcher has found about the reasons to work and balance along with family among gender which is male and female teachers in the area of Navi Mumbai. The research is conducted in the colleges of arts, commerce and science colleges affiliated to University of Mumbai. Teachers surveyed are from both aided and unaided section. Study also focuses on the work life balance between the personal and professional life of teachers.

Keywords: Work life balance, Work life balance Factors

Introduction:

Work-life balance is a very major term of modern assistance on achieving wellbeing. Education today has become challenging as compared to the other industries and it's a pride working for a university or research institute which consumes time and energy, leaving moderated opportunities to maintain relations or personal relations. In the 21st century there are biggest concerns towards the human resource management. Work timings has also been changed as per the business demand. Education system has become wide and with lots of modified teaching resources, administration work and many other duties and responsibilities. In reality to improve the quality of work-life remains a hard-hitting job as work pressure have increased in the past decades.

Work-life balance has been an apprehension for all those concerned in preserving a well poise between working life and its association with wider quality of lifespan. The considerate work life association can afford direct influence on organization. Since, many organizations are in pursuit of increasing the standards of staffs by improving their organizational assurance, enhancing occupation satisfaction levels and at the same time reducing the work related stress, it becomes a very competitive environment.

Techniques to balance work life:

- Find your balance between work and an individual. It also involves the importance of work which is at priority and accept the way work comes.
- Maintain open communications which is important, as organization know that you are existing in the organization. Employee also need to know the realistic about business requirements. Planning and considering work-life balance ahead can put you in a positive position.

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- Prioritize what is important and what is urgent as it helps in lot of different work in office or college.

Literature review:

Goyal K.A, Agrawal A (2015) in the paper titled " Issues and challenges of Work life balance in banking industry of India" has explained that the Work life balance policies and programs are an investment in an organization for improving productivity, reducing absenteeism, achieving improved customer services, better health, flexible working as well as satisfied and motivated workforce especially in banking industry.

Singh S. (2013) in his paper titled Work- Life Balance: A Literature Review wherein the negative side of the work- family interaction has been put under the spotlight. The study has also shown that in recent times, the emphasis has shifted towards the investigation of the positive interaction between work and family role as well as roles outside work and family lives on the principle of work- life balance.

Jang (2008), in his study on relationship between work-life balance resources and the well- being of working parents has focused on how working parents cope up with work- life demands. The study has used twenty seven working parents with either ill or disabled children in New Jersey. It was mixed research with both qualitative and quantitative results. The result talks about the effect of formal and informal workplace support in enhancing the well-being of employees with the children in general and those with a chronically ill or disabled child in particular.

Murthy M. and Shastri S. (2015) have mentioned about the various issues in Work Life Balance of Parents such as need more time for children, job frustration on children. There are marital issues time of spouse, unable to give time to spouse and other home or family matters.

Statement of problem

In education or an organization it is important for a good quality work life as it helps into the success of employees and organization itself. Maintaining work like balance creates a smooth functioning of employees or teachers showing their capabilities and should be stress free. As compared to earlier work life todays work life is fast and restless, therefore to maintain the quality toward work life can have an effect on teacher's timings, potentialities and other academic aspects. With this attempt in this study it aims to know and analyses the factors of work life among both male and female teachers working in aided and unaided section of arts, commerce and science colleges in Navi Mumbai.

Objectives:

1. To know the demographic information for working as teachers (Male and Female) in arts, commerce and science colleges.
2. To know the factors responsible towards balancing the work life in higher education.

Research Methodology

To find out about the work life balance between the teachers who were surveyed from the arts, commerce and science streams of aided and unaided section on the basis of stratified random sampling. The colleges are affiliated to University of Mumbai. For the purpose of survey Navi Mumbai was focused for the study. Total teachers surveyed was 100. 45 were female teachers where 15 did not respond and 35 were male teachers and 5 did not respond. Primary data is collected through structured questionnaire and secondary data is collected through journals, magazines and other resources. Percentage analysis is carried out to analyze the data.

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Data Analysis& Interpretation

Table 1: Demographic Information

Sr No	Demographic Information	Percentage
1.	**Gender**	
	Male	35
	Female	45
2.	**Age**	
	25-30	18
	30-35	25
	35-40	26
	40 > above	29
3.	**Marital Status**	
	Yes	70
	No	10
4.	**Work Experience**	
	< 2 years	6.9
	2 to 10 years	49
	10 years	43

From the above table 1, it indicates about the demographic information about the female and male teachers. Male teachers surveyed are 35 and female are 45. The age of working teachers are 25-30 is 18 per cent, 30-35 is 25 per cent, 35-40 is 26 per cent and 40 above is 29 per cent. From the above data it is seen that marital status is 70 per cent teachers are married. The work experience is 49 per cent is 2 to 10 years and 43 per cent is 10 years.

Figure 1: Factors balancing towards work and family life
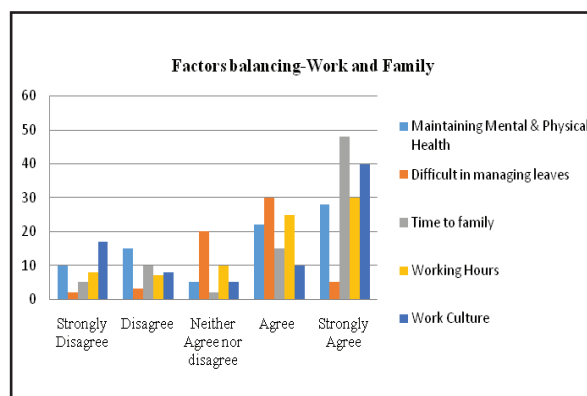
The above figure 1 shows the factors balanced by the teachers towards their work and family life. It is seen that many teachers strongly agree towards maintaining mental and physical health which is 28 per cent, 20 per cent neither agree nor disagree that managing leaves is difficult, 48 per cent teachers are unable to give time to family due to administrative work and duties. Almost 30 per cent teachers strongly agree that working hours has a very important consideration as it relates to the balancing of both work and family life, work culture also is an important factor to balance which is 40 per cent.

Findings, Conclusions and Suggestions
From the above study it is found that the teachers who are working are of age from twenty five and forty. Almost seventy per cent teachers are married irrespective of their gender. Work experience is ten years which is 43 per cent and more than two years is forty nine years. There was not much significant difference between male and female teachers related to the factors of work and family life. Many teachers are trying maintaining mental and physical health. Many teachers did not happily respond that managing leaves is difficult. There were thirty per cent teachers who are unable to give time to their families due to time constraint related to the administrative work in their colleges. Thirty per cent teachers strongly agree that working hours has a very important consideration as it relates to the balancing of both work and family life, work culture also is an important factor to balance which is 40 per cent.
Hence it can be concluded that the professional course has much of work pressure as compared to the regular course. This study was conducted in Navi Mumbai colleges affiliated to University of Mumbai. There are teachers working who are of different age groups. Therefore the work life balance becomes different for many teachers as there are teachers who are married. Majority of them are not able to give time to their families.

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To suggest this study is conducted to know the factors balancing toward working and family life. Colleges should also provide facilities to teachers which can maintain their health and mind. It can be further conducted towards the teachers of other colleges such as engineering, management and other colleges in different areas of India. Proper work balance should be maintained so that teachers are given time for both work and family life. There should be also proper balance towards work allotment and other academic activities.

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A Study on commonalities and differences among CSR approaches of Selected leading private sector banks of India

Dr. Jayrajsinh Jadeja & Dr. Kedar Shukla

Abstract

Businesses worldwide are increasingly worried about the impact of their business activities on society. They also recognize that the world they live in presents a growing array of demands, pressures and risks that are not signalled through markets or the traditional political processes on which they have relied for a very long time.

In the present paper authors have attempted to understand the CSR practices, approaches, differentiators and commonalities among four leading private sectors bank in India, i.e. HDFC Bank, ICICI Bank, Axis Bank and Kotak Mahindra Bank. Rational for selecting them are they are first four leading private sector banks in Banking sector of India.

Key Words: Corporate Social Responsibility, CSR and Banks, Banking Sector

Introduction

From the early days business was closely related with society. It could exist only when there were people, for whom it produced products and services, if there were producers of raw materials and people who worked for this business. These basic things haven't changed nowadays and business still depends on the society and at the same time influences it greatly.

The history of CSR comes back to the beginning of the twentieth century and is connected mostly with the USA, when some businessmen decided that their enterprises should use resources in the way that would bring benefits both to the owner and to society. This idea had to be forgotten soon because of the great depression in the 30-s, when all the enterprises had only one goal, to survive and the American employees wanted nothing but salaries and employment. According to Lee Preston it was again brought up in 50-s (some scientist are sure that it was a result of global cooperation during and after the WWII) and approximately at the same time H.R. Bowen published his book (the first study on CSR, Social Responsibility of a Businessman), where he showed that social responsibility can add to the profits of the company if it is correctly introduced. In 60-s and 70-s the idea of CSR was separated from economic profit and from that moment business was expected to follow not only juridical legislation but nonofficial rules of business ethics as well.

After the collapse of the Soviet Union foreign companies started to enter our market and brought along ideas of CSR. Thus it is really rather new for our country, but if we want to develop and to reach the level of international business we need to form socially responsible business.

Literature Review

The concept of CSR originated in the 1950's in the USA but it became prevalent in early 1970s . At that time US had lots of social problems like poverty, unemployment and pollution. Consequently a huge fall in the prices of Dollar was witnessed. Corporate Social Responsibility became a matter of utmost importance for diverse groups demanding change in the business. During the 1980's to 2000, corporations recognized and started accepting a responsibility towards society. Corporate social responsibility (CSR) focuses on the wealth creation for the optimal benefit of all stakeholders – including shareholders, employees, customers, environment and society. The term stakeholder, means all those on whom an organization's performance and activities have some impact either directly or indirectly. This term was used to describe corporate owners beyond shareholders as a result of a book titled Strategic management: a stakeholder approach by R. Edward Freeman in the year 1984.

According to Bowen, CSR refers to the obligations of businessmen to pursue those policies to make those decisions or to follow those lines of relations which are desirable in terms of the objectives and values of our society. Frederick (1960) stated Social responsibility means that businessmen should oversee the operation of an economic system that fulfills the expectations of the people. Davis (1960) argued that socialresponsibility is a nebulous idea but should be seen in a managerial context. He asserted that some socially responsible business decisions can be justified by a long, complicated process of reasoning as having a good chance of bringing long-run economic gain to the firm, thus paying it back for its socially responsible outlook .An ideal CSR has both ethical and philosophical dimensions, particularly in India where there exists awide gap between sections of people in terms of income and standards as well as socio-economic status (Bajpai, 2001).

CSR Approaches Studies.

Literature defines CSR approaches in the CSR literature and classifies in to the major pillars as Classical Approach (Adam Smith, 1937). Accountability Approach. (Hay and Grey 1977) , Public Approach Galbraith (1973) Trusteeship Approach , (Gandhiji ,1942) and Modern or Strategic CSR approach.

Marketing , Consumer Behavior and Social Responsibility .

Should CSR activities , communicated to the consumers really generate profitability and business for the companies ? Or it is treated negatively by the consumers? What is the impact on the Marketing Mix of the companies of CSR activity or responsible behavior of the company? Several researches has been reviewed in this area as follows. Varandarajan and Menon (1998)they categorize CRM among CSR initiatives that "Do Better by Doing Good." In other words, CRM not only increases the company's revenues but also contributes to societal welfare.Abowd et al. (1990)Abowd et al. used the event A study methodology to check the CSR impact of the CSR activities related to Human Resource development , to the companies stock prices. Results showed there was no consistent pattern of increased or decreased. Worrell et al. (1991.)Worrell et al. could tried to discover the relations between layoff programmers of the companies to it's investor's reaction. Result showed that investors react negatively to the layoff announcements , especially when they are due financial distress.

Research Objectives And Research Methodology

CSR has been in continuously evolving stage in India. Gradually concept is gaining importance and it is moving from conventional philanthropic model to strategic CSR approach. In the present paper we have selected four leading private sector banks for the study of their CSR investment , approach ,

areas for discharging CSR fund , The rationale for selecting them is they are top four largest private sector banks of India . All of them has CSR policy , Structured CSR departments and CSR reporting in practices since quite a long time.

Research Objectives

This study and the research have been trying to attend the following dimensions of the selected private sector banks.

1. To understand the concept and scope of corporate social responsibility and getting an insight in CSR practices for all four groups .
2. To understand commonalities and differences among CSR practices adopted by all four banks on selected parameters.

(b) Research Design & Analysis

Exhaustive literature survey regarding the topic and related concepts has been done. Secondary data inclusive of quantitative and qualitative data were being collected from the secondary sources like Website , CSR report , Karmyag CSR index report and banks CSR reports. Data were also collected from various sources including books, research papers, newspapers, magazines, and websites is used for the purpose of study. To examine the sustainability reports, to study the CSR approaches adopted by the companies , to understand about the philosophy and approaches of social responsibility of business etc concern executives of the organization were also contacted and qualitative information was obtained.

Introduction to the Selected Banks and Frame work of study

(a) ICICI Bank

ICICI bank is India's largest private sector bank with a turn over of approximately USD 10.3 billion (YTD,2015) and profitability of USD 1.5 billion. Having branches across the country and operational in all the segments of the sector. ICICI Bank and its subsidiaries contribute approximately 0.75%-1.0% of their annual profits to the Foundation.

(b) HDFC Bank

HDFC bank is India's second largest private sector bank with a turn over of approximately 60210 Crores (YTD,2015) and profitability of Rs.3357 crore plus. Having branches across the country and operational in all the segments of the sector. HDFC was previously known as Housing Development and Financial Corporation .

(c) Axis Bank

Axis bank was earlier known as UTI bank was started way before the ICICI and HDFC Banks in private sector, last decade has jumped up to number third position with turnover of approximately Rs.44565 Crores (YTD,2015) and profitability of Rs.7448 crore plus. Having branches across the country and operational in all the segments of the sector.

(d) Kotak Mahindra Bank

Kotak Mahindra Bank earlier known as , Kotak Mahindra Finance Ltd. Has been emerging as one among the leading growth rate achiever bank to have turnover of approximately Rs.10963 Crores (YTD,2015) and profitability of Rs.1569ccrore plus. Having branches across the country and operational in all the segments of the sector.

Framework of the study for present paper.

In present paper a comparative study on CSR of the selected four banks have been made on the following factors as shown in Diagram 1.

Diagram 1 : Factors on which comparative
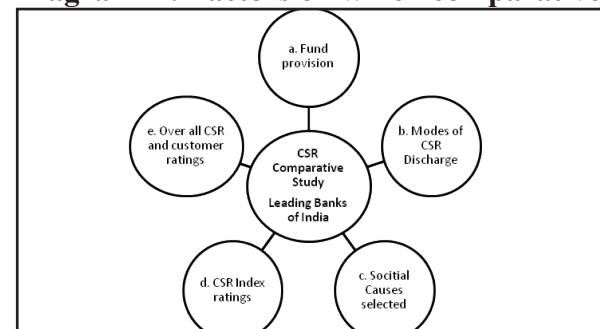
study of CSR has been framed.

5.0 Comparative Study of CSR of Various Banks .

Study has been made on five factors mentioned in diagrammatic presentation made.

(a)   Fund allocation

In the present research paper authors have compared the commonalities and differentiation of CSR efforts of various leading private sector banks on all of the above mention parameters in Diagram -1. The core heart of the CSR programme is to dedicate the CSR fund and utilizing them effectively. Fund allocation has also been one among the key criteria for the CSR indexing being carried out by various indexing agencies and research rating firms. Table 1 below explains the comparative status of fund allocation with analysis.

Table -1 Comparative study on Fund Allocation and CSR Spent

Bank	CSR Spend (In Crs.)	Customer Base (Number of Brc.)	Priority Sector Landing in (%)	Rural Branch Expansion
HDFC BANK	39.01	3251	32.68	177
ICICI BANK	116.5	3611	23.37	285
AXIS BANK	42.42	2225	28.56	133
KOTAK M. BANK	4.08	525	31.47	33

(Data for the financial YTD 2013, Source Banks Operating reports.)

(b)   Modes of Discharging CSR Fund

Companies have multiple option of investing CSR funds (1) Direct investments through companies CSR department or HR department (2) Investing through NGOs and (3) To government nodal agency (3) Investing through Trust or body created by the company by itself. Brief about the mode of discharge of CSR fund has been presented in Table -2 below for the selected companies for the present research paper with analysis.

Table -2 Modes of Discharging CSR

HDFC	ICICI	AXIS	KOTAK M.
HDFC Bank, has full fledged CSR department and it has professional way of discharging CSR funds. They have strategically opted the concerned areas for the CSR discharge.	Company has an organized CSR department and it handles all the CSR spent through the CSR department and CSR is a strategic function in the organization. All CSR activities are linked with the Strategic thinking of the business too. Funds are also allocated and discharged through the partner NGO (Non profit organizations) firms.	HDFC Bank, has full fledged CSR department and it has professional way of discharging CSR funds. They have strategically opted the concerned areas for the CSR discharge.	Company has an organized CSR department and it handles all the CSR spent through the CSR department and CSR is a strategic function in the organization. All CSR activities are linked with the Strategic thinking of the business too. Funds are also allocated and discharged through the partner NGO (Non profit organizations) firms.

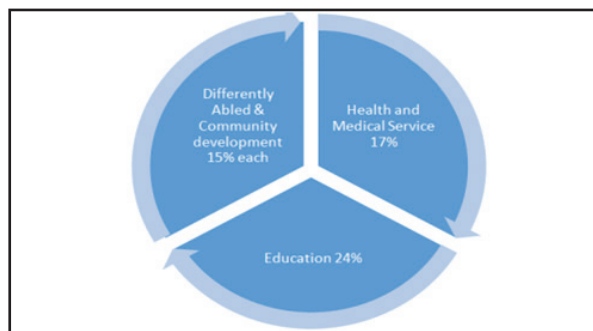**(c) Identified Social Causes for CSR Investment**

There are more than 15 plus identified areas of the social concerns , under the companies bill where companies are likely to invest their CSR fund as specified. Table 3 indicates the broad areas of concerns for the selected companies where CSR fund has been invested.

Table -3 Social Causes and Areas of Concerns Selected For CSR

HDFC	ICICI	AXIS	KOTAK M.
HDFC has formed (1) Vicharata Samuday Much, which fights for the rights of under privileged communities (2) Yuva Mitra Education, Youth Dev and Women empowerment are the three main mottos Institute of Fundamental Studies and Research + Tata institute of social sciences + Helen Keller Institute for the Deaf and Deaf plus blind (3)Muskaan: Voluntary Organization to help the mentally disabled (4) Can Kids Kids Can Help little children affected with Cancer.	•Inclusive growth campaign. A fundamental initiative taken by the top authorities of the bank which states that apart from its financial growth year on year it will simultaneously facilitate, enable and ensure a collaborative growth of its stake holders such as the general population. Investing through ICICI Foundation, A CSR wing of ICICI that promises to cater to the rural and poor populations need. It has the following objectives. 1. Improving health and nutrition for women and children. 2. Advancing elementary education. in government schools 3. Providing vocational and skill training for rural youth. http://www.icicifoundation.org/	(1)Balwadis: Early Education for infant children providing them with the basic education. (2)Supplementary education to the girl child: Identifies potential female dropouts from elementary schools and provide them the support to successfully complete their schooling. (3) Highway Trauma care: Establishes hospitals alongside the highways and caters to highway accidents and catastrophes. (4)Rural Medical Relief: Sets up medical camps at select spots to help cope up with natural and mane made calamities. (5) Skill development: Train the youth with additional skills. http://www.axisbankfoundation.org/	Kotak Education foundation Kotak Unnati – vocational training for drop outs. Kotak Udaan – Scholarship programs to help poor children with exceptional brilliance. •Employee volunteering Building houses for the displaced and the homeless is a part of employee volunteering. •Running for a cause. •Awareness Campaign and public interest contests

Diagram 2 below represent the CSR spending pattern of HDFC Bank in the respective projects.

Source :http://indiaresponsibilitybrands.com

As we can see , HDFC for the year 2014 has spent around 15% of it's CSR allocated funds to the community development fund projects , 17 % spent has been in the area of health and medical services and around 2% has been sent towards education projects.

