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# SFIMAR RESEARCH REVIEW

in association with



Study on impact of social media on buying decision of consumer goods

- Mr. Darshan B. Pagar

An analysis of the announcement of Demonetization on the stock market returns

- Mr. Akhilesh Yaday

Portfolio Construction Techniques using hedging and diversification

- Mr. Pushkar D. Parulekar , Mr. Anand K. Mishra

Study the relationship between Organisational Environment of Mumbai Colleges and Exchange of Data & Information among teaching staff for the practice of knowledge Management

- Ms. Shaili V. Gala

Marketing to the Millennials - An Apercu'

- Dr. Shrawankumar B. Roongta

The study of motivational drives among degree college students with special reference to McClelland's Theory of Motivation - A case Example

- Prof. Kiran Manglani



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Mt. Poinsur, S.V.P. Road, Borivali (West), Mumbai - 400 103.

Tel.: 2891 7089 Fax: 2890 6567 E-mail: srjournal@sfimar.org Website: www.sfimar.org

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## SFIMAR RESEARCH REVIEW (SRR)

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## Editorial...

We are happy to announce the publication of volume 12 issue 1 of the journal, "SFIMAR Research Review" in association with University of Mumbai. This is a half yearly journal with an ISSN number (0975-895X). The Journal is published with an objective to disseminate information based on application in various segments of management. It is felt that this publication can help in encouraging and promoting indigenous management research and extension activities. It is also considered a platform to share ideas, views and experiences of management practitioners, researchers, academicians at national as well as international level.

The current issue of this journal contains six papers on research work done by researchers.

**Mr. Darshan Pagar** in his study aims to know how social media affects our lives in terms of activities related to products and also to determine the consequences of social media networks on consumer's buying behaviour.

**Mr. Akhilesh Yadav** in his paper attempts to analyse the effect of demonetization on market return by analysing trading data before and after the demonetization day.

**Mr. Pushkar Parulekar and Mr. Anand Mishra** in their study focus to construct different portfolios using various methods of hedging and diversification and analyzing them for returns.

**Ms. Shaili Gala** in her paper tries to find out the relationship between organizational environment and exchange of data for practice of Knowledge Management.

**Dr. Shrawankumar Roongta** in his paper aims to focus on the "Millennial" category of consumers by reviewing research publications, government surveys, research reports of various firms involved in business, marketing or consultancy.

**Ms. Kiran Manglani** in her study focuses on likert scale analysis of R. Steers and D. Braun Stein test of finding out different drives of motivation in selected groups as stated by McClelland and thereby highlighting different factors and traits of personality in relation to motivation.

I hope readers will like the contents of the current issue. I thank all the scholars and supporting personnel who made this publication a reality and request everybody to help continue this publication uninterrupted.

Dr. Sulbha S. Raorane.

Editor

# STUDY ON IMPACT OF SOCIAL MEDIA ON BUYING DECISION OF CONSUMER GOODS

\*Mr. Darshan B. Pagar

#### **ABSTRACT**

India is the 2<sup>nd</sup> largest footwear producer in the world, with 9 percent of global annual production which comes to 22 billion pairs. Of this 90 percent are domestic internal consumers. The Indian Shoe market is worth of Rs. 30,000 crores to Rs. 40,000 crores. Consumers today have begun to increasinaly purchase services from Internet and also other tools from web. The reason for this fact can be understood due to the fast aged development of technology and due to development of channels of communication. Amidst these developments, one of the few important tools is social media. Along with this, access to information related to products and services has increased on a large scale. This can be assigned to social media. Thus, it's clear that in today's era popular social networks viz. social media elements like Facebook (FB), Twitter, Instagram (Insta), Snapchat have become great consumer markets. Therefore, many companies these days have pages on social networks to complement information held about products, held by the feedback of consumers about products and tend to relate more to a specific company after reading different reviews. This study aims to know how social media affects our lives in terms of activities related to products viz. shoes, and also to determine the consequences of social media networks on consumers' buying behaviour. It is to be perused that study considered a set of 101 youthful customers who fall amidst the age (in years) criteria of 18-25 and along with that fact use social media networks (having an account). Random sampling method was used to finalise the study group as study required only those customers who have purchased a pair of shoes during the last year i.e. from Jan 2017 onwards. Also, customers were selected only from two social networking platforms viz. Facebook and Instagram. Questionnaire was delivered to the respondents through Facebook, Instagram and WhatsApp to get the required and essential data to carry out the study; the questionnaire for study was developed by researcher. For details of the questionnaire: 1st part of it included Questions related to physical activity and social media usage whereas the second part had questions related to demographic information of young people. Microsoft Excel was also used as a tool for analysis of the numerical and statistical data which was obtained from the responses of different users of social media. The outcome of the survey indicates that less than 70% of consumers referred social media before purchasing their latest shoes. These customers on an average do less than three types of activities related to products on social media. Customers across different education backgrounds use social media differently but male and female customers do not show much difference in their usage of social media before making a purchase. Customers treat shoes as high involvement category irrespective of the price point as they readily invest time in making the right purchase.

<sup>\*</sup> Assistant Professor - Marketing, MVM Degree College of Commerce & Science, Mumbai

## Introduction

With the advent of Web 2.0 latest technologies in communication have increased which not only provide sharing on media sharing but also offer discussion for the users. People use such platforms largely for creating environments and thus have the privilege to share ideas, information about products and also about services. Due to all these mentioned reasons, social media is proudly placed as one of the favoured internet social method and is one of the highly effective significant communication instruments today.

Social media is springing up rapidly and is a vital part of almost every big organization today. Throughout the history, since television has been invented, social media's use has become one of the fastest arising activities. This is true all over the world. And it has been used as a preferred medium of communication in the last few years. Within a time-span of almost 30 years, radio as a medium reached 50 million (mn) listeners, whereas if television's reach is considered, it took mere 13 years for to garner the reach of 50 mn viewers. Amazingly, the internet has reached 50 mn users in a very short span of 4 years. More-so-ever, Facebook (fb) reached that figure in just one and half years.

Facebook was conceptualised to be used only by the students at Harvard University in 2004. In 2009 Facebook (FB) had an estimate of around 100 million users. By ending of year 2010, this statistic changed positively to around 500 million users all over the world. Eventually, Facebook's has garnered a subscriber base of 2 billion members as of Q4 of 2017 (techcrunch.com).

While 50 percent and 67.6 percent of internet users were actually using different types of social networks in