(d)   CSR Rating Performance :

The Indian popular CSR research and indexing NGO firm ,Karmayog presents CSR ratings based on CSR performance of the firms, They have rated both the organizations above 3 ratings in their CSR performance on a scale of 5. Karmayog rating has major criteria of rating are as , fund allocation, consistency, area of CSR fund discharge, CSR reporting and CSR efforts impact measurement . Table 4 below summaries the performance all four banks on their CSR ratings

Table -4 CSR Index Ratings and Spent

BANK	CSR Spent (Cr.)	Avg.CSR Spent / Bank(Cr.)	CSR Index	Customer Base as number of Branches	Nos. of Rural Branch
HDFC	39.01	1.2	3/5	3251	177
ICICI	116.5	3.2	4/5	3611	285
AXIS	42.42	1.9	3/5	2225	133
KOTAK M	4.08	0.7	2/5	511	33

Source :http://Indiatopresponsibiloitybrands.fil.wordpress.com/2014/untitled.png

(e)   Over all CSR and Customer Perception Ratings :

Table -5 CSR and Customer Management Performance Overall Ratings

BANK	CSR Spenting Rating	Priority Landing Rating	Interest Rate Rating	Rural Branch Ratings	Mouth Shut Rating (Complain Mgmt)	Over all ranking out of 40
HDFC	6	10	7	4	4	31
ICICI	10	6	7	6	3	32
AXIS	7	7	7	5	4	29
KOTAK M	4	9	7	5	2	27

Source : http://Indiatopresponsibiloitybrands.fil.wordpress.com/2014/untitled.png

The analysis of above tables indicates that , ICICI bank has been doing wonderful work on discharging CSR obligations to the out side world. However they are not doing well for their over all customer management. Both HDFC bank and Axis bank have scored moderately well on Customer management however they need to work on improvement on CSR discharge what is expected. Kotak Mahindra Bank being new player in the year

2014 has low base of customers , Branches and also have teething trouble in discharge of CSR , however their intensions and inclination towards the CSR is visible.

Conclusion .

The paper analyzes CSR activities of four leading private sector bank through strategic lens. It has also identified commonalities and differences of the CSR and it's impact on banks customer relation perceptions.

"In a free enterprise, the community is not just another stakeholder in business but is in fact the very purpose of its existence." Believed by JamsetjiNusserwanji , Tata Founder, Tata Group.

"Corporate Social Responsibility should be in the DNA of every organization. Our processes should be aligned so as to benefit the society. If society prospers, so shall the organization." –JRD Tata.

Corporate Social Responsibility has always been taken care of by the various banks in India. However modes of discharging CSR are different. One commonality in banks CSR discharge is , all the bank leaders believes that "Having more rural branches and creating banking facilities for village people , as well as educating them on Banking and Insurance services" is their prime CSR in the country. They also see that as Strategic CSR which will help them ultimately in market opportunity growth. Other important task they wish to invest in to "Creating More and More ATM / E-banking" facilities. Again investment in this segment will help them achieving better customer management as well as it will also help them in reducing the service staff cost. However it is noteworthy that all the banks have not restricted themselves in discharging funds towards strategic moves and business profits but they have also been concerns for the other social issues and concerns. Comparative to other industries and segments Private Banks have behaved quite responsibly in discharging their moral obligations through CSR.

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Role of Human Resource Management in Operations Management for successful Make in India Campaign

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Abstract

Purpose: To Understand role of human resource management in operations management for successful Make in India campaign.
Approach: Exploratory Research
Practical Implication: It is argued that any Business Process can be improved to its optimum only when you factor in the human resource in any system, and design a system taking it into consideration.
Originality /Value: This Paper approaches the method of process improvement in a manufacturing organization from the perspective of role of human resource management.

Keywords:
Operations Management, Process Improvement, Human Resource Management, Process Certifications
Paper Type: Conceptual Paper Based on Secondary Data

Introduction

It is generally agreed that Operations research came into existence as a discipline during World War II when there was a critical need to manage scarce resources. Since World War II involved strategic and tactical problems that were highly complicated, to expect adequate solutions from individuals or specialists in a single discipline was unrealistic. Thus, various groups of highly specialized individuals were set up within the armed forces, which collectively collaborated in order to deal with strategic and tactical problems of various military operations. (Sharma, 2005)

Efforts were made after the war to apply this rich body of research in areas of public applications such as production of goods, transportation, and aviation etc. Howsoever varied the field was, the basic objective behind solving any problem was the same, "Optimizing the output while minimizing the inputs" (Goldratt,2014).

Since this field was born in minds of highly specialized individuals who were masters of their own field, it was rarely brought into public focus. However, only in the past decade has this field brought into public domain due to its various applications in day to day activities in public utility services, viz., air tickets reservation, automated production Systems (Fayol, 1949), time and motion studies (Coonley, 1941) to name a few.

People who choose working in field or shopfloor are mostly those who come from technical backgrounds like engineering or basic sciences. They are mostly employed in fields like manufacturing, analytics and business processes. In such technical fields, the working is not by hits and misses but is based on data gathered from observations, analysis, findings and recommendations that is routed through rationale

logical steps and stages.

Hence, the human resource that is involved in such process of observation, analysis, findings and recommendations, is the key to optimize the operations management in manufacturing units. Therefore, if this human resource, which is expected to follow certain rationale in operations, does not follow the same in that sequence, become challenge for the field of Operations Management, either manufacturing or in services.

Concept Development and Discussion

• Operations Management and Its Functions

Operations managers face problems which predominantly come from technical fields, where most of the learning and research is done with minimal interaction with the individuals. The focus is on solving the problems taking into account various elements that interact in the system they are working upon.

Any problem in operations management is looked upon from systems' point of view by various entities. All problems are attempted to be solved by calculated corrections with the use of data as a guide. In a manufacturing unit an operations manager is expected to work on the operational areas of the production line overseeing various process of the entire value stream. They often control various inputs allocated to individual processes for the optimum output.

Productivity = Output / Input

Where,

Input = Raw Materials Consumed + the Manpower Utilized + the Capital Allocated Cost of Holding Inventory + Cost of Processing the Raw Material + other costs

Output = outcome of the processing which shall be used as input for the subsequent process or used for final consumption.

Productivity = economic measure of output per unit of input.

Productivity measures may be examined collectively (across the whole economy) or viewed industry by industry to examine trends in labour growth, wage levels and technological improvement.

Very often such improvements/ control are not fructified or their true potential not realized due to human resources.

• **Operations Management and Human Resources**

Considering, the importance of human resources, we need to discuss that aspect of managerial science of operations management where research requires to be done[1]. Usually an operations manager is expected to function along with those people who work on the individual processes for a number of years. A new manager cannot change something suddenly and if he does that will be viewed as inappropriate in context of manufacturing activity. The data is thus a key for change and human resource is that entity that uses the data for optimum operations management.

It is always observed that the workers working on assembly line or work stations are never asked for their views for bringing in change or improvisation in operations management of manufacturing processes. Though Operations Manager is looked upon to solve the problems marring the process he is assigned to and trying to improve the productivity of the same, he needs to tackle with two factors- one is data and second the human resources working under him.

• **Operations Manager And Managing Technical Human Resources**

An Operation Manger is highly technical personnel whose focus is on the transactional

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1 Considering changed internal and external business environment.

function of any process of a system. But his target is to get optimum results with resources that are predictable (inanimate things like, money, material, machine and methods) or unpredictable (man). However, the unpredictable resource i.e. human resource is also the resource that can translate all the plans in to execution and all inanimate things into assets by utilizing them properly to make an organization world class. And hence the field of HR considers the manpower as the most valuable resource of any organization.

• **Optimum productivity through various processes**

Major theories of operations management that were propounded by various researchers are Total Productive Maintenance (TPM), Total Quality Management (TQM), Six Sigma, Lean Management, Value Stream Mapping, ISO 9000 etc. However, the human resource goes into the root of these theories as they require "Total Employee Engagement". (The processes alongwith their importance and companies using these processes are shown at Annexure I) Various organizations have various ways of achieving that. However, the objective is to have each employee associate himself completely with the work which he is required to carry on.

ISO 9001:2008 specifies requirements for a quality management system where an organization must adhere to statutory and regulatory requirements while providing products through a system that enhances customer satisfaction (International Standards Organization)[2] .

TQM: A management approach to quality improvement for a long-term success through customer satisfaction. However, all members of an organization are required to participate in improving processes, products, services and the culture in which they work. (American Society for Quality) [3]

TPM: Total productive maintenance is a complete system for maintenance of equipment that aims at achieving an optimal production environment devoid of defects, downtime, stoppages and accidents (David Gitachu, n.d.)[4] .

Value Stream Mapping: It's a lean-management method for filling the gap between current state and future state for the series of events that take a product or service from its beginning through to the customer. At Toyota, it is known as "material- and information-flow mapping" (Rother & Mike, n.d.; Shook & John, 1999)[5]

Lean Six Sigma: Lean Six Sigma is a methodology that relies on a collaborative team effort to improve performance by systematically removing waste and reducing variation. It combines lean manufacturing/ lean enterprise and Six Sigma to eliminate the eight kinds of waste (George & Michael, 2002)[6] .

All the above systems have one thing in common and that they require 'Human Intervention' in all processes either for improvisation of process or for changing the processes/ system. The end results of TQM, ISO, TPM, Six Sigma, and Value Stream Mapping cannot be achieved if Human Potential is not tapped to its optimum. Thus,

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management of human resources is the key to operations management in manufacturing processes.

• **Role of HR Management in Operations Management**

The field of operations management defines role of human resources management that are relevant in this domain. But rarely are they practiced by the operations or HR managers. It is never observed that an HR manager walking up to a shop floor worker and explaining him the benefits of the latest scheme linked with production or productivity that has been brought up. On the other hand the operations managers are not sufficiently trained for all those duties that are expected of him to get better productivity from the workers of the shop floor.

Operations managers' bid to increase the productivity sans recourse tapping the human potential at shop floor will lend him scratching the back without going to the root of the problem. That means his focus is more on improving the productivity through transactional functions rather than transformational function. Even the systems redesigning process must be developed keeping in mind the work stations that are manned by individuals with given skill sets.

Conclusion

The Operations managers must be trained to give role clarity to human resource working under him to optimize the outcome of defined process in a manufacturing unit. This is the key for the success of make in India movement. This calls for participative decision making of the team members involved in manufacturing. Operations managers can be trained to communicate with the workers and listen to their problems and help them do their work more efficiently. The Practioners of Operations Management come from a technical

background and when such an individual works on the shop floor there is lack of HR perspective in their working methodology. Concerned with improving the productivity of the organization the focus is more on entities of systems that are quantifiable and elements that are transactional. HR of a company is a resource but at times it tends to become a liability if not properly managed and for a process improvement managers now have to handle two variables- One is the Processes and the other being the Human Resource. Thus to involve the HR in redesigning the process would be the best way ahead. An operations manager's most valuable asset is the HR if properly tapped into for predictable output and at times perform outstanding output with limited resources at disposal. Various Theories of Operations Management propound the concept of Total Employee Engagement as the very basic condition to achieve any process improvement campaign. Thus optimum productivity is only possible when there is a total employee engagement in an organization. It is observed that the HR Function in an organization is not practiced to its full leading to general management addressing these issues only on a surface rather than to their actual causes, thus, there needs to be the involvement of HR functions when such processes redesigning are taken place.

Managerial Implications of the study

The present study has focused on human side of manufacturing in operations management. Therefore, operations managers' first responsibility should be towards the man behind the machine and not vice versa. Man behind the machine is the raison d'être of any production process (even in case of automation of the process) because it is the man who maintains machines even in case of automated processes. This paper is useful for those operations managers who take care of machines leaving human resources to

be managed by the HR managers sitting in offices at cool places. This paper supports process improvement that considers errors from human intervention at work stations.

Future Scope of Study

This Paper is based on taking into consideration secondary data, but going further into these areas and collecting primary data can give us greater insights to the problems that crop up due to human resources while implementing the process improvisation systems and processes and finding solutions for the same.

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10. Rother, M., Shook, J., 1999, Learning To See - Value Stream Mapping to Create Value and Eliminate Muda, Brookline, Massachusetts: Lean Enterprise Institute Lean Six Sigma for Service. How to Use Lean Speed and Six Sigma. Quality to Improve Services and. Transactions. Michael L. George. MCGRAW-HILL. New York Chicago San)

Annexure I

Sr. No.	Title of Certificate	Companies that Use the certificate	Benefits of Certificate	Human intervention required of processes
1	ISO 9000:2014	-DLF -IIFCL -TUV India Pvt Ltd Source[7]	Require to document the process of manufacturing unit.	The certificate is for what you do

7. Document Titled " LIST OF ISO 9001:2008, ISO 9001:2015, ISO 20000:2011 & ISO 27001:2013 CERTIFIED CUSTOMERS" Published by CQAL certificationshttp://conceptqalabs.com/wp-content/ uploads/2014/07/CQALC_ClientStatus.pdf (as visited on 4-2-18)

2	TQM (Total Qaulity Management)	-Hero Moto Corp Ltd Dharuhera Plant -The Supreme Industries Ltd, Pondy -Turbo Energy Limited -TAFE -QH Talbros Ltd. Source[8]	The advantages of total quality management (TQM) include: Cost reduction. When applied consistently over time, TQM can reduce costs throughout an organization, especially in the areas of scrap, rework, field service, and warranty cost reductio[n9].	At the heart of the TQM is the concept of intrinsic motivation-involvement in decision making by the employees. Employee involvement is a process for empowering members of an organization to make decisions and to solve problems appropriate to their levels in the organization[10].
3.	Kaizen	- The Ford Motor Company -Herman Miller -Lockheed Martin -The Govt of Gujarat Source[11]	Continual small improvements that add up to major benefits. Thus resulting in improved productivity, improved quality, better safety, faster delivery, lower costs, and greater customer satisfaction[12].	Employee involvement/ participation in (1) Deciding how their work is done (2) making suggestions for improvement (3) goal setting (4) planning (5) Monitoring of their performance. Encouragement to employee involvement is based on the thinking that people involved in a process know it best, and on the observation that involved employees are more motivated to improve their performance[13].

8. http://www.tpmclubindia.org/index.php?option=com_content&view=article&id=18&Itemid=259 (as visited on 4-2-18)

9. Article Name – The Benefits of Total Quality Management Author Steven Bragg Posted on date March 01 2013 Posted on website https://www.accountingtools.com (as visited on 4-2-18)

10. Total Quality Management-Text, Cases and Readings Third Edition, Author – Joel E. Ross and Sussan Perry Publisher – 1999 CRC Press page number not given viewed in e book format at google library (as visited on 4-2-18)

11. Article Title – How 5 Companies Used Kaizen Effectively Author – Tara Jones Posted on 6/30/2017website name http://blog.effexms.com(as visited on 4-2-18)

12. Total Quality Mangment ,Secnd Edition, Pearson Publication2011 – Author Poornima M. Charantimath pg 280 viewed from google E library books (as visited on 4-2-18)

13. http://www.businessdictionary.com/definition/employee-involvement.html (as visited on 4-2-18)

14. http://www.leansingapore.com/total-productive-maintenance-tpm/(as visited on 4-2-18)

15. Total Employee Engagement by Training and Developing the Employees to implement Total Productive Maintenance (as visited on 4-2-18)

4.	Total Productive Maintenance	-Aditya Cements -Bajaj Auto Ltd, Akurdi Plant, Pune -Birla Tyres, Balasore	Total Productive Maintenance (TPM) aimed at maximizing equipment effectiveness through the optimization of equipment availability, performances, efficiency and product quality[14].	Total Employee Engagement by Training and Developing the Employees to implement Total Productive Maintenance[15].
5.	Value stream mapping	-Gabriel India Ltd [16] -Schaeffler FAG	Value stream mapping is a lean tool that employs a flow diagram documenting in high detail every step of a process. Many lean practitioners see value stream mapping as the fundamental tool to identify waste, reduce process cycle times, and implement process improvement[17].	Identifying Employees with required skillset for defined task to be done, which will be studied in detailed for material and information flow via value stream mapping[18].
6.	Six Sigma	-GE -Motorola -Allied -Allied [19]	The name Six Sigma comes from the statistical term that refers to a process that allows for no more than 3.4 errors per one million opportunities. Organizations that have used the Six Sigma methodology have reduced waste, increased profit and enhanced shareholder value[20].	

16. Journal Paper , Journal Name serialjournalmanager – Paper Number 1327903359, Author A.V. DAMALE1 AND K.N. NANDURKAR2 Department of Mechanical Engineering, SRES' College of Engineering, Kopargaon,

17. Article Title – "Profitable Applications of Value Stream Mapping Tutorial" Author - Michael Pitcher No Date posted on website http://asq.org (as visited on 4-2-18)

18. https://hbr.org/2011/10/lean-knowledge-work- Madam this is an HBR Article in the Magazine of 2011 – I am not able to open the link from my work system, please visit the link if possible. (as visited on 4-2-18)

19. Comment Posted by Anonymous on https://www.isixsigma.com discussion topic "Companies In India having Six Sigma" Jan 3 2002 (as visited on 4-2-18)

20. http://www.six-sigma-material.com/Six-Sigma.html (as visited on 4-2-18)

		-Nike		
7.	-Conseco Source Lean Manufacturing	-Kimberley-Clark Corporation -Caterpillar Inc -Intel Source[21].	Lean manufacturing provides many advantages, which include improving flow (material, people, information, and work) and eliminating waste[22].	

21. Article Title – Top 10: Lean Manufacturing Companies in the world Author Staff Writer on Jun 11 2014 on website http://www.manufacturingglobal.com (as visited on 4-2-18)

22. Article Title – Advantages of Lean Manufacturing Author – Joel Bradbury uploaded on https://www.graphicproducts.com Date Not Found – as seen on the site visited on 4-2-18

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Design and Development of Android-based/accessible Content and Language Integrated Learning (CLIL) System for selected Professional Courses affiliated to Sardar Patel University.

An International Peer Reviewed Research Journal (ISSN-2321-5968) Vol-5, Issue-02, October 2018

Design and Development of Android-based/accessible Content and Language Integrated Learning (CLIL) System for selected Professional Courses affiliated to Sardar Patel University.

Dr. KamleshVaishnav& Dr. Nishrin Pathan

Abstract

Content and Language Integrated Learning (CLIL) is a dual-focused educational approach in which an additional language is used for the learning and teaching of both the (subject) content and language (say, English). The aim of this research is designing and developing android based-accessible Prototype System to facilitate learning of discipline specific content prescribed in syllabi of technical subject of professional courses affiliated to Sardar Patel University, and to demonstrate that how such system can be used to reveal benefits/impacts of such system in an objective manner.

Keywords: CLIL, Content and Language Integrated Learning, CLIL for Programming Language C, Objective Research

Introduction

Content and Language Integrated Learning (CLIL) is a dual-focused educational approach in which an additional language is used for the learning and teaching of both the content and language. CLIL is a pedagogical approach with a dual (integrated) objective: learning of the subject matter (content) and learning of the (second/foreign) language which is also used as the medium of instruction for the content teaching. CLIL is an "Umbrella Term" for all those approaches in which some form of specific and academic language support is offered to the students pursuing Higher Education in order to facilitate their learning of the content and language simultaneously. CLIL allows subject teachers to develop their pedagogies in relation to second language. It allows teachers to facilitate learning so that learners feel more interested, more confident and can deal with complex information about (subject) content through (second) language

Technology integration in higher education is undeniable. It offers numerous benefits including those related to access to information, developing higher order thinking among students, engaging students in collaborative learning, making them globally competent, preparing students for future careers and many more. The use of technology based teaching learning became essential for higher education in particular. Complementary, the use of mobile devices is pervasive today. The large number of students use android based devices. So, we planned to design and develop prototype system to facilitate learning of discipline specific content prescribed in syllabi of technical subject of professional course affiliated to Sardar Patel University using android platform. The aim of this research is also to demonstrate that how

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such system can be used to reveal benefits/ impacts of such system in an unbiased way unlike form based system which is prone to subjective data. The two objectives of research are as under:

- To design and develop a prototype for android–based /accessible CLIL System for selected professional courses affiliated to SPU

- To evaluate the effect of proposed CLIL system based on empirical factual data.

Methodology:

Traditionally, the students use paper copy of dictionary to lookup the difficult word (language part related to their study) while they are reading technical subject content (written in second language) and find difficulty in understanding some language word. This method has several short comings such as:

- It is time consuming

- It does not give meaning and examples relevant to the subject a student is studying.

- It also doesn't help students to improve upon the language part except to apply the word meaning to current context.

- Obviously, it neither supports technical learning.

Hence, an integrated CLIL system is required to overcome such limitations and to provide a richer learning experience to learners.

There can be several methods to assess the effectiveness of CLIL system and to measure their impact on Learning System. The proposed android-based/accessible CLIL System can automatically collect the data of usage objectively. Hence, it eliminates the subjectivity in data, related to use of CLIL System, which otherwise gets introduced when traditional system such as questionnaire and observation is used at the end of study period.

Hence, the primary data related to use of CLIL system will be collected by system itself. The secondary data such as Demographic data and Course/subject related data (such as Name,

Gender, Age, Previous Medium of Learning, State, District, Course, result of learner before and after using CLIL system) will be collected by system or manually using form filling method.

The collected data will be analyzed using the Data Analysis tool such as Excel to look at different aspect related to the contribution of CLIL System in Teaching Learning Process.

The steps used to design the CLIL are:

- The population of study is students enrolled in selected professional course affiliated to SPU.

- The content of selected professional courses is collected from official documents, website of university, concerned faculty members and text book prescribed for the courses.

- The Language Component for the subjects under study is identified and organized using suitable data structure that can be used by computer based system.

- The Computer based CLIL System is used as an instrument to collect the data regarding the usage of CLIL. The CLIL will be used by students enrolling in selected courses.

To evaluate the impact of CLIL system, two tests needs to be conducted by teacher for learners such that one test is to be taken by them before using the CLIL system and the other is to be taken by them after using the CLIL system. For additional analysis, the learners can be divided into two groups: one who will use CLIL system between tests and the other who does not use CLIL system.

As said earlier the system will collect as possible as subjective data related to use of CLIL using just in time feedbacks from the user and/or automatic recording of data. It is assumed that user will be able to give more accurate feedback than (in comparison to) if it were collected at the end of study period using questionnaire.

The scope of study is limited to selected

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(few hundred) students enrolled in selected professional courses in SPU, and is limited to only for those students who are transiting from Gujarati Medium to English Medium Prototype System

The proposed CLIL system requires learners to register themselves on server in order to identify CLIL usage data per user basis on server. Each learner has unique Lerner ID assigned by system that is stored on server as well as on learner's mobile device and subsequently used to identify user. The continuous Internet connection is not required to use this App (that is, it can be used offline). Whenever Internet connection is available the Service written as a part of App will transfer the usage data such as Topic Usage, Word Usage, and Quiz Usage Data to server. The data collected on server can be used to perform statistical test to identify the impact of using CLIL system on the performance of the user. The Proposes system includes the following features

- Lerner's Registration
- The Subject Part: Topic wise subject content which includes Concept and Examples (if applicable) for each topic. The concept will be presented in both the languages.
- The Language Part: Topic wise vocabulary
- Glossary of the Subject
- Quiz for subject and language part to improve the learner's capability.
- Analysis of data collected by the system

Data collected user can be analyzed to perform various analysis such as difficulty levels of topic, word, questions, etc., the interest of user in study, and the impact of usage of various components of system on performance of users or a demographic group of users.

Data Structure

- Learner (Learner ID, Name, Phone, Email, DOB, Gender, City, Year in which Medium of English for Learning is started, Course, College, Pre Result, Post Result)

- Topic (Topic ID, Topic Name, Topic Concept in L1, Topic Concept in L2, Topic Example, Parent Topic ID)
- Question (Question ID, Question Text, Option1 Text, Option2 Text, Option3 Text, Option4 Text, Correct Answer Text, Topic ID)
- L1 Word (L1 Word ID, L1 Word, Meaning1, Meaning2, Meaning3, L2 Word 1, L2 Word 2, L2 Word 3, Common Example 1, Common Example 2, Common Example 3, Content Related Example 1, Content Related Example 2, Content Related Example 3, Topic ID)
- Topic Word (Topic Word ID, Topic ID, L1 Word ID)
- Synonym (Synonym ID, L1 Word ID, L1 Word ID, Synonym Group ID)
- Related Word (Related Word ID, L1 Word ID, L1 Word ID, Related Word Group ID)
- Word Usage (Word Usage ID, L1 Word ID, Used On Date Time, Time Spent in Seconds, Rating Given, By Learner ID)
- Topic Usage (Topic Usage ID, Topic Id, Used On Date Time, Time Spent in Seconds, Rating Given, By Learner ID)
- C Questions (C Question ID, Question Text, Option A Text, Option B Text, Option C Text, Option D Text, Correct Answer Text, Topic ID)
- Language Questions (Language Question ID, Question Text, Option A Text, Option B Text, Option C Text, Option D Text, Correct Answer Text, Topic ID)
- Quiz Result (Quiz Result ID, Learner ID, Total Questions, No. of Attempted Questions, No. of Questions Correctly Answered, On Date Time, Time Spent, Type of Quiz (C/L for Language))

User Interface

The sample user interface through which user will interact with App is shown in Figure-1 to Figure-10.

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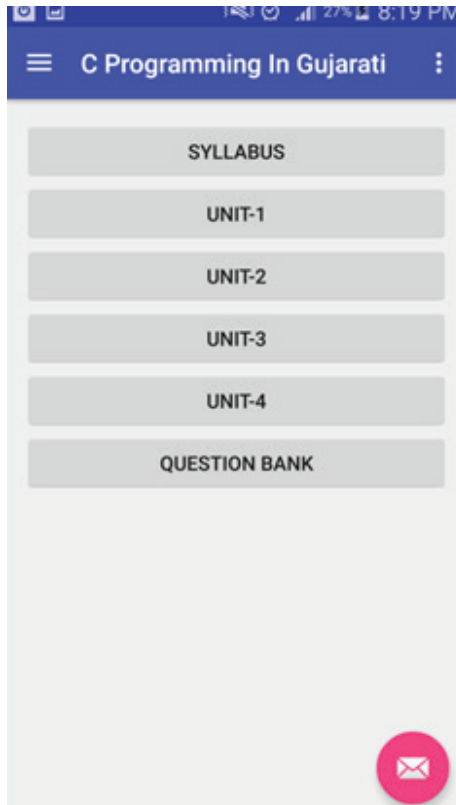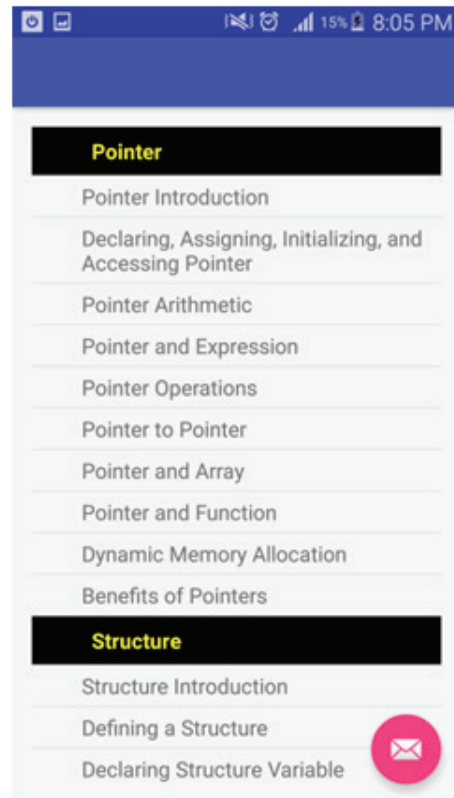An International Peer Reviewed Research Journal (ISSN-2321-5968) Vol-5, Issue-02, March 2018
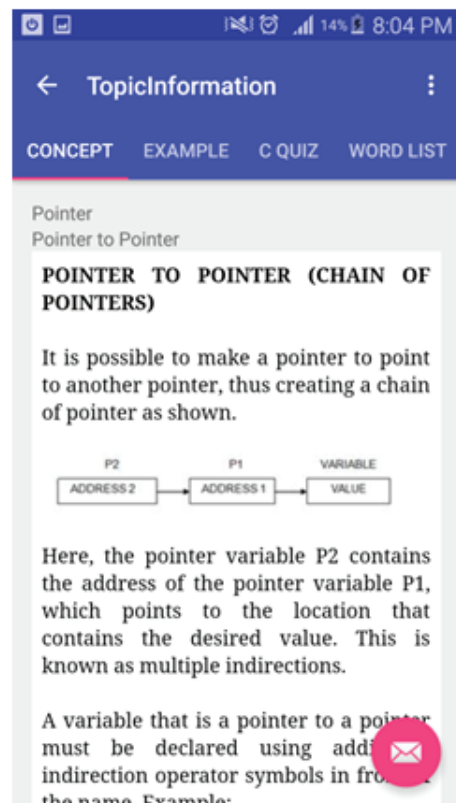
Figure-1: Home Screen

Figure-3: Topic List
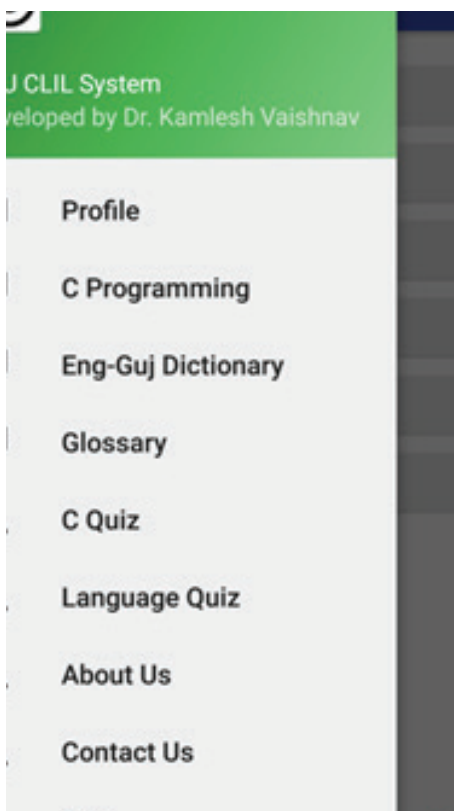
Figure-2: Menu

Figure-4: Concept of Topic

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Figure-5: List of Words
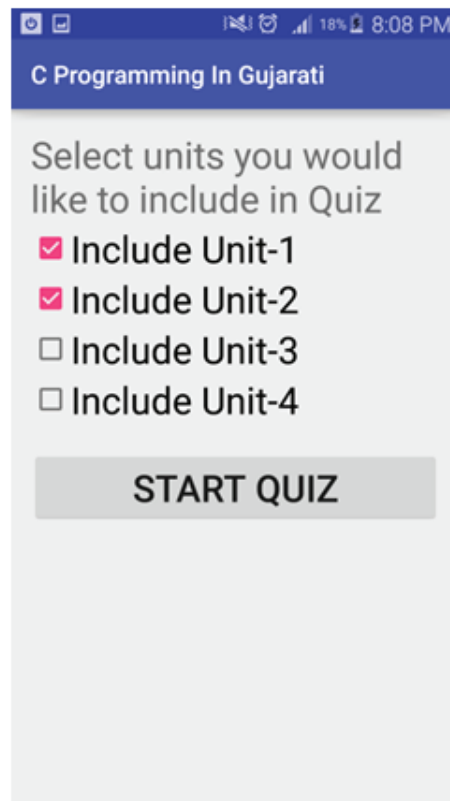
Figure-7: Quiz Setting

Figure-6: Search Word

Figure-8: Correct Answer

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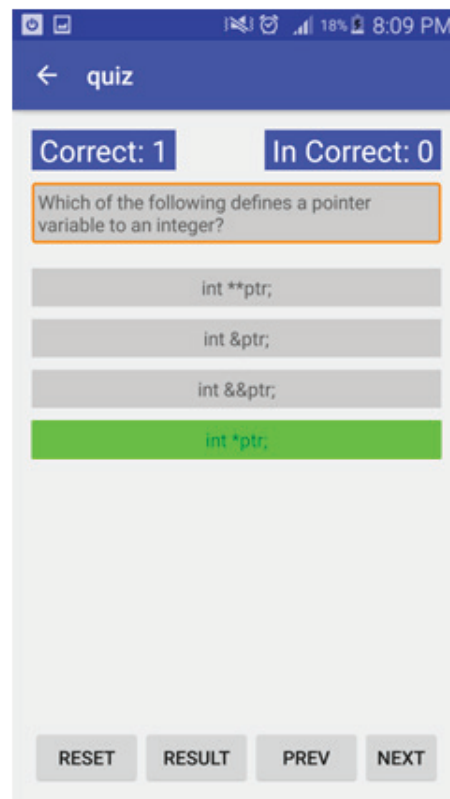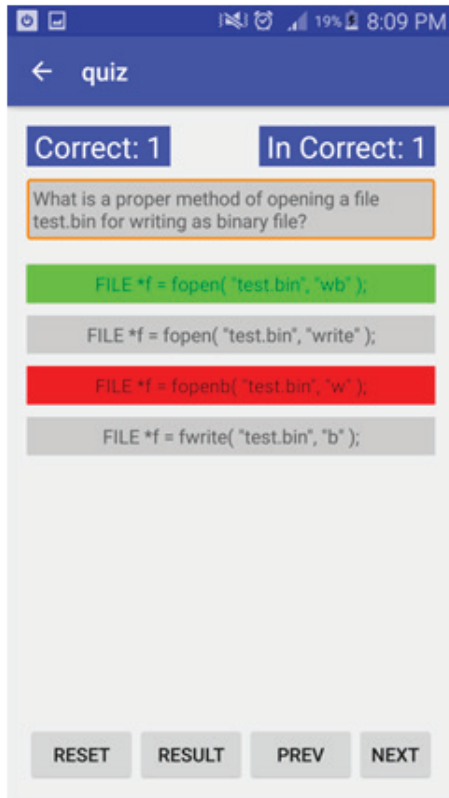
Figure-9: Incorrect Answer
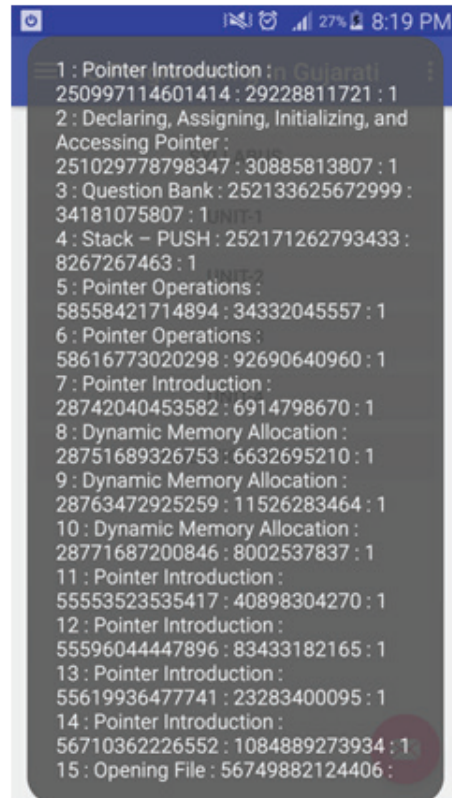
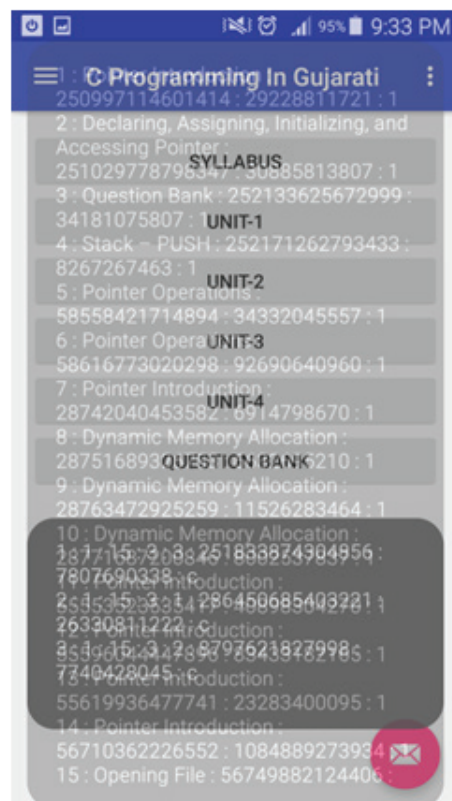Figure-11: Topic Usage
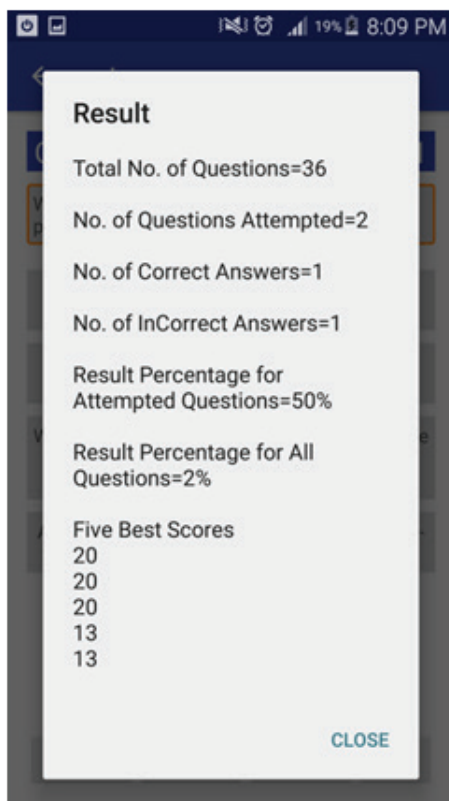
Figure-10: Result of Quiz

Figure-12: Quiz Usage

Conclusion

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The proposed CLIL system can be helpful to learners of the professional course who is either switching the medium of learning or wish to learn the second language. That is, depending on the objective it can be used to teach subject part or language part or both. The system is also capable to collect the objective data on which analysis can performed to find the effect of CLIL system on teaching learning process.

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A Study of Credit Risk Management of Bank of Baroda

Dr. Kamini Shah and Utkarsh Amaravat

Abstract

Banks are generating maximum revenue through credit interest earned by them and Non-Performing Asset of Public Sector banks are the biggest problem for the Indian government in today's time. It means banks are unable to generate income and revenue which create difficulties for government to run public sector bank. Even in the financial year 2015-16 first time losses incurred in 109 years' history of leading public sector bank - Bank of Baroda. Hence, it is necessary to study the credit risk management tools used by Bank of Baroda. This study will help to find the causes for financial losses in Bank of Baroda in the financial year 2015-16 and help to examine bank financial future based on bank credit risk management tools.

Key Words: Bank of Baroda. Non Performing Assets, Credit Risk Management

Introduction

Bank of Baroda is India's leading Public Sector bank having 5,422 branches in India and 107 branches abroad. Bank of Baroda's main work is to accept deposits from the public and to provide credit like any another financial institution. Bank of Baroda is generating 86.19% of total profit through credit interest earned. Credit risk is the most important for any bank because credit is the main source of interest income.

Credit risk is a probability of loss due to a borrower's failure to make payments on any type of debt. Credit risk is the risk of default on a debt that may arise from a borrower failing to make required payments. Credit risk means potential at which a bank borrower or counter-party will fail to meet their obligations in accordance with agreed terms. Initially, this risk includes loss of principal and interest income, but also disturbs cash flows and increase recovery costs. The loss may be complete or partial. In an efficient market, higher levels of credit risk will be associated with higher borrowing costs and due to this, measures of borrowing costs such as yield spreads (the difference between the quoted rates of return on two different investments, usually of different credit qualities but similar maturities) can be used to infer credit risk levels based on assessment of market participants.

The Credit risk management is used to minimize bank's risk like adjusting credit facility pricing (rate of return) to maintain credit risk exposure within acceptable parameters. Banks are required to manage the credit risk of entire portfolio as well as the risk in individual credits or transactions. Banks have to consider relationships between credit risk and other

risks, as well the effect of credit failure on other risks. Credit risk management is the process to reduce losses by understanding the adequacy of a bank's capital and loss of loan reserves at any given time. The effective Credit Risk Management is a challenge for financial institutions but essential to get long-term success for any banking organisation.

To improve Public Sector Banks condition and boost Indian economy the central government has recently announced Rs.2.11 lakh crore help to recapitalize banks on 25th October, 2017 which has created an extra burden on the pocket of central government. Bank of Baroda is one of the oldest banks in India with good market reputation but as per Bank of Baroda annual report of 2017, the Bank has gross non-performing assets of Rs.42,718 crore which increased from previous years and according to Care Ratings (Professional Risk opinion) on 30th June 2017, Bank of Baroda is having 5.56 % contribution in total commercial banks Rs.8.29 lakh crore non-performing assets which has also increased in comparison to previous years. Even in the financial year 2015-16, first time losses occurred in 109 years' history of the bank. Bank of Baroda is one of the important banks for the Indian economy so it is necessary to analyze Credit Risk Management of Bank of Baroda.

Literature Review

The Economic Times (2017, May 31), "India's big bad loan problem: Banks with highest NPAs" which suggest that NPA is increased in all commercial banks in India. It suggests that it is necessary to do credit risk management to strengthen Indian Economy.

Adu-Gyamfi M (2016) studied on The Bankruptcy of Lehman Brothers: Causes, Effects and Lessons Learnt. The researcher concluded that the world finest bank Lehman brother was collapsed due to weakness in risk management strategy implementation due to which US economy was almost collapsed in 2008.

Singh V R (2016) has done a study of Non-Performing assets of Commercial banks and its recovery. He concluded that Non Performing assets are the biggest problem for banks in India and suggested that credit appraisal and post loan monitoring are required to concentrate by banks in India.

Bhaskar P J (2014) studied on Credit Risk Management on Indian Bank. He studied theoretical aspects of the credit risk rating and concluded that Risk Management is prevented from damage and Risk should be taken with full knowledge, clear purpose and understanding.

Mekasha G (2011) studied on Credit Risk Management and Its Impact on Performance of Ethiopian commercial banks. The researcher concluded that bank performance and credit risk management are correlated; higher profit potential can better absorb credit losses and direct but the inverse relationship between return on asset (ROA) and the ratio of non-performing loans to total loan (NPL\TL) and loan provision to total loan.

Research Gap:

Credit Risk Management has a direct impact on bank's non-performing assets and profitability which also help to strengthen Indian Economy, but a study on Bank of Baroda credit risk management along with credit portfolio analysis is not done till today, so the researcher made an attempt to bridge the gap by doing a Study of Credit Risk Management of Bank of Baroda.

Research Methodology

Problem Statement:
To study Credit Risk Management of Bank of Baroda.

Objective of the Study:

1. To understand various credit risk ratio of Bank of Baroda.
2. To analyze Bank of Baroda advances based on security.
3. To evaluate the credit risk involved in various credit facilities of Bank of Baroda.
4. To explore the evolution in Bank of Baroda credit risk taking.
5. To understand the movement of NPAs in Bank of Baroda.
6. To explore credit risk exposure of Bank of Baroda.
7. To find out the impact of effective credit risk management policies on bank's non-performing assets and profitability.

Research Hypothesis:

1. H_0: There is no impact of priority sector advances on Bank of Baroda non-performing assets.
   H_1: There is an impact of priority sector advances on Bank of Baroda non-performing assets.

2. H_0: There is no impact of provision made for advances on Bank of Baroda profitability.
   H_1: There is an impact of provision made for advances on Bank of Baroda profitability.

3. H_0: There is no impact of unsecured advances on Bank of Baroda non-performing assets.
   H_1: There is an impact of unsecured advances on Bank of Baroda non-performing assets.

4. H_0: There is no impact of decreasing non-performing assets on Bank of Baroda profitability.
   H_1: There is an impact of decreasing non-performing assets on Bank of Baroda profitability.

5. H_0: There is no impact of risk category wise exposure on provision made by Bank of Baroda.
   H_1: There is an impact of risk category wise exposure on provision made by Bank of Baroda.

Research Design:

The researcher has used exploratory type research design to explore insights of the research problem.

Data collection:

The researcher has used secondary data i.e. financial statements of Bank of Baroda. The period for the study considered is 10 years from Financial Year 2007--08 to Financial Year 2016-17; however, some of the data is available only for four years.

Rationale/Significance of the Study:

This study will help Bank of Baroda;
1. To find out advances based on security of Bank of Baroda.
2. To analyze the credit risk involved in various credit facilities of bank.
3. To understand the evolution of credit risk taking in Bank of Baroda.
4. To know movement of NPAs in Bank of Baroda.
5. To find solutions to reduce NPAs in Bank of Baroda.
6. To understand various provision made by Bank of Baroda based on risk category wise exposure.
7. It will also help other banks and government to understand credit risk management policy of Bank of Baroda. Even it can be compared with other banks and issue necessary guidelines in general for all public sector banks so they can reduce their non-performing assets which will have a positive impact on profitability. It can help Govt. of India and RBI to further strengthen Indian financial system.

Data Analysis & Interpretation:

The data is analysed in a descriptive, multi-dimensional manner so as to illuminate various aspects of credit risk management at Bank of Baroda.

Capital Adequacy Ratio:

Capital Adequacy Ratio is also known as Capital to risk-weighted asset ratio which is used to promote stability of the financial system and to protect depositors.

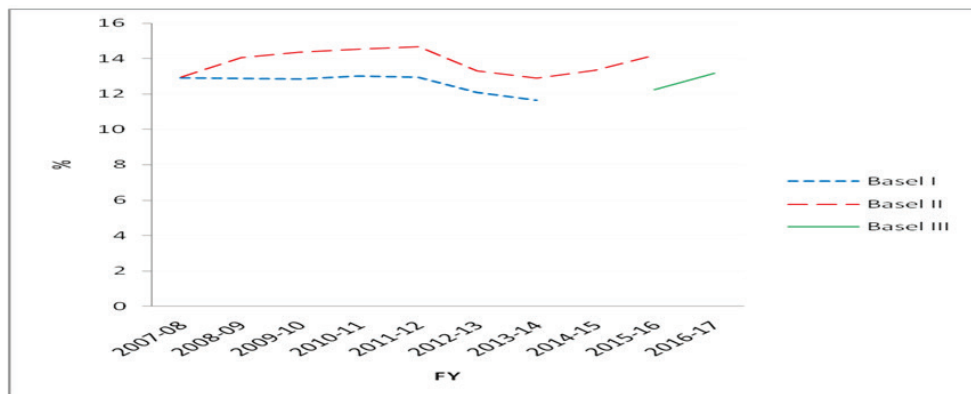$$\text{Capital Adequacy Ratio} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk Weighted Asset}}$$

Fig 1 Capital Adequacy Ratio

Where,
Tier 1 Capital is the capital that is available easily to cushion losses without requiring to stop banking operations, like equity capital.
Tier 2 Capital means liquidation of asset and cushion losses in case of winding up of the bank, so it is not providing higher protection to depositors and creditors.

Now a day's Banks have to follow BASEL III norms which is more focusing on strengthening banks own capital reserve and having at least capital of 11.5 % then its risk-weighted.

As shown in Figure 1, Capital Adequacy Ratio of Bank of Baroda is increased by following BASEL II and BASEL III norms that means own capital reserve is increased which reduces the risk of a depositor. To fulfil BASEL III norms in the financial year 2016-17, Bank of Baroda has made 25.56 % capital reserve provision in Profit after tax which helps the bank to increase Capital Adequacy Ratio.
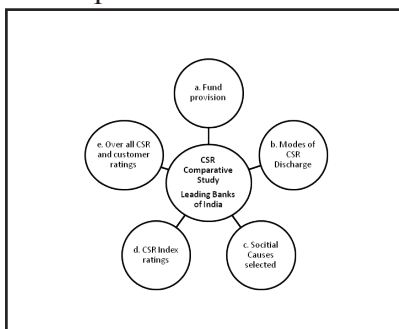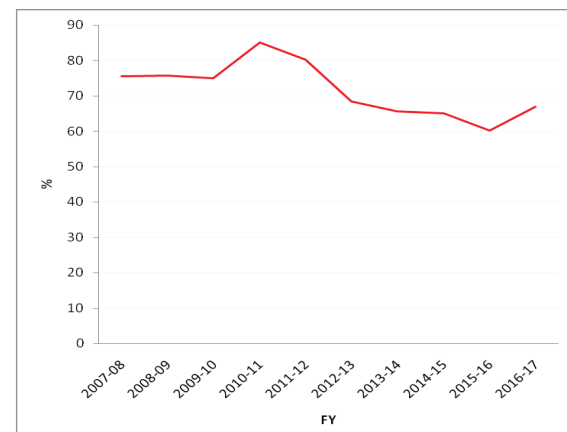
Provision Coverage Ratio:

Provision Coverage Ratio is the ratio of provisioning to non-performing assets, which indicates provision of funds bank has to keep aside to cover loan losses.

Fig 2 Provision coverage ratio

As shown in Figure 2, Provision Coverage Ratio of Bank of Baroda is decreased during the period of the financial year 2010-

11 to the financial year 2015-16 but increased in the financial year 2016-17. Bank has to make provision based on IRAC (Income Reorganisation and Asset Classification) norms and in the financial year 2016-17 Bank of Baroda has made around 31.71 % provision for the loans against total income. Hence one can say that increase in provision for loans directly impact banks profit.

In the financial year 2007-08 Bank of Baroda has done huge provision due to 2008 crisis which decreased drastically in the financial year 2008-09 as shown in Figure 3, but after that during a period of the financial year 2008-09 to the financial year 2016-17 provisions increased overall in huge amount. This is because throughout this period Bank of Baroda has to show all Non-Performing Assets (NPA) in its financial report to fulfil RBI guideline which lead bank to increase other provisions to maintain provision coverage ratio.
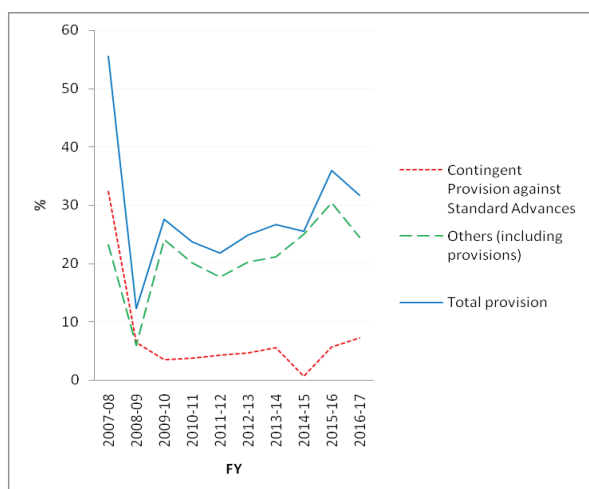

Fig 3 % of Provision against Income

Advances Based on Security:

Security is essential to reduce credit risk involved while giving advances. Advances are classified into three categories based on security associated with it – Advances secured by tangible assets, Advances covered by bank/government guarantee and Unsecured advances.
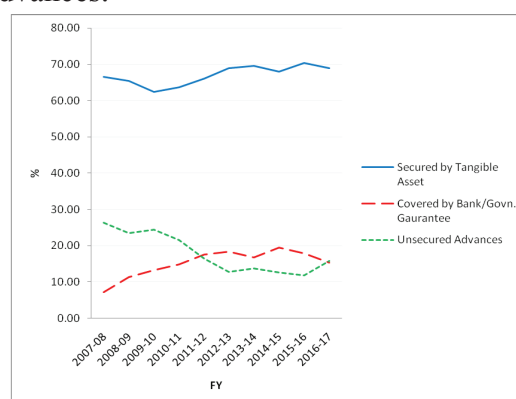

Fig 4 % of Provision against Income

As shown in figure 4, Bank of Baroda is mainly focused on advances secured by tangible assets over the years and gradually increase these category advances along with advances covered by bank/government security. The bank is decreasing unsecured advance over the years to reduce credit risk.

Credit Risk Involved in various Credit Facilities:

Bank of Baroda provides various credit facilities like other banks which are mainly divided into priority sector and non-priority sector. Each credit facilities are having NPA among total advances lending over those facilities, by using which one can understand risk involved in various credit facilities.

Table 1 - NPA % in various Priority Sector Credit Lending

Financial Year	Agriculture and allied activities	Advances to industries sector eligible as priority sector lending	Services	Personal loans	Total Priority sector NPA
2013-14	5.15	4.84	5.12	2.86	4.72
2014-15	5.3	7.84	6.31	2.7	5.88
2015-16	10.74	13.51	12.55	5.01	11.06
2016-17	11.88	15.51	12.1	5.52	11.89

Source: Annual Reports of Bank of Baroda

As shown in Table 1, NPA has increased in Bank of Baroda in priority sector every year. Based on above data, one can say that for Bank of Baroda industries sector eligible as priority sect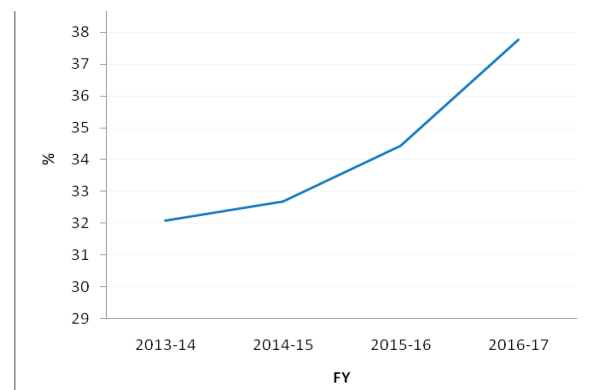or lending is the most risky which includes government financial inclusion schemes i.e. start up India, Stand Up India, PMJDY, etc. as NPA almost increased three times within a period of last 4 years compared to other priority advances where NPA is almost double within a period of last 4 years.

Table 2 NPA % in various Non Priority Sector Credit Lending

Financial Year	Agriculture and allied activities	Industry	Services	Personal loans	Non Priority sector NPA
2013-14	0	5.05	1.17	2.05	3.01
2014-15	0	6.94	2.23	1.43	4.04
2015-16	0	21.22	7.17	5.06	12.38
2016-17	3.65	21.2	5.12	4.42	11.64

Source: Annual Reports of Bank of Baroda

NPA has increased in Bank of Baroda in non-priority sector lending every year almost three times within a period of last 4 years as shown in Table 2. Based on above data, one can infer that Industrial advances and service advances are the most risky for Bank of Baroda in non-priority sector advances. NPA almost increased four times within a period of last 4 years compared to other priority advances where NPA is double within a period of last 4 years.

Bank Credit Risk Taking Evolution:

Credit risk-taking of any bank is simply the reflection of credit risk management policy of any bank. As shown in Figure 5, Priority sector advances have increased every year but it is necessary for public sector banks for fulfilling government financial inclusion policy norms. Retail mortgage-based products like housing loan also belonged to priority sector which covers 100 % security, so risk involved in it is low compared to other advances.

Fig 5 Priority sector Advances

In priority sector advances also, as shown in Figure 6, Bank of Baroda has reduced advances in industries sector which is also eligible as the priority sector because maximum NPA incurred in priority sector due to this sector. Service sector advances are promoted as housing loan and other retail products are belonging to it. Agriculture and aligned activity credit lending has also increased.
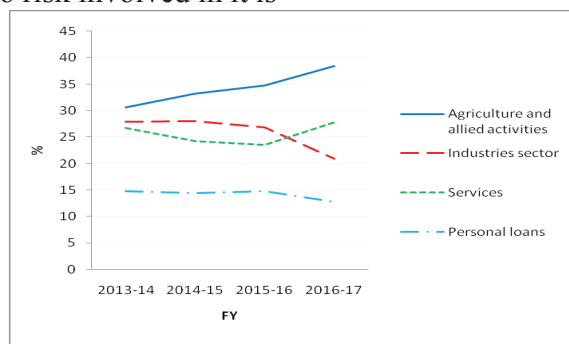

Fig 6 Priority sector Credit lending

As shown in Figure 7, Non-Priority sector advances have decreased in Bank of Baroda and it is the great move by the bank as NPA growth rate in this sector is very high.
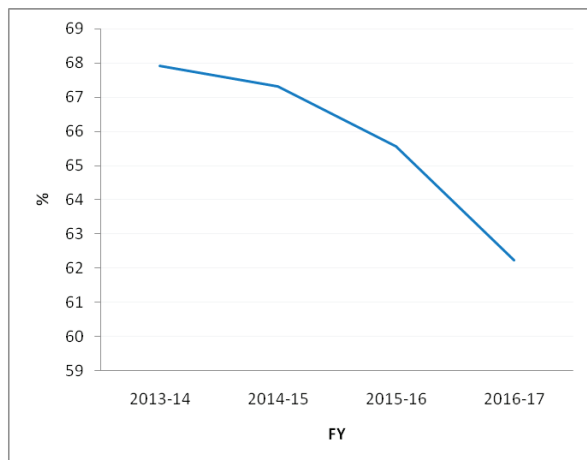

Fig 7 Non-Priority sector Advances

In non-priority sector advances also, as shown in Figure 8, Bank of Baroda has reduced advances in industries sector as NPA growth rate is high in it. Service sector advances' NPA growth rate is also high but it is increased as it comes under the category of secured advances.
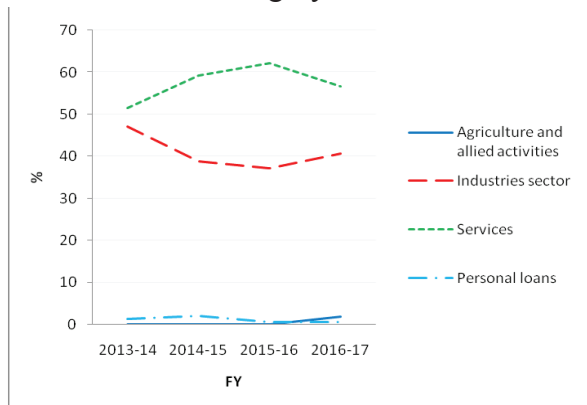

Fig 8 Non-Priority sector Credit lending

Movement of NPAs:

This tool is used to measure the impact of Credit Risk Management policies over the years. As shown in figure 9, the overall addition of gross NPAs is decreased in the bank over the years, but Net NPAs to Net Advances is increased due to the impact of past burden of NPAs. This suggests that bank is going on a good track but still past policies
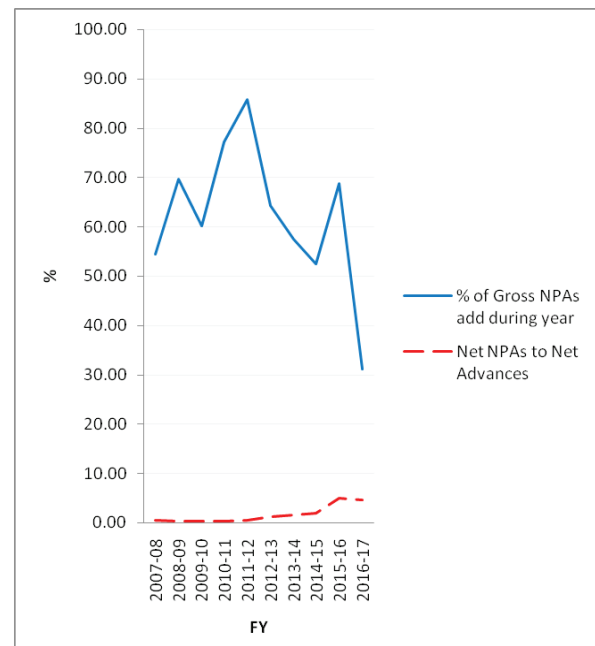
affect bank present performance.

Fig 9 Movement of NPAs

Risk Category Wise Exposure:

In Bank of Baroda, Credit exposures are classified into the various categories based on risk involved in it. As shown in Figure 10, Bank of Baroda is mainly focusing on advances which involve insignificant or low risk compared to risky advances. Due to the market scenario and competition, Bank of Baroda has been lending advances to very moderate or low or high risk or non-rated risk, etc. amongst various risk categories advances but the amount of such advances are very less.

Provision has been made based on risk category wise exposures in Bank of Baroda only for insignificant and low-risk category in which Bank of Baroda is mainly dealing with.

Credit exposures are classified based on credit risk rating and risk-based credit pricing. Bank of Baroda is doing credit risk rating in mostly each credit exposure and based on it analyze future risk.
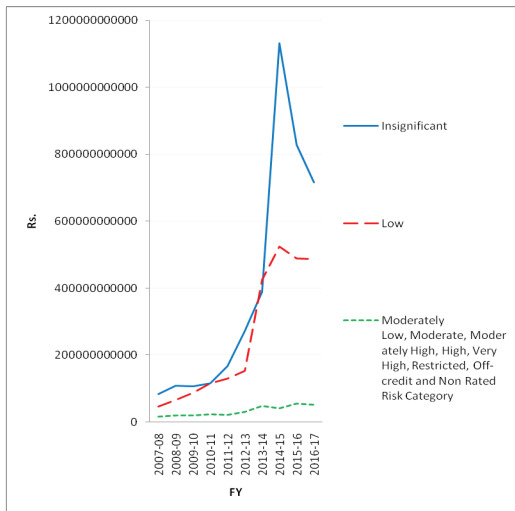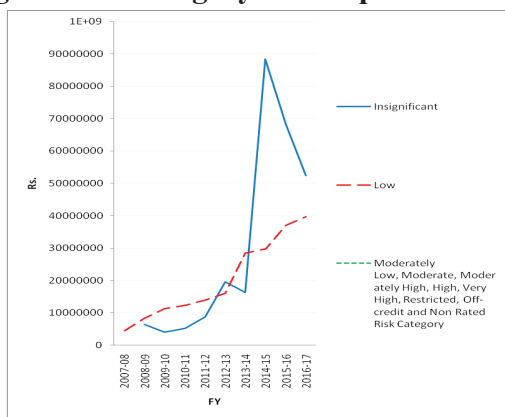
Fig 10 Risk Category wise exposure

Fig 11 Provision in various Risk Category wise exposures

Even to overcome future risk the bank is focusing on risk-based credit pricing method and link credit facility price (interest rate) along with credit exposure CIBIL/Equifax/ etc. score. Bank is trying to recover extra amount invested on taking credit risk based on such score.

Hypothesis Testing

1. H_0:   There is no impact of priority sector advances on Bank of Baroda non-performing asset.
      H_1:   There is an impact of priority sector advances on Bank of Baroda non-performing asset.

Regression Statistics	
Multiple R	0.953004825
R Square	0.908218196
Adjusted R Square	0.408218196
Standard Error	380850917627
Observations	3

ANOVA

	df	SS	MS	F	Sig.
Regression	1	287060618773220000 Cr	287060618773220000 Cr	19.79	0.140763
Residual	2	29009484291528800 Cr	14504742145764400 Cr		
Total	3	316070103064749000 Cr			

Where Cr. denotes Crore

This hypothesis is tested based on a factor like priority sector advances on the bank non-performing assets. We can see that f value is 19.79 and p value is 0.14. As p value is greater than 0.05, we accept the null hypothesis. Thus, it can be inferred that there is no impact of priority sector advances on Bank of Baroda non-performing assets.

2. H_0:   There is no impact of provision made for advances on Bank of Baroda profitability.

H_1:   There is an impact of provision made for advances on Bank of Baroda profitability.

Regression Statistics	
Multiple R	0.399746332
R Square	0.15979713
Adjusted R Square	0.03479713
Standard Error	104950466128
Observations	9

ANOVA

	df	SS	MS	F	Sig.
Regression	1	1675882422708880 Cr	1675882422708880 Cr	1.52	0.257199
Residual	8	8811680272373330 Cr	1101460034046670 Cr		
Total	9	10487562695082200 Cr			
					Where Cr. denotes Crore

This hypothesis is tested based on a factor like provision made for advances on the bank profitability. We can see that f value is 1.52 and p value is 0.257. As p value is greater than 0.05, we accept the null hypothesis. It means there is no significant impact of provision made for advances on the bank profitability.

3.   H0:   There is no impact of unsecured advances on Bank of Baroda non-performing assets.

H1:   There is an impact of unsecured advances on Bank of Baroda non-performing assets.

Regression Statistics	
Multiple R	0.571293728
R Square	0.326376524
Adjusted R Square	0.242173589
Standard Error	84409822681
Observations	10

ANOVA

	df	SS	MS	F	Sig.
Regression	1	2761707381013510 Cr	2761707381013510 Cr	3.87	0.084504
Residual	8	5700014532085320 Cr	712501816510665 Cr		
Total	9	8461721913098830 Cr			
					Where Cr. denotes Crore

This hypothesis is tested based on a factor like unsecured advances on Bank of Baroda non-performing assets. We can see that f value is 3.87 and p value is 0.08. As p value is greater than 0.05, we accept the null hypothesis. Thus, it can be inferred that there is no impact of unsecured advances on Bank of Baroda non-performing assets.

4.   H0:   There is no impact of decreasing non-performing assets on Bank of

Baroda profitability.

H$_1$:   There is an impact of decreasing non-performing assets on Bank of Baroda profitability.

Regression Statistics	
Multiple R	0.130637651
R Square	0.017066196
Adjusted R Square	-0.1079338
Standard Error	48989404533
Observations	9

ANOVA

	df	SS	MS	F	Sig.
Regression	1	33335484026139.40 Cr	33335484026139.40 Cr	0.13	0.720405
Residual	8	1919969405226860 Cr	239996175653358 Cr		
Total	9	1953304889253000 Cr			
					Where Cr. denotes Crore

This hypothesis is tested based on a factor like decreasing non-performing assets on the bank profitability. We can see that f value is 0.13 and p value is 0.72. As p value is greater than 0.05, we accept the null hypothesis. It means there is an impact of decreasing non-performing assets on Bank of Baroda profitability.

5. H_0: There is no impact of risk category wise exposure on provision made by Bank of Baroda.

H_1: There is an impact of risk category wise exposure on provision made by Bank of Baroda.

This hypothesis is tested based on risk category wise exposures on provision made by Bank of Baroda. We can observe p value for insignificant risk exposures is 0.00574, low-risk exposures is 0.000844, moderate risk exposures is 0.00, high-risk exposures is 0010791 and non rated risk exposures is 0.003319. All these values are less than 0.05. Thus, Null Hypothesis is rejected and it can be inferred that there is an impact of risk category wise exposure on provision made by Bank of Baroda.

ANOVA

	df	SS	MS	F	Sig.
Insignificant Risk Exposures					
Regression	1	78756490091906900 Cr	78756490091906900 Cr	13.95	0.00574
Residual	8	45145931886059500 Cr	5643241485757440 Cr		
Total	9	123902421977966000 Cr			
Low-Risk Exposures					
Regression	1	27886351224504700 Cr	27886351224504700 Cr	26.81	0.000844
Residual	8	8318745859473360 Cr	1039843232434170 Cr		
Total	9	36205097083978100 Cr			
Moderately Low-Risk Exposures					
Regression	1	2812788150274.37 Cr	2812788150274.37 Cr	1.72	0.225648
Residual	8	13056050611725.60 Cr	1632006326465.70 Cr		
Total	9	15868838762000 Cr			
Moderate Risk Exposures					
Regression	1	117973026954196 Cr	117973026954196 Cr	81.84	0.00
Residual	8	11531436427904.30 Cr	1441429553488.04 Cr		
Total	9	129504463382100 Cr			
Moderately High-Risk Exposures					
Regression	1	3953536745926.82 Cr	3953536745926.82 Cr	3.53	0.096747
Residual	8	8938596447673.19 Cr	1117324555959.15 Cr		
Total	9	12892133193600 Cr			
High-Risk Exposures					
Regression	1	49896273247340.50 Cr	49896273247340.50 Cr	10.91	0.010791
Residual	8	3656216721155.95 Cr	4570270901444.93 Cr		
Total	9	86458440458900 Cr			
Very High-Risk Exposures					
Regression	1	6847401963845.77 Cr	6847401963845.77 Cr	1.88	0.207433
Residual	8	29119633817754.20 Cr	3639954227219.28 Cr		
Total	9	35967035781600 Cr			

Restricted Risk Exposures					
Regression	1	294431130 Cr	294431130.07 Cr	0.60	0.458573
Residual	8	3884582469.90 Cr	485572808.74 Cr		
Total	9	4179013600 Cr			
Off Credit Risk Exposures					
Regression	1	108179332.70 Cr	1081793320.74 Cr	0.21	0.658715
Residual	8	4114757567.20 Cr	514344695.90 Cr		
Total	9	4222936900 Cr			
Non Rated Risk Exposures					
Regression	1	1420528091999.02 Cr	1420528091999.02 Cr	17.01	0.003319
Residual	8	667734136100.97 Cr	83466767012.62 Cr		
Total	9	2088262228100 Cr			
					Where Cr. denotes Crore

The value of significance of regression for moderately low-risk exposures is 0.225648, moderately high-risk exposures is 0.096747, very high-risk exposures is 0.207433, restricted risk exposure is 0.458573 and off credit risk exposures is 0.658715. The p value is more than 0.05 in above mention six risk exposures. Thus, Null Hypothesis is accepted. It means that there is no impact of risk category wise exposure on provision made by Bank of Baroda.

Findings:

The major findings can be discussed as follows:

- Bank of Baroda (BOB) is moving towards following BASEL III norms and based on it the bank has classified its assets based on risk category and provision is made for it, even the bank has increased its capital reserves in the assessment year 2016-17 and 2017-18. Bank of Baroda has made 25.56% capital reserve provision from Profit after tax which helps bank to increase Capital Adequacy Ratio.
- Provision coverage ratio has also increased as the bank has made around 31.71% provision for the loans against total income. BOB has increased provision for standard advances and provision for doubtful advances. The bank has shown its all non-performing assets in the assessment year 2016-17 to fulfil IRAC and BASEL III norms and has also done provision for it; hence there is a huge loss in 2016-17.
- Non-priority sector advances of Bank of Baroda are decreasing while priority sector advances of Bank of Baroda are increasing to fulfil government financial inclusion policy. In both these sectors, the bank is increasing their retail-based service sector advance which is considered as secured advances.
- Addition of gross NPAs are reducing, but net NPAs to Net Advances are increasing due to huge burden of past NPAs and now Bank of Baroda is showing all NPAs in book of accounts.
- Bank of Baroda is diverting its credit portfolio towards secured advances to reduce the possibility of future NPAs. Also, the bank has classified credit risk exposure into various categories and mainly provides credit into an insignificant or low risk category and even the bank has done adequate provision for it.

Suggestions:

Bank of Baroda is having credit risk management system which is analyzing credit risk involved in various credit facilities based

on possibility of NPAs and past records. At present, the bank is mainly diverting credit portfolio towards secured advances to reduce the possibility of future NPAs but this is not a proper solution. Bank of Baroda is decreasing its priority and non-priority sector industrial advances drastically. As advances in such sector are decreasing, it will reduce bank NPAs but also reduce bank profitability. Hence, the bank has to look for alternative solution or model such that credit portfolio remains as diversified as it is at present with less NPAs and high profitability.

Conclusion:

NPAs are the biggest issue in Indian public sector banks which reduces depositors trust towards bank but to fulfil BASEL III norms Bank of Baroda is increasing its capital provision and NPAs provision which will generate trust in the mind of depositors towards the bank. Bank of Baroda is again moving towards profit after the losses of the assessment year 2016-17. NPA is increasing which affect bank's profitability so the Bank of Baroda is in a process to divert its credit portfolio towards secured advances, but more than that the bank needs to find a more practically useful solution/model using which bank will be able to finance in all sectors with proper risk assessment. Bank of Baroda is using credit risk rating system and risk-based credit pricing method as Credit Risk Management system which other public sector banks can also use to improve profitability and reducing NPAs.

Limitations of the study:

1.   The researcher has considered 10 years duration of financial data of Bank of Baroda, but all required financial data are not available for 10 years. Thus, some of the analysis has been done using four years data. Hence, this research results may not be useful to Bank of Baroda.
2.   The researcher has used secondary data only for this research.

Scope for Further Research:

Similar study can be done for all banks especially public sector banks to address the problem of NPAs which has become headache for the Government. An exhaustive study of all banks can help in identifying and creating a suitable credit risk management model for Indian banks.

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Impact of Elastic Computing, Scalability and Data Analytics on the Learning Environment

Dr. Nilay M. Vaidya&Dr. Priti S. Sajja

Abstract

ICT now-a-days, have influenced in many different ways to assist people in teaching learning environment. In technological revolution and fourth generation of machine learning environment plays a vital role in filtering, integrating and analytics of the content before being produced. This opens a gate for the science of logical analysis on the data called a data analytics in learning environment. Analyzing the text, producing accurate analytics and producing actionable information in the environment enhances overall effectiveness. This paper presents an impact of fourth generation agent that performs the data analytics through maturity model in e-Learning environment. The study proposes an adaptive learning agent that requires minimum human effort and continually expands the knowledge when the information is encountered to read the behavior of the learner in e-Learning environment.

Keywords — Adaptive learning, e-Learning, Data analytics, Learning Analytics, Machine learning.

Introduction:

Focusing the next generation learning challenges is the goal of this emerging era of ICT. Information Technology in learning environment has made life easier and faster in terms of information retrieval and information sharing. Digital learning environment has been envisioned as an umbrella to transform society into a knowledge society. We are glad to see that the Prime Minister has introduced technological revolution through various initiatives at all the levels of society, especially through e-education, e-basta, NandGhar and many more that impacts education. Looking at the increasing use of technology through different electronic gadgets, delivering education via such digital platform to people could be a potential way to fill the gap.

Digitization has enabled educational sector to access variety of global resources which promotes the collaborative environment amongst various institutions.

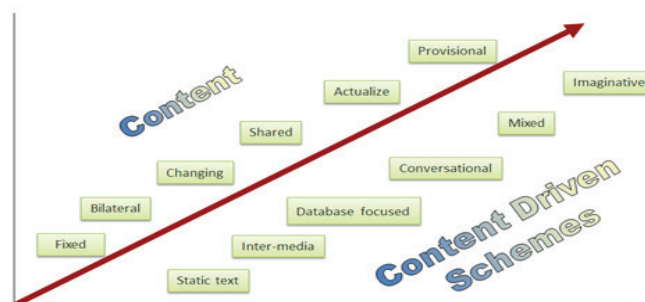Looking at the evolution of the type of content and content driven system since the inception of digital era:

Fig. 1 evolution of content and content driven system in digital era

This derives an era of a conditional content derivation from the content pool defined. To fetch

the content one need to focus on the system that behaves intelligently. Learning analytics focuses on building systems that are able to adjust content and supports in providing the personalized service by capturing the learner behavior, processing and evaluating learner competency. This leads towards providing the personalized content and minimizing the time delay between the capture of data, and use of data.This analytics seeks to combine past and current user data to predict the kind of services that learner demands and deserves. The monitoring process to improve the overall performance as well as imparting intelligence to the system encourages connecting an agent that provides the adaptive approach.

Across the globe, there is a growing commitment to support user transition by engaging users as partners, creators, collaborators and co-creators. With this multiple roles invites

setting up an environment that provides the collaborative approach which allows understanding and articulating the learning experience across the community.

The virtualteaching-learning cycle that merged with artificial intelligence gives a new flavor to the field. This lead exhibiting various new features that personalizing the offerings by tracing the learner behavior in the system. This promotes the working of an adaptive learning agent. This e-Learning environment attached with an agent that reads, models and augment learner behavior.

Agent helps in engaging the stakeholder, analyses their needs, evaluates their learning and reviews it for the better outcome of the model.

Agent engagement in the collaborative learning environment involves:

Fig. 2 Collaborative Learning Agent Analytics

1. Involve:Engages the learner as an active component
2. Facilitate: Engages and facilitates the learner in shaping their learning
3. Grant: Enables and empowers learner to access the relevant resources in the personalized manner make them competence enough in the challenging environment.
4. Inspire: Inspires learner to change the learning resources around them, reassures

higher level resources in the learning process.
5. Restarting the same cycle after observing the general behaviour of the learner makes the agent learn and infer the new knowledge from the existing one make it a "smart agent".

INSIGHT OF AN AGENT:

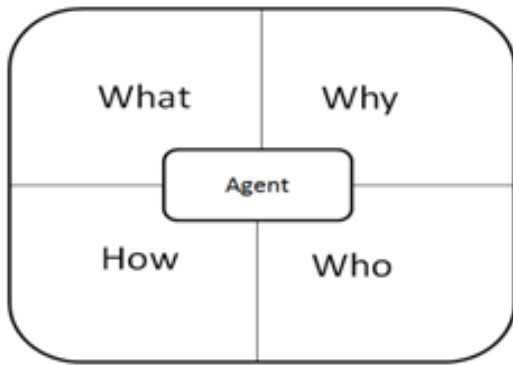Agent works on the following four major reasons:

Fig. 3 Reasons for an agent

1. What type of data/content are avalialbe i.e. relevancy of the data/content into the system.It works on the priciple of connection, creation and production rule that prepares the fundamental component for the system.

2. Why i.e. the objective of the content, monitoring the content and content bifurcation/clustering in the system. It works on the engagement, inclusion and participation principle that helps in categoriztion of the content in the system. This is the key component being used in the data analytics.

3. How this content is being used, bifurcated and alloted i.e. the alogorhtmic approach is considered here.It works in the active, inquiry based learning principles that helps in producing the right content to the right person, and also defines the right evaluation mechanism for the users in the sytem.

4. Who defines the taget audience i.e. the user, admin and the stakeholders.This works on research mindedness principle that defines the roles and responsibilities of the user in the system.

Increasing the data day by day as well number of user in the environment requires effective analysis that optimizes the data and makes it real time. This gives the agent an edge over typical data processing system.

To help reaching towards the optimization, the proposed agent in teaching-learning environment passes through the following phases.

The divides the tasks mainly into four major levels:
(1)   Operational
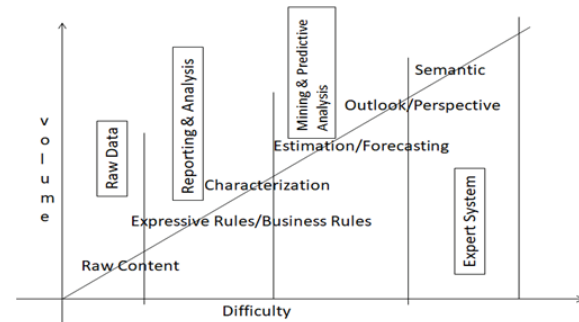(2)   Advanced reporting
(3)   Advanced analysis
(4)   Forecasting

Fig. 4 phases of data analytics

Phase of data in an environment:
(1)   Raw content
(2)   Expressive rules / Business rules
(3)   Characterization
(4)   Estimation
(5)   Perspective
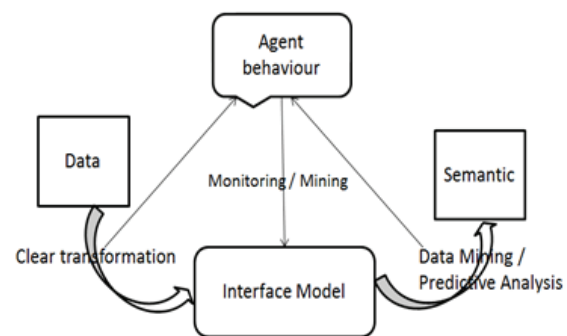(6)   Semantic

Agent Architecture:

Fig. 6. Architecture of agent behaviour

The details working of an agent is mainly divided into following steps:
(1)   Selection of data
(2)   Cleaning the data
(3)   Splitting the data
(4)   Applying the algorithmic approach
(5)   Evaluate

First two steps focuses on the collection of the content from the domain database.Splitting the data and algorithmic approaches uses following mechanism to have the cleansing process that personalizes the content:

(1) Regression algorithm:

This algorithmic approach is used on the continuous data associated with the user in the system. The major use and application of this approach is to read the continuous behaviour of the user in the system.

(2) Anomalies detection

To identify any unusual occurrence or action being carried out by the user in the system. This better helps in confirming the user behaviour and gives justification to the facts being gather and processed in the previous phase of the architecture.

(3) Clustering algorithm

This uses the results of previous two approaches and helps in classifying the content in the system. The major activity being carried out is clustering the content according to the usage by the user in domain environment.

(4) Categories / Prediction

This last phase helps in categorizing the content as well the user in the environment which helps the system in generating the content, helps tutors in understanding the group, and helps in generating the continuous evaluation pattern according to the understanding level of the users in the environment.

Conclusion:

In the era of digitization, everyone is talking and moving towards the e-resource. The adaptive agent offers as a platform for the collaborative learning environment; that extends featureof a current environment and applies the adaptivity into it. The adaptive learning agent then facilitate planning and organizing learning need and also manages, produces and evaluates learning content;applies analytical reasoning on the content before and after presenting it to the learner in the environment. Through this process of proposing an agent, current pedagogical aspect and user involvement can combine generates better result for the user, tutor and administrator.

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A Study on Usage and Satisfaction of Plastic Money: With Reference to Anand City

Dr. YashasviRajpara & Dr. Komal Mistry

Abstract

Due to faster life style customers have become very demanding and banks have to deliver customized products through multiple channels and allowing customers access to the bank round the clock. Thus, with the objective of providing customer services banks started new delivery channels like ATMs, Tele - banking, Internet banking etc. by providing anywhere, any time and any how banking facilities to them round the clock. The present study tries to identify the usage status and satisfaction level of plastic money users of Anand city.

Key Words: Plastic Money, Satisfaction, Usage

Introduction:

Banking function refers to the services, benefits, functions and facilities, offered by banks to their customers, whereas E-banking products refer to the offering of banking products through electronic delivery channels. Important E-banking products are card banking, phone / tele-banking, internet banking, ECS (Electronic Clearing Services), NEFT, and mobile banking. Among them, card banking is widely used form of E - banking products. Important card banking products are Debit Cards and Credit Cards, which are popularly known as Plastic Money.

As reported by Business Today in their article that, the card transactions are not encouraging enough post demonetization. In the first ten months (November - August) of 2016-17, the mobile banking and mobile wallets shows a huge surge in the volumes as well as value as compared to the previous period of the corresponding year. As per the Reserve Bank of India (RBI) data, the value of card transactions both debt and credit at Point of Sales (PoS) as well as ATMs are around Rs 26.22 lakh crore in the November 2016 to August 2017 period. That was less than 2% as compared to the similar value in the 10 months during November 2015-August 2016. There is, however, a 16% jump in the volume of transaction. The volume of transaction for both debt and credit card at PoS and ATM went up from 9,132 million to 10, 612 million. Many feel the demonetization impacted the consumption and the restriction on ATM withdrawals also resulted in sluggish card numbers.

Literature Review:

Kaynak E. and T. Harcar (2001) in their study "Consumers attitudes and intentions towards credit

card usage in an advanced developing country", have attempted to investigate consumer attitudes and intentions towards credit card ownerships and usage in an advanced developing country. In particular, knowledge structure, beliefs, likes and dislikes as well as attitudes of credit card owners in the possession and the use credit cards are investigated. Data for the study were collected from 673 credit card holders and non-card holders in the largest Turkish city of Istanbul and public policy implications for banks and credit card issuing firms are offered for orderly decision making purpose.

Roberts, James A. and Eli Jones (200l), in their study, "Money attitudes and intentions towards credit card use and compulsive buying among American college students", used a casual modeling approach to investigate the role of money attitudes and credit card use in the campus buying within a sample of American college students. It was found that the money attitudes, power, prestige, distrust and anxiety are closely related to compulsive buying and that credit card uses often moderate these relationships.

Chakravarti, Sujit (2003) in his paper "Theory of credit card networks: A survey of the literature", examined the credit cards usage and their benefit to consumers and merchants by comparing other payment instruments. Recently, credit card networks have come under scrutiny from regulators around the world. The costs and benefits of credit cards to network participants are also discussed. Focusing on interrelated bilateral transactions several theoretical models have been constructed to study the implications of several business practices of credit card networks. The results and implications of these economic models along with future research topics are also discussed.

Bernthal, Mathew J., Crockett, David and

Rose, Randall L. (2005) in their study, "Credit cards as lifestyle facilitators" found credit cards as an important facilitator of consumer emancipation through lifestyle within the current market structure. Authors analyze the accounts provided by consumers, credit counselors and participants in a credit counseling seminar in order to develop a differentiated theory of life style facilitation through credit card practice. The skills and tastes expressed by credit cardholders helped to distinguish between the life styles of those with higher cultural capital relative to those with lower cultural capital. Differences in life style regulation practice are pointed to originate in cultural discourses related to entitlement and frugality. They also developed a model of credit card practices related to life style regulation.

Jin, Rui and Sharon A. Devancy (2005) in their study entitled "Determinants of debit card use: A study from the consumers perspectives", investigated the debit card use from the perspective of the demand side i.e. the consumer. The impact of consumer's demographic, socio — economic and credit related characteristics on debit card use was examined by using data from the 2001 Survey of Consumer Finances (SCF). Logistic regression analysis showed that household heads that were younger, more educated and with more income were more likely to use debit cards. In addition, household heads who were Hispanic, renters and credit card revolvers were more likely to use debit cards than household heads who were white, home owners and convenience users of credit cards.

Kataria, Neera (2005) in the article "Credit cards-challenges ahead", pointed out the growth of credit cards in India, market share of each individual banks, challenges faced by bankers etc.

Saha, Tapas Ranjan (2005) in the article

"Credit card and frauds", provided awareness about various credit card frauds, suggestion about precautionary measures and tips for safety use of it.

Vincent, L. (2005) in the article "Credit cards - Modern payment system", provided information about credit card functioning in India and settlement and concluded that it is a blessing to both the traders and customers.

Reddy, Ramakrishna (2006) in his article "Card products in India" commented about the reasons for not attaining full growth potential among card products and suggest remedies for growth in this field for the benefit of all players.

Saha, TapashRanjan (2006), in the article "Debit cards overtaking credit cards in India", provided comparative features of both credit cards and debit cards and its volume of transactions from 1995 to 2005, shows that debit cards growth is out placing the credit cards.

Rangaswamy and Ramesh Kumar S. (2007) in his article "Plastic money in retail distribution" highlighted the growth of plastic money particularly ATM cum debit cards, its importance in retail distributions, cost effects, benefits, suggest some tips to avoid frauds and necessity of increasing its usage.

Annamalai, S. and Muthu R. Iiakkuvan (2008) in their article "Retail transaction: Future bright for plastic money" projected the growth of debit and credit cards in the retail transactions. They also mentioned the growth factors, which leads to its popularity, important constraints faced by banks and summarized with bright future and scope of plastic money.

Sarangapani, A. and T. Mamatha (2008) in their article "The growing prominence of debit cards and credit cards in the Indian Banking Industry", highlighted the growing prominence of debit and credit cards by giving necessary statistics, comparative features of both cards and also pointed out more popularity of debit cards than credit cards.

Research Methodology:

The present study is of analytical and exploratory nature. Accordingly, the use has been made of primary as well as secondary data. The secondary data have been collected mainly from RBI monthly bulletins, repute journals and other literature available in the field. Primary data were collected with the help of structured questionnaires from customers using ATM / Debit Card or Credit Card. Total 187 respondents who actually use card banking were surveyed by following non-probabilistic convenience sampling technique. To analyze the data, various statistical techniques such as average, std. deviation and normal distribution have been used as per the requirement of the data. F test has also been used to analyze the variances.

Objectives of the Study:

1. To study the usage of Plastic Money across demographic variables.
2. To identify Satisfaction level of Plastic Money Card users.

Limitations of the Study:

The study is covering only Anand city, which is not applicable to entire population. Study includes 187 respondents which does not presents the real scenario of the Debit / Credit Card usage and satisfaction. Out of all E-Banking delivery channels only Debit / Credit card users are considered for the study.

Data Analysis and Interpretation:

Table 1 Demographic Profile:

Demographic Variables	Categories	No. of Respondents
Type of Bank	Public Sector Bank	89 (47.59%)
	Private Sector Bank	98 (52.41%)
Gender	Male	114 (60.96%)
	Female	73 (39.04%)
Age	15-25 years	23 (12.30%)
	26-40 years	117 (62.57%)
	41-60 years	29 (15.51%)
	More than 60 years	18 (9.62%)
Income	Up to 3,00,000	47 (25.13%)
	3,00,001 to 6,00,000	87 (46.52%)
	6,00,001 to 10,00,000	37 (19.79%)
	Above 10,00,000	16 (8.56%)
Occupation	Government Service	28 (14.97%)
	Private Service	42 (22.46%)
	Professionals	35 (18.72%)
	Business	43 (22.99%)
	Student	39 (20.86%)

The above Table 1 shows the demographic / Sample profile of the respondents based on Gender, Age, Income, Occupation and Type of Bank. .

Frequency of usage of Plastic Money:
Frequency of usage of plastic money and its association with all demographic variables is displayed in Table 2 & 3 respectively.

Table 2: Usage of Plastic Money

Usage	No. of Respondents	Percentage (%)
Daily	34	18.18%
Weekly	86	45.99%
Fortnightly	45	24.06%
Occasionally	22	11.77%

Table 2 displays the usage of Plastic money by the respondents. It is found that majority (45.99%) of the respondents are using plastic money on weekly basis, followed by 24.66% respondents are using plastic money fortnightly. Table represents that more than 18% of the respondents are using it on daily basis.

Chi square analysis of usage of plastic money among respondents
Frequency of using ATM service is different for different categories of people based on their age, gender, income & Occupation. To understand the association between demographic variables of respondents and frequency of plastic money usage, Chi square test was carried out to test the hypothesis as under:

H01: There is no association between demographic variables of respondents and frequency of Plastic money usage.
H11: There is association between demographic variables of respondents and frequency of Plastic money usage.

Table 3: Chi square analyses for frequency of plastic money usage among respondents by Demographic Variables

Sr. No.	Demographic Variable	Chi Square Value	d.f.	p-value	Significance	Hypothesis
1	Type of Bank	0.714	2	0.700	No	Null hypothesis not rejected
2	Age	1.515	6	0.042	Yes	Null hypothesis rejected
3	Gender	2.457	2	0.293	No	Null hypothesis not rejected
4	Income	8.383	8	0.397	No	Null hypothesis not rejected
5	Occupation	0.497	6	0.998	No	Null hypothesis not rejected

Table 3 shows that except age all other demographic variables are having p-value more than 0.05. So, it displays that, there is association between Age and frequency of plastic money usage, whereas for other demographic variables, no association was found with frequency of plastic money usage.

Table 4: Reasons for choosing plastic money

Sr. No.	Reasons for choosing plastic money	Mean Score	Rank
1	Convenient, safe and secure than carrying cash	5.67	1
2	Ease of use at anywhere any time	4.75	2
3	Saving of cost and time	3.69	3
4	Effective device for payment and borrowing	3.49	4
5	Symbol of Status and pride	2.39	5
6	Influence of social change in borrowing and spending	1.64	6

The analysis of reasons for choosing plastic money by customers (Table 4) revealed that the first important reason for choosing plastic money was that it is more convenient, safe and secure than carrying cash. The second important reason was its ease of use at anywhere any time. Third and fourth reasons were it helps in saving of cost and time and it is an effective device for payment and borrowing respectively. The reasons for choosing specific cards by the respondents were analyzed and the mean scores and the ranks assigned are presented in Table above.

Spending Pattern on Purchases

Card users spend differently on different items. A list of items was provided to respondents who indicated on how they spend on various listed items. The aim of this section was to observe the respondents preference on various item for spending through cards.

Table 5: Use of Plastic money on spending pattern

Sr. No.	Variable	Rank	W.A.M.
1	Groceries	1	5.66
2	Restaurant bill payment	2	5.45
3	Consumer Durables	5	4.64
4	Electronics	4	4.86
5	Cash withdrawal through ATM	3	5.02
6	Hotel accommodation	7	3.27
7	Airlines / railway tickets	6	4.24
8	Clothing and Jewellery	8	2.60

Table 5 shows that groceries spending was ranked first, followed by restaurant bills payment and cash withdrawals. This shows that majority of card users use their cards in purchasing small items from shops and super markets and use it in hotels and restaurants. Some other places where cards are used include electronics and consumer durables which was ranked number 4th and 5th respectively it was further revealed that respondents use their cards rarely to pay for clothing and jeweler. This might be because they are not getting facility of payment through card.

Perception of Customers Regarding Problems while using plastic money

This section of the paper helps us know the respondents opinion regarding various problems in using plastic money. Respondents were asked to rank on the basis of 6 statements reduced without cash receipt.

related to the problems faced.

Table 6: Perception of Customers Regarding Problems while using plastic money

Sr. No.	Problems while using plastic money	Rank
1	Card gets blocked	1
2	Card Invalid	2
3	Machine out of Cash	4
4	Machine out of Order	3
5	Wrong amount in slip	6
6	Balance reduced without cash receipt	5

Table 6 reveals that most commonly encountered problem is card gets blocked followed by card invalid. Least encountered problem in usage of plastic money in balance

Table 7: Level of Satisfaction from usage of Plastic Money

Level of Satisfaction	Highly Satisfied		Satisfied		Neutral		Dissatisfied		Highly Dissatisfied	
	N	%	N	%	N	%	N	%	N	%
Plastic Money	57	30.48	67	35.82	28	14.97	29	15.51	6	3.21

Table 7 displays the satisfaction level of the respondents. It is found that majority of the respondents (more than 66 %) are satisfied with usage of plastic money across all variables. And around 15% of the respondents are neutral on satisfaction from plastic money usage.

Chi square analysis of satisfaction level of E-Banking Services across Demographic Variables

To check association between demographic variables of respondents and satisfaction level of plastic money, Chi square test was carried out to test the hypothesis:

H02: There is no association between demographic variables and satisfaction level of respondents for using plastic money.

H12: There is an association between demographic variables and satisfaction level of respondents for plastic money.

Table 8: Chi square analyses for plastic money across satisfaction level of Demographic Variables

Sr. No.	Demographic Variable	Chi Square Value	d.f.	p-value	Significance	Hypothesis
1	Type of Bank	0.457	4	0.978	No	Null hypothesis not rejected
2	Age	9.089	12	0.695	No	Null hypothesis not rejected
3	Gender	2.372	4	0.668	No	Null hypothesis not rejected
4	Income	12.103	16	0.737	No	Null hypothesis not rejected
5	Occupation	5.830	12	0.924	No	Null hypothesis not rejected

The above table shows that across all the demographic variables p-value more than 0.05. So, there is no association between demographic variables and satisfaction level of respondents using plastic money.

Findings:

• It is found that majority of the plastic money users falls in to age group of below 40 years and income below 6 lakhs. Across all class of occupation plastic money is used.

• More than 45% of the respondents are using plastic money on weekly basis followed by fortnight and daily. Further it was found that except age there is no association between the demographic variables and frequency of plastic money usage.

• Majority of the respondents prefer plastic money because it is convenient, safe and secure than carrying cash followed by ease of use at anywhere any time.

• It is found from the spending pattern that plastic money is used more on groceries, restaurant bill payment followed by cash withdrawal through ATM, consumer durables. It is used least in clothing and Jewellery.

• Major problems perceived while using plastic money are card gets blocked, card Invalid, machine out of order. Least encountered problems were balance reduced without cash receipt and wrong amount in slip.

• Majority of the respondents are Satisfied with the usage of plastic money. Further it was found that there is no association between the demographic variables and level of satisfaction of plastic money usage.

Conclusion & Future Scope of Study:

This research concludes that there is an efficient use of plastic money. It is due to convenient, safe & secure than carrying cash followed by any time anywhere usage. Plastic money has got wide acceptance in to economy which has resulted into more frequent use of plastic money. It is also found that plastic money is used in almost all routine purchase made by the respondents starting from groceries to restaurant bill. The respondents found problems like card blocked, card invalid, machine out of order while using plastic money. Bank should provide problem oriented solution through less time consuming method in order to get more frequent usage of plastic money. Level of satisfaction from the existing plastic money users is comparatively high.

Findings of the study may be helpful for bank officials and it may also help the card section of the banks to develop their future plans and strategies. Similar studies can be carried out in other E-Banking delivery channels as well as other geographical areas for better clarity.

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A Study on Impact of Union Budget on Share Market: With Special Reference toTop Tyre Companies in India

Mr. Kirtan P. Raval & Dr. Yashasvi Rajpara

Abstract

Share market a buzz word forall Gujarati People. Present time has been proved golden era for the share market because of tremendous growth insensex but after the extraordinary highs in market significant fall has been started couple of days before. The reason is Union Budget 2018, new policies and laws of government for the upcoming year, new agendas for development and effort for strengthening weaker one for growth of the economy of India. Each and every budget brings noticeable impact every year on the share market of India. Many researchers each and every year dive for the impact analysis of union budget, this research paper is also an honest effort to determine impact of union budget 2018 on share prices of top tyre companies of India.
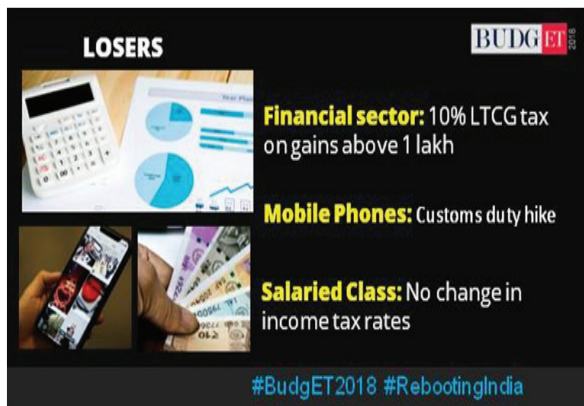
Keywords
Budget, Share Market, Tyre Companies

Introduction

Union Budget of India is nothing but an upcoming future agendas of the country planned and managed by the financial experts with core suggestions of Finance Minister of India. This union budget proves as a blue print for the existing government and its official for driving growth of the country in right direction with the help of right decisions and honest implementation. It is not necessary that whatever is budgeted in present is to be there in future point of time, journey of innovation and change may end with new achievement and it may be required to be diverted because of unavoidable circumstances. But the declaration of union budget gives noticeable impact on the prices of shares because its affects the mindset of the investor, Investors start to explore budget and accordingly they invest or bring out their investment from share market.

On 1st February 2018, Finance Minister Shree ArunJately has announced Union Budget 2018. Each and every year it is generally announced in the starting of February because of government can have enough time to settle new policies before the starting of new financial year in April. In union budget 2018 there are key declarations regarding Agriculture, Long term Capital Gain Tax on shares, Corporate Tax, Education, Gold, Bond, Airlines, Health Policy and Tyre Companies by Finance Minister. In short Union Budget Came with many drastic changes which have affected many sectors of economy directly or indirectly. Increase of custom duty on various commodities like mobile Phone, imported radial tyres, large passenger vehicles, engines, transmissions, breaks, sunglasses, wrist watch, toiletries and footwear will bring significant impact on prices of all such items, It may prove harmful to one manufacturer and beneficial to another one.

Source:https://economictimes.indiatimes.com/ news/economy/policy/key-highlights-from- budget-2018-ease-of-living-is-new-catch-phrase/ articleshow/62735935.cms

Financial sector is going to be affected adversely by the union budget 2018 because of introduction of the Long Term Capital Gain of 10% on equity and mutual fund above 100000. It will give negative impact on share prices of almost all companies because investors will hesitate to invest in share market.

Review of Literature

S. Sureshbabu(2012)has carried out research with one co-author on the topic Impact of Union Budget on Indian Stock Prices in which researcher has compared volatility of sensex in 3days, 15days and 30 days before the day of budget and after the day of budget, researcher has concluded that on the day of budget investor has to be careful while investing if investor want to get benefit of swing of budget day than he has to predict budget impact on his own.

Arindham Gupta(2006) has pointed out in his research on the topic A Study on the Impact of Union Budget on Stock Prices in India that study was carried out for determining the volatility in the sensex by comparing pre budget day and post budget day period. Research has concluded that research proves impact of budget on shares on the post liberalization period.

Objectives of The Study

To know the basics of Union Budget.

To determine the impact of union budget 2018 on the share prices of tyre companies.

Researchmethodology

This research isbased on purely secondary data which is collected on 4th February 2018, as latest date after the declaration of budget from various online sources, research papers, books and journals. Here researcher has compared the top tyre companies' closing share prices on the day of budget and opening share prices on immediate day after budget i.e. on 1st February 2018 and 2nd February 2018. Prices as per Bombay stock Exchange (BSE) are taken into account for comparison.

Comparative Statement of Prices of Shares of Tyre Companies:

Company Name	Closing Price on Day of Budget (1-2-2018)	Opening Price on Next Day of Budget (2-2- 2018)	Change	% Change
MRF	71913.15	70900.90	-1012.25	-1.41%
Balkrishna Ind.	1134.50	1119.00	-15.50	-1.37%
Apollo Tyres	262.25	262.25	0.00	0.00%
Ceat	1884.35	1830.30	-54.05	-2.87%
JK Tyre& Ind.	187.90	185	-2.90	-1.54%
TVS Srichakra	3595.10	3511.25	-83.85	-2.33%
Goodyear	1079.00	1032.25	-46.75	-4.33%

|				
PTL Enterprises	55.95	55.15	-0.80	-1.43%
Modi Rubber	103.10	103.10	0.00	0.00%
Govind Rubber	20.65	20.10	-0.55	-2.66%
Krypton	12.20	12.80	0.60	4.92%
TirupatiTyres	7.50	7.50	0.00	0.00%
Average	6687.97	6586.63	-101.34	-1.52%

Source: Computed on the basis information available from Money Control website.

Above tableshows the closing share price of tyre companies on the day of budget and opening share prices on the immediate next day. Out of twelve companies three companies, Apollo Tyres, Modi Rubber and TirupatiTyres shows no change in their share prices. All other companies except Krypton shows decline in their shares price after the declaration of the budget. There is average decrease of 1.52% in the share prices of all tyre companies. On the basis of above data it can be said that declaration of budget has affected significantly to the tyre sector of the share market. The main reason behind this decline is increase of custom duty from 10% to 15% on the imported radial bus and truck tyres. Till date radial tyres in the cars was a common thing but the level of radial in passenger vehicles was negligible. It should give positive impact on the prices of shares of the domestic tyre manufacturers like Apollo, MRF and JK Tyres Etc. But results are opposite in the case of domestic players also which is because of key change in the Long Term Capital Gain, If individual holds equity or mutual fund units for more than one year and if your gain is more than one lakh than you have to pay LTCG tax at the rate of 10%. This will apply from 1st April 2018 so investors who have capital gain have started selling shares and which lead to market fall.

Conclusion

On the basis of research study conducted it can be concluded that declaration of new rules, regulations and policies by government in union budget has given noticeable impact on the prices of shares related to the tyre companies on the next day of declaration of budget i.e. 2nd February 2018. More than one factors of new budget gives direct and indirect impact to the prices of the shares so, investor should have critical evaluation power to understand complex impact of one factor of union budget on the more than one companies. Investments after predictions of budget can become fruitful in future. In this study domestic it is found out that domestic tyre companies' share can perform well even though they are showing decline. Because they have scope to capture domestic radial tyre market of passenger vehicles by charging low cost in comparison to outsiders.

Percentage Change
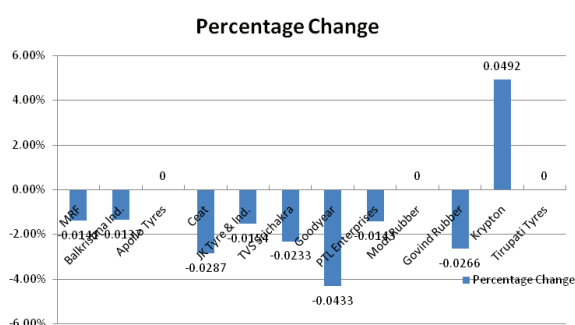
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Human Resource Management Trends, Challenges and Opportunities in a Changing Global Business Environment

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Abstract

Significant changes are taking place in the environment of human resource management. Changing workforce, downsizing, corporate restructuring, globalization, knowledge economy are some of these changes. As a result, human resource management is now emerging as a source of competitive advantage. In their efforts to integrate themselves into the global economy, companies in India are using human resource as a strategic tool for competitive advantage.

Inroduction:

Significant changes are taking place in the environment of human resource management. Changing workforce, downsizing, corporate restructuring, globalization, knowledge economy are some of these changes. As a result, human resource management is now emerging as a source of competitive advantage. In their efforts to integrate themselves into the global economy, companies in India are using human resource as a strategic tool for competitive advantage. Virtually all companies are putting emphasis on the up-gradation of managerial and professional skills. Companies are adopting flatter structures and empowering employees to facilitate independent decision-making and flexibility. This is leading to improved involvement and motivation of employees. Middle level managers are becoming more participative and result oriented. Decision-making is being increasingly handled at the group level. There is increasing emphasis on training and retaining talent. Employee compensation is being linked with performance through benchmarking, business process engineering etc. There is an emphasis on transparency and multi skilling. Companies are downsizing to shed redundant staff. Networking of various functions and divisions is being adopted with a view to create a responsive, goal oriented and competitive organization.

Key Words: Changing workforce, globalization, knowledge economy, workforce diversity, emotional intelligence.

Research Objectives:

1. The objective of the paper is to study the challenges of Human Resource Management in the Corporate India.
2. The objective of the paper is to examine the innovative human resource management practices

adopted by the corporate and businesses to tap human resource potential in India.

3. The objective of the paper is to understand the impact of changing business environment on Human Resource Management in India.

Economic liberalizations, privatization and globalization of economies adopted by various countries led to the increased competition among the global companies, national companies and local companies. Most of the business activities, today, are centered around the customer. In fact, it is the human resource which brings innovation, quality, customization, superior speed and the like. As such, the increased importance to the customer and enhanced customization brought paradigm shifts in human resource management.

Non-Hierarchical Structure

Managements have experienced the consequences of hierarchical /tall and bureaucratic organization structures like delay in decision-making, increase in cost of operations, red-tapism, wastage etc. As such, the companies today shifted towards non-hierarchical and flat organizations. Non-hierarchical and flat organizations empower the employees, uses employee's creativity; provide freedom at work place, and collaborative work through teams etc. They reduce decision-making time, communication level and channels. Some of the modern organizations prefer to shift even to the loose organization structure where jobs, teams and departments are more flexible in view of fast changing of customer expectations. Traditionally, organizations have given much importance to individual contributions. Because of the growing nature of complexity and inherent benefits of achieving parallelism and reduced response time to customer problems, work teams came into being in an organization for executing the projects. There is one more concept known as war room. If

a team is developing a complex product, all the team members sit in the same room. This room is known as war room. There are other types of teams such as virtual teams. These teams are distributed geographically across different locations. Virtual teams use the technology to the maximum extent for the purpose of communication. They use e-mail, video conferences, and web conferences extensively. Indian IT firms like TCS, Infosys, Wipro, and HCL use this kind of teams very extensively. In high technology and product development companies such as Intel, Nokia, IBM, HP, Sun and Microsoft one can find war rooms frequently. Modern day objective of these IT firms is to achieve more productivity using project teams. (Sudhakar, Ayesha, and Sanghamitra (2010)).

Attitudes and Emotions but not skill and knowledge:

The term human resource can be thought of as, "the total knowledge, skills, creative abilities, talents and aptitudes of an organization's workforce, as well as, "the total knowledge, skills, creative abilities, talents and aptitudes of an organization's workforce, as well as, the value, attitudes, and beliefs of the individuals involved. Today's organizations have realized that the employees with positive attitude take up the work on their own, without being entrusted, learn the required skills and knowledge on their own, be innovative, take risk to perform better, take the decisions etc. Employees with positive attitude see the strengths and opportunities in every project or issue and act as change agents.

Prior to the 1990s, emotional intelligence was a much-neglected aspect of human nature. In the year 1988, Reuvan Bar was credited with coining the word 'emotional intelligence'. In 1990, John Mayer and Peter Saloveyundertook a path breaking research on emotional intelligence. The research drove home the importance of understanding thyself and others. Daniel Goleman asserted that emotional intelligence is more effective predictor of great leadership than Intelligent

Quotient. Emotional intelligence is nothing but the capacity to appreciate and explain emotions and use emotions to enhance thought. Emotional Intelligence is the foundation for personal qualities such as self-confidence, integrity, knowledge of strength and weakness, self-motivation, perseverance, ability to bounce back during the times of crisis and knowing the art of getting along with others. Emotionally Intelligent leaders are highly self-motivated and soldier on in the face of adverse situations. Self-regulation, self-awareness and motivation signify the self-management skills of a leader. Empathy and social skills points to leader's ability to forge relationship and bond big-time with others. Socially-skilled leaders have their own network of contacts to tap into if the situation so warrants. (Aravumudhan, 2010). For an individual to gain a higher level of EQ he would succeed better by understanding the framework of the 'transactional analyses. (Thomas, 2009).

Changing Nature of Work

Globalization and technological changes are causing significant changes in the nature of jobs and work. A major change in the nature of work is the shift from manual to knowledge work. In the knowledge economy, there is growing emphasis on human capital (the knowledge, education, training, skills and expertise of employees) in place of physical capital (equipment, plant and machinery, furniture). In the knowledge driven and service oriented economy, jobs require greater brain power (skills, expertise and creativity). As the center of gravity in employment is shifting from manual workers to knowledge workers, new human resource practices and policies are needed.

The old ways of functioning-of strict log in timings and straight jacketed protocols are now things of the past! The new age corporations are more open to flexibility in rules and protocols. And it has been observed that the more accommodating an organization is, the more productive its employees are. The use of modern information technology enables employees to address their e-mails and work issues remotely. At Sun Life, employees enjoy a flexible work culture. They are given the opportunity to work from home on a need basis. Such a flexible policy lets them strike a great work-life balance. (Rajeev, 2015).

Workforce Diversity

Workforce diversity means employees of an organization differ from each other in terms of age, gender, education, language, values, cultural norms, ethnic origin, etc. As a result organizations are becoming more heterogeneous. Various categories of employees bring their own skills, attitudes, motives and other personal characteristics. In Indian Companies, differences in religions, cultures, social ethos and regional origin add to workforce diversity. Diversity can be a source of competitive advantage in the market place. Such Organizations can better understand different market segments. Increased number of women in the workforce requires more flexible work schedules, child care facilities, maternity leave, and transfer to husband's place of posting.

With increasing globalization people from different nationalities are working in the same organization. They bring with them the unique culture specific ways of appraising incidents. Employees of different age groups and different generations in all likelihood hold different work values. The presence of these multiple perspectives increases the creativity, innovation and the quality of decision making. It also increases the acceptance of organizational decisions. Diversity also has implications for succession planning and knowledge sharing within organizations. The traditional model of older employees occupying senior positions and younger employees being at the bottom of the organizational pyramid is fast changing. Today Competence not age

is the criterion for selection for leadership positions. When the wisdom of the older generation is passed on the younger entrants, it aids in succession planning. On the other hand, the younger generation have those skill sets which are absent in the older employees. This can be shared through the process of reverse mentoring. The diversity inspired mindset in its new avatar is already being reflected in the policies of various new age Indian organizations. Large organizations like IBM, Wipro, Infosys, Pepsi Co. India etc. are hiring people with hearing, learning, visual and orthopedic disabilities. (Anuradha, 2016)

Globalization:

Growing internationalization of business has a significant impact on HRM. The functions of hiring, training, compensation, maintenance and so on acquire global perspective. The HR department is required to cope with problems of unfamiliar languages, laws, management styles, work ethics etc. Globalization requires new skills and therefore managerial training becomes a critical process. Preparing managers for international postings is a challenge.

HR AND ETHICS:

HR need not be policing around for keeping checks on employees, however, through various unique and innovative practices, HR can ensure that organizational ethics don't just remain theoretical concepts but truly become a part of the core governance of the organization. Even research suggests that HR and Ethics should go hand in hand. In a conference board survey of ethics and compliance and human resource professionals from 214 global companies, 77 percent of respondents said they "would like to see a more collaborative approach between the two functions than their company is currently taking." R. Nanda, CHRO and Chief Ethics Counsellor, Tata Chemicals Limited, says, "Rather than leaving ethics as something that resides only in posters and booklets, HR

can play an important role in making it both 'seen' and 'felt' within the organization. From recruitment, to training and development to appraisals and exits, HR can be a strong agent in embedding organizational ethics in the entire employee lifecycle. Bhatnagar shares, "Integrating ethical values throughout organizational processes is key to creating the culture. (Lipi, 2015)

Corporate Restructuring

Reorganizations resulting from acquisitions, mergers and divestiture have significant bearing on organizational levels. Employees face anxiety and uncertainty about their places. Changes take place in status, career progress and corporate culture. The pace of mergers and acquisitions is likely to accelerate in future. Internal restructuring is also gaining momentum as corporates downsize and flatten themselves to meet increasing competition from multinationals.

Creativity and Innovation

In today's era an organization's crucial asset is not the raw material, technical processes, transportation system, policies, or political influence rather it is the pool of creative thinkers whose thoughts can be put into valuable products and services. Innovation has gained momentum in the headlines as one of the fundamental processes that must be nurtured by every organization in order to retain its viability. The way an organization goes about creating a culture for innovation would be unique for every organization. To think of bringing change is very important. The mindset for developing creativity should start from top management and later permeate in the levels of management beneath. Creativity can't be managed it can only be encouraged. If an organization wants to promote innovation, it should first remove all the communication barriers. The organizational structure should be made flexible enough to encourage ideas. To speed up things the interconnection

between various departments should be strong and effective. This will help in converting the idea into something valuable within less time. (Saxena, 2015).

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Demonetization –Its Impact and Effects on Indian Eonomy

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Abstract

Government of India announced demonetization of the high value currencies of Rs. 500 and 1000 with an objective to unearth the black money and to curb the corruption, counterfeit currency as well as terror funding. This decision is considered as biggest cleanliness drive against the black money in the history of Indian economy whose benefits will be reaped in the long run. However, the impact of this sudden move is causing major cash crunch in the economy affecting day to day requirements of the common man and businesses. Indian government has taken a bold decision on note ban on 08/11/2016. Central government was a judicious, well-thought out and well-implemented step, and whether it would really eradicate all the existing black money.

This study is purely based on secondary data.

Keywords: demonetization effect, Indian government, note ban, Corruption, banks, black money.

Introduction:

Demonetization is the act of removing the current currency from the economy and replacing it with the new one. It is the step taken up by the Government generally with the motive of removal of corruption. Moreover it is the act of depriving of value of currency for official payment. It does not only include the currency but also include the precious metals. Originally Demonetization is the French word "demonetiser" dating back to 1850-55. The reasons for the Demonetization are. To fight with inflation, to beat the corruption, to remove counterfeit currency and to discourage the cash system. Developing country like India has to find the solution of problems like this for betterment of country. In 1982, Ghana took the decision to demonetize their 50 cedi currency. Which created chaos and the decision was not well comed. Afterwards Nigeria (in 1984), Myanmar (in 1987) , Soviet Union(1991) , North korea and Zimbabwe had also took this type of decision in past. With effect from 8th Nov. 2016 Tuesday Midnight PM Shri Narendra Modi Ji Banned the Currency notes of 500 and 1000. It is a strict decision of banning regular 500 and 1000 rupee notes from circulation which is a result of finding 1.25 lakh crore black money. Within 3 days of that striking decision: - 35000 Crore Rs. Deposited in banks and approximate 1500 Crore Rs Black Money were destroyed. Demonetization is the act of changing the existing currency in another form. The old units should be retired and replaced by new currency. In other words demonetization means either introducing new notes or coins of the same currency or fully replacing the old currency with new currency. There is an one important thing exist on economics, which is demonetization, in which forms of payment is restored as legal tender. There are so many reasons, why governments demonetized their nation's

currency. Some reasons are like resisting inflation, resist corruption, and discourage a cash system in the country.

History of Demonetization in India:

It is not the first time in history, that government has taken this kind of step. It has been happen twice in the past. The First currency ban was announced as on 12th January, 1946(Saturday) by RBI headquarter. At that time currency notes of 1000 and 10,000 were totally removed from economy. Both the notes were re-introduced in year 1954. At that time people had given 10 days time period to exchange the notes. Further that was extended to 15 days more where by people has to give reasons why they had not exchanged it in previous 10 days. It had not created much effect at that time. By the end of 1947 out of Rs.143.97 crores, notes of only Rs. 134.9 crores were exchanged. Thus notes worth Rs. 9.07 were perhaps "Demonetized". The Second currency ban was made on 16th January, 1978(Monday), announced by R. Janaki Raman a senior official of RBI, and at the time of Morarji Desai led Janata party. At that time currency ban was taken 1000, 5000 and 10,000 out of circulation. That time the people had given only 3 days to exchange the notes. This time around 73.1 crore was demonetized.

Finally the Third Time, the most recent demonetization had been announced as on 8th November, 2016 by Prime Minister Narendra Modi. This time the currency of 500 and 1000 notes are demonetized from economy. The Government has instructed the hospitals, petrol pumps, airports etc to accept the old denomination notes till 11th November, 2016.

Meaning of Demonetization:

The act to cease a currency unit or put an official stop on its status as a legal tender is known as demonetization. Demonetization is the process that involves a change of national currency, where old currency is replaced with new currency. The circulation of a specific currency unit is stopped, followed by the withdrawal of old banknotes or coins. The process of demonetization is opposite to demonetization, where the legal status is restored.

Objectives of the Study:

- To know the impact of note ban decision on the Indian economy.
- To estimate the consequences for future of the note ban decision.
- To understand about people's attitude for keeping the money either at home or at bank.
- To check the awareness of online banking among consumers.
- To analyze the impact of Demonetization on different sectors of economy.
- To analyze the impact of Demonetization on GDP.
- To understand the effect of demonetization in terms of positive or negative.

Scope of the study:

This study will also helpful for the Indian citizen because they would be able to know the present and future condition of the economy and they can take rational decision on their income and expenditure. Any businessman can also take the wise decision so that he will be able to generate more revenue and can earn the profit in the actual market scenario. Finally everybody would be able to know the impact of note banned decision on Indian economy as well as Indian markets. This study will helpful for the citizens of India, Indian government, businessman and the Indian customers. Through this study government will be able to know about the future conditions of the economy. This study will help to the government for policy making to the betterment of the economy.

Impact of demonetization on Indian economy:

The demonetization somehow reduced consumption activity in economy of India. But it increased the money in banks. At the time of demonetization the consumption had reduced and the market become slowdown, but the increase in the deposition in the After demonetization announcement deposition in Indian bank has increased, According to reserve bank India, deposits crossed 5 trillion rupees from 10th November to 18th November. Due to this many banks like SBI, ICICI, HDFC PNB reduced their deposits bank would be better for economy in future. Impact of demonetization on loan from banks in India

Impact of demonetization on Indian financial market:
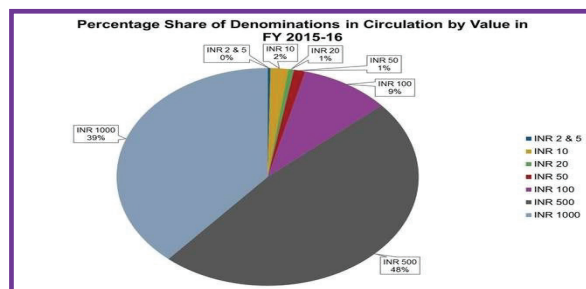
After demonetization Indian financial market has been followed just like secular falling trend.

Nifty 5fell approx 6.3% and S&P BSE Sensex Fell 5.9% from 8 November to 22 November.

Impact on Different Segments of Economy:

There is short-term and long-term impact of Demonetization on different sectors of economy.

- Agriculture:
- Manufacture:
- Automobile:
- Consumption-related sectors like consumer durables, FMCG
- GDP:
- Business sector:
- Real Estate :
- Service Sector:

Advantages of Demonetization:

1. Eradicate the use of fake currency.
2. Tackle with corruption due to currency upholds.
3. Withdrawal of old currency and bring unaccounted money back into the banking system by a considerable increase in bank deposits. With this the idle money becomes productive.
4. Encourage digital payment modes to reach the target of a cashless society.
5. Reduction of illegal activities.
6. Reduced tax avoidance by encouraging higher tax payments.
7. With a perfect implementation, demonetization policy can provide a great boost to any country's economy.

Disadvantages of Demonetization:

Some of the disadvantages that may emerge could be:-

1. Inconvenience to the public.
2. Huge economic cost to the nation.
3. Disruption of business activities.
4. Decrease in sales, particularly cash based sales.
5. Labour / Wage payment issues.
6. Additional printing and distribution cost of new currency.
7. Problem situation for small-scale business operations that deal in cash.

Experts and Economists views about demonetization in India.

1. Surjit Bhalla (Chairman, Oxus Investments, a Delhi-based economic research/advisory firm; Former Professor at Delhi School of Economics; Previously worked at the World Bank)

According to Mr. Surjeet Bhalla BJP government take a Courageous step, and the credit goes to our prime minister Mr. Narendra Modi. If this step would be successful then it will be biggest reform in India. This policy will silently create the money for the economy.

2. Arun Jaitley (Current Finance Minister of India; Senior Advocate, Delhi High Court)

According to Indian Express Mr. Arun Jaitley gives his opinion that the demonetization is good for economy, Indian banks were facing NPA problem since last many years, now banks will have more money to lend for many sectors of the economy.

3. Amartya Sen (Leading economist; Noble Laureate; recipient of the Bharat Ratna)

According to Indian express, Professor Amartya Sen said that millions of innocent people have deprived from their money and being suffered to get their own money back.

4. Dr. Manmohan Singh (Former Prime Minister; eminent economist; former RBI governor)

According to Indian express, the former prime minister, RBI governor, and economist Dr. Manmohan Singh said in Rajya Sabha that this demonetization is an organized loot. In his speech he said that, the way the scheme has been implemented will harm the agricultural sector in India, it will also harm the small scale industry and informal sectors of the economy. He also said that India's GDP can falls about 2 percentage point as a result of this note banned policy. Cooperative banks which serves the rural areas are non functional and has been prevented from cash. Former prime minister also said that this note banned policy is a monumental mismanagement.

5. Kaushik Basu (Leading economist; Senior Vice- President and Chief Economist at The World Bank)

According to Indian express, Mr. .Kaushik Basu said that government of India made policy that any person who deposits money beyond the limit of 250000, have to pay huge penalty. This policy created a new black market, in which large amount of illicit cash broken in to smaller parts and deposited by the members of team; which is a legal way of illegal activity. Mr., Basu said this move is hurting innocent people who has no illegal money but they have built up cash reserve over a long period of time.

CONCLUSION:

The present study shows the impact of Demonetization on Indian economy's different Sectors. GDP of Country Slightly decreases as compare with the previous year but we cannot say it will be same in future also. This intervention is a one-time draining of this current stock of black money but unless the root causes of corruption are removed, corruption will continue. It is sort of like a dialysis, more of a short term cleaning up than a solution of the problem. Demonetization in India is a great effort taken by Indian government to combat with black money and corruption. It is a bold decision taken by government. The main purpose of demonetization is eradicating the black money and reduces the corruption. Government of India has become success to some extent. Most of the black money has been crushed. Amount of cash liquidity increased in the bank day by day. And anybody knows if the bank has more deposits then bank become stronger.

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Digital India and Its Impact on Indian Economy

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ABSTRACT

The digitalization brings innovation, ease of working, new job opportunities and growth in the economy. It helps to bring transparency in the system and more transparent are the flow of funds in the economy less is the problem of tax evasion, parallel economy etc. But with all these benefits available it also makes it necessary for the people to have basic financial knowledge and a push towards the importance of the financial literacy.

This paper analyses the impact of digital India on the Indian economy. The finding of the study will identify the obstacles in the execution of digital dia programmes and it also makes valuable recommendations to make India financial literate and to boost the Indian economy effectively and efficiently.

Key Words: Digital India, Digital Literacy, Indian Economy, Services, e- Governance.

Introduction

Indian economy is growing at a fast pace. It is ranked among the top fast developing economies in the world. The Indian economy takes 7th place among the largest economies when measured through nominal GDP and 3rd place when measured on the basis of PPP (Purchasing Power Parity). Due to the growing industrialization in the country, it is considered one among the major G-20 economies. The average growth rate of the economy has been around 7% for the last two decades. The Indian economy has piqued the interest of the world because of the increased rate of development due to industrialization & automation, increasing customer base due to population explosion and increase in ease of trade due to reduction in regulation & entry barriers. The Indian economy has been divided into 3 major parts, namely, agriculture sector, industry sector and service sector.

The Digital India programme is designed in a three components structure. These are:

- Creation of Digital Infrastructure
- Digital Delivery of Government Services
- Increasing Digital Literacy

The Digital India Programme has been launched with an aim of transforming the country into a digitally empowered society and knowledge economy. This programme will help in creating employment opportunities in the country so that the GDP and per capita income increases, and the life style of people can be improved. It circulates around three key areas. These are- Developing digital infrastructure, e-governance and digitally empowering the citizens. Some of the facilities provided under this programme are, digital locker, e-mandi, e-education, e-hospitals, e- banking, e-government, e-sign, etc.

Objective of the Study

1. To understand the Pillars and Initiatives of Digital India.
2. To examine the impact of digitalization on Indian economy
3. To understand the obstacles in the path of digitalization and the economic growth.
4. To understand the requirement of financial literacy.
5. To derive conclusions and suggest measures for improvement of Digital India programme.

Research Methodology

The study is exploratory and quantitative in nature. For this research purpose, secondary data analysis is usually conducted to gain in-depth understanding of the "Digital India" initiative. Secondary data review and analysis involves collecting information, statistics, and other relevant data at various levels of aggregation in order to conduct a requirement analysis of the impact of digital India on Indian economy. Mostly the paper is based on the information retrieved from the internet via journals, research papers and expert opinions on the same subject matter.
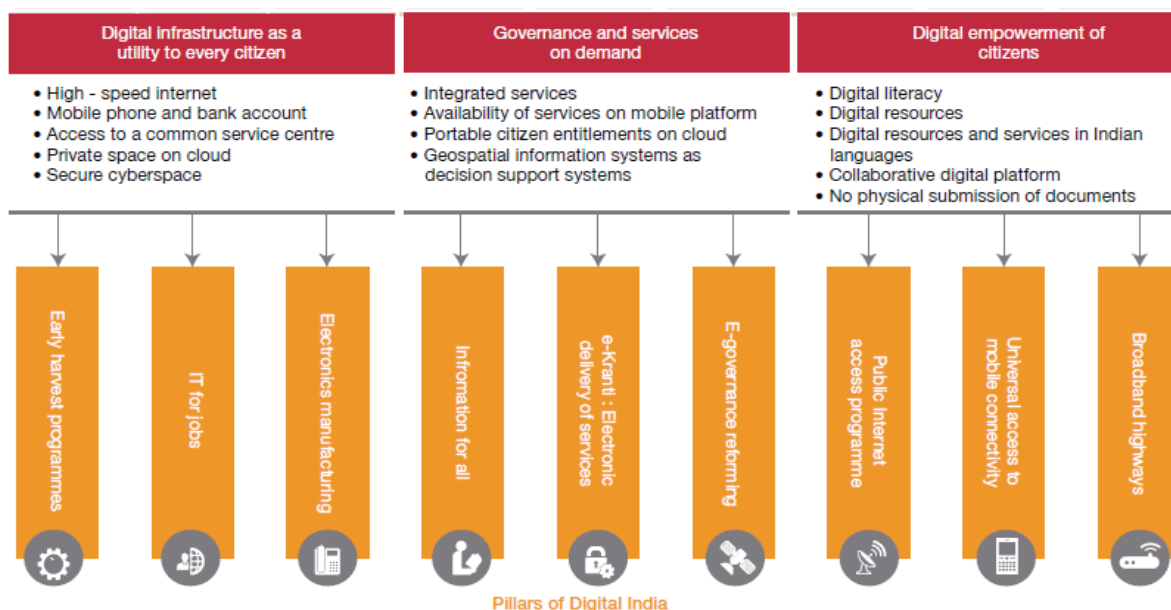
Digital World and Digital India

The Digital India initiative is one of the necessary steps needed for our economy to compete with the digitalization transition going on around the world and aims to close the gap by fostering investment in digital infrastructure, improving digital literacy, and increasingly providing online services to citizens.

In the Global Information Technology report 2016 published by World Economic Forum, India Ranked at 91stposition.

Figure-1

Vision Areas of Digital India

Digital infrastructure as a utility to every citizen	Governance and services on demand	Digital empowerment of citizens
• High - speed internet • Mobile phone and bank account • Access to a common service centre • Private space on cloud • Secure cyberspace	• Integrated services • Availability of services on mobile platform • Portable citizen entitlements on cloud • Geospatial information systems as decision support systems	• Digital literacy • Digital resources • Digital resources and services in Indian languages • Collaborative digital platform • No physical submission of documents

Pillars of Digital India: Early harvest programmes; IT for jobs; Electronics manufacturing; Information for all; e-Kranti : Electronic delivery of services; E-governance reforming; Public Internet access programme; Universal access to mobile connectivity; Broadband highways

Source: Retrieved from http://meity.gov.in/divisions/national-e-governance-plan

Nine Pillars of Digital India Programme

1. Broadband Highways: The aim is to cover 250000 village Panchayats under National Optical Fibre Network (NOFN) by December 2016. Nationwide internet infrastructure (NII) would integrate the network and cloud infrastructure in the country to provide high speed connectivity and cloud platform to various government departments up to the panchayat level.

2. Universal Access to Mobile Connectivity: The aim is to increase network penetration and to provide mobile connectivity to 44000 villages by 2018 with investment of RS 16000.

3. Public Internet Access Programme: One Common Service Centre (CSC) would be provided to each gram panchayat and 150,000 Post Offices are proposed to be converted into multi service centers.

4. e Governance: IT would be used to make the delivery of government services more effectively. There would be integration of services and platform-UIDAI, Payment Gateway, Mobile Seva platform, Public redressal etc., through IT. All information would be available in electronic form.

5. eKranti: The aim is electronic delivery of services to people be it education, health, financial inclusion or justice.

6. Information for All: MyGov.in is a website launched by the government to facilitate a 2-way communication between citizens and the government. It is a medium to exchange ideas or suggestion with government. The citizen would have open access to information through open data platform.

7. Electronics Manufacturing: The government is focusing on zero imports of electronics by2020 through local manufacturing of items such as smart energy meters, micro ATMs, mobile, consumer and medical electronics. Government is also taking several steps to promote manufacturing and investment in electronics sector by providing clarity on taxation, incentives skill development etc.

8. IT for Jobs: The aim is to train 10 million people in towns and villages for IT sector jobs in five years. It also aims to provide training to three lakh service delivery agents as part of skill development to run viable businesses delivering IT services.

9. Early Harvesting Programmes: Government plans to install Wi-Fi facilities in all universities across the country. All

books will be converted into e books. Email will be made the primary mode of communication within government.

Figure – 2

India: Share of Global Gross Domestic Product (GDP) adjusted for Purchasing Power Parity (PPP) from 2010 to 2020
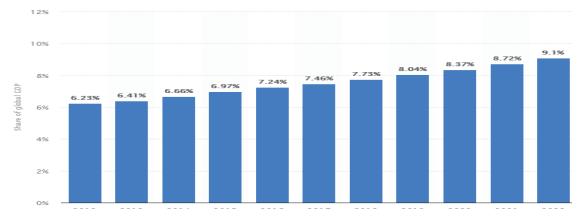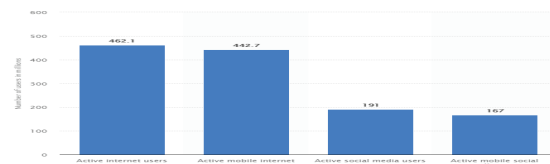

Source: www .statista.com

Figure – 2 indicates the statistic of India's share of the global gross domestic product (GDP) adjusted for Purchasing Power Parity (PPP) from 2010 to 2011, with projections up until 2020. In 2016, India's share of global GDP (in relation to PPP dollars) was estimated at about 7.23 percent.

Figure – 3

**Digital Population in India as of January 2017 (in millions)**

Source: www.statista.com

Figure – 3 above presents the statistic of the digital population in India as of January 2017. During this period of time, it was found that India hat 462.1 million internet users, of which 442.7 million were mobile internet users.

Figure – 4

Number of Internet users in India from 2015 to 2022 (in millions)
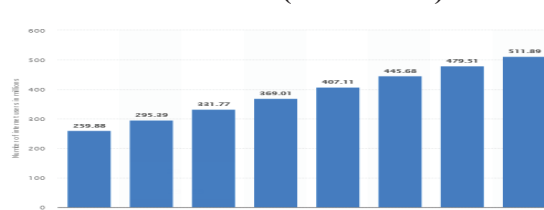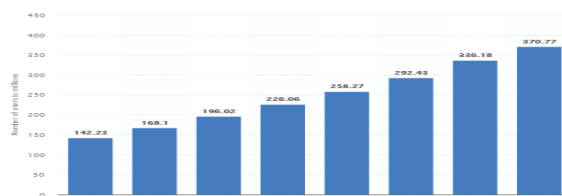

Source: www.statista.com

Figure – 4 above provides information

on the number of internet users in India from 2015 to 2022. In 2017, India had 331.77 million internet users. This figure is projected to grow to 511.89 million internet users in 2022. Despite the untapped potential, India already is the second-largest online market worldwide. The majority of India's internet users are mobile phone internet users, who take advantage of cheap alternatives to expensive landline connections that require desktop PCs and infrastructure. As of 2016, India had 320.57 million mobile phone internet usersand forecasts estimate 492.68 million Indian mobile phone internet users by 2022.

Figure – 5

Number of Social Network users in India from 2015 to 2022 (in millions)

Source: www.statista.com

Figure – 5 shows the number of social network users in India from 2015 to 2022. In 2019, it is estimated that there will be around 258.27 million social network users in India. The most popular social networks in India were YouTube and Facebook, followed by social app WhatsApp. Facebook is projected to reach close to 319 million users in in India by 2021.

Economic Impact

According to analysts, the Digital India plan could boost GDP up to $1 trillion by 2025. It can play a key role in macro-economic factors such as GDP growth, employment generation, labour productivity, growth in number of businesses and revenue leakages for the Government.

As per the World Bank report, a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38%

respectively in the developing countries. India is the 2nd largest telecom market in the world with 915 million wireless subscribers and world's 3rd largest Internet market with almost 259 million broadband users. There is still a huge economic opportunity in India as the tele-density in rural India is only 45% where more than 65% of the population lives. Future growth of telecommunication industry in terms of number of subscribers is expected to come from rural areas as urban areas are saturated with a tele-density of more than 160%.

Kerala – India's First Digital State

In February 2016, former President Pranab Mukherjee declared Kerala as the first digital state of India owing to its achievement of high e-literacy and mobile penetration. It was also the first state to complete the National Optical Fibre Network (NOFN) project, granting high-speed Internet access to all its gram panchayats. This achievement is significant especially in the area of rural development. Kerala has been setting benchmarks in terms of achievement of digitisation targets.

Gujarat - The Working Model of India's First Digital Village

Government of Gujarat partnered with ICICI Bank, which adopted the village and converted it into a working model for Digital India. From setting up bank accounts and going cashless to installing CCTV cameras, the village is a perfect example of what a digital village would look like.

Digital Literacy

Making citizens aware of the Digital India programme and its benefits is one of the biggest challenges. This is because 12 crore of the 16.8 crore rural households in India have no computers and are unlikely to have digitally literate persons.

However, this is being offset with the exponential increase in the number of mobile

phones. Most Indian consumers indicated that the lack of awareness about Internet services was the main reason for not using them. The non-availability of digital services in local languages is also a major concern. There should be adequate awareness building for people living in rural areas so that they can be a part of digital India and reap the benefits of the Internet.

The expectations of a modern-day connected citizen are:

1. Availability of public services on demand.
2. Awareness of services and government initiatives and consequent reduction in physical visits to government offices for processing of requests.
3. Omnichannel delivery of services.
4. Single point of access for all government services.
5. Responsive government systems.
6. Transparency in processes.
7. Alerts and notifications.
8. Engagement/feedback mechanism.

Obstacles in the process of Digitalization

1. The resistance to change people show during emergence of new technology.
2. Building trust among the people for change is difficult.
3. Lack of knowledge about its use and benefits.
4. Infrastructure requirements and their unavailability also hamper the reaching of these basic facilities to the people.
5. The basic hindrance is the lack of literacy and literacy is not just to be able to write ones name and do the signature but to have an understanding of the changes going in the technology, society and the country for their own betterment.

Regulating Regulations

Better cohesiveness between departments, ministers and regulatory agencies for pursuing the Digital India initiatives is the need of the hour.

Cyber Security: Robust policies and laws for data protection and privacy will help in mitigating data leaks and cyberattacks. Policylevel changes are vital to subsidise digital transactions and allay concerns around data privacy. The policy framework governing digital payments must be closely aligned with the government's aim of mass adoption of digital payments.

Private Sector Participation: The government needs to provide a policy framework and incentives for the private sector to have a viable business model so that it can participate wholeheartedly in various projects and also consider becoming part of the application ecosystem of the government

Project Governance To reduce the delay in e-governance projects from the government's side, the MeitY may include the clause of deemed acceptance of deliverables in case there is no response from government project heads within a stipulated time frame after the submission of deliverables by an implementation agency.

Findings

1. Innovation in the business world is accelerating exponentially, with new, disruptive technologies and trends emerging that are fundamentally changing how businesses and the global economy operate.
2. IMF has projected India's GDP growth rate at 7.4% in 2018 and 7.8% in 2019.
3. Kerala – India's First Digital State.
4. Gujarat - The Working Model of India's First Digital Village.
5. In 2018, India's share of global GDP (in relation to PPP dollars) was estimated at about 7.73 percent. Making citizens aware of the Digital India programme and its benefits is one of the biggest challenges.

6. In 2018, India had 369.01 million internet users. This figure is projected to grow to 511.89 million internet users in 2022.

7. In 2018, there are around 226.06 million social network users in India and in 2019, it is estimated that there will be around 258.27 million social network users in India.

8. The tax collection figures between April-June 2017 Quarter show an increase in Net Indirect taxes by 30.8 per cent and an increase in Net Direct Taxes by 24.79 per cent year-on-year, indicating a steady trend of healthy growth.

9. The total number of e-filed Income Tax Returns rose 21 per cent year-on-year to 42.1 million in 2016-17 (till 28.02.17), whereas the number of e-returns processed during the same period stood at 43 million.

10. India's ranking in the world has improved to 126 in terms of its per capita GDP, based on purchasing power parity (PPP) as it increased to US$ 7,170 in 2017, as per data from the International Monetary Fund (IMF).

11. By 2030, the largest company on the Internet is going to be an education-based company, with smart-bot instructors able to personalize lessons for each individual student.

12. Usage-based auto insurance enabled by the Internet of Things will grow nearly 1,200% by 2023. This insurance uses real-time information about a driver's actual driving to assess actuarial risk.

13. New digital technologies can enable a 20% reduction in global carbon emissions by 2030.

14. By 2020, over 80% of the G500 will be digital services suppliers through Industry Collaborative Cloud (ICC) platforms.

15. There is need to speed up our country's literacy rate, digital literacy rate and financial literacy rates as they all together have an impact on the proper utilisation of the Digitalization.

Recommendations

1. The initiatives took by the government can only be successful if people get involved in the transformation. The Schools and Colleges can create awareness among the people of their locality about the initiatives and imparting knowledge to the people.

2. For doing so they also need to have the knowledge about the program and how to use the facilities provided by the government.

3. Community centres can be formed were people who are more literate about the issues can help the other people and experts can visit them to give the guidance from time to time.

4. Organizations can guide their employees and make them literate regarding the financial aspects.

5. RBI and SEBI have already taken many steps to create awareness among the people about the importance of financial literacy and also provided the online modules for financial literacy on their websites.

6. People should be imparted with the knowledge of factors which affect their savings and how they can maximize their saving.

7. People should also be made aware about the security of their personal information regarding their accounts and online frauds.

8. The banking system must also be made robust as people need to trust the system before they go with the technological advancement.

Conclusion

The digitalization brings innovation, ease of working, new job opportunities and growth in the economy. It helps to bring transparency in the system and more transparent are the flow of funds in the economy less is the problem of tax evasion, parallel economy etc. But with all these benefits available it also makes it necessary for the people to have basic financial knowledge and a push towards the importance

of the financial literacy.

In this digital era, it is imperative to meet the increasing aspirations and demands of tech savvy citizens, particularly the millennials. With significant strides already made in the Digital India programme, it is now time for the government to transform its approach and aspire to become fully digital. The success of Digital India will be a major factor in enhancing the country's economic growth by improving social and financial inclusiveness, citizen engagement, as well as efficiency and accountability in governance and delivery of services.

The focus must be on bridging the divide between citizens and fostering connections by way of providing tailor-made services in an efficient manner. The government must strive to fully embrace technology and re-invent the way it delivers services. Moreover, it is imperative for the government to bolster its capabilities and institutional capacities to optimise its return from ICT investments. By this we can reach on a conclusion that the new technology needs to harnessed well and for this it is not only the availability but also the knowledge to use it and get benefits from it.

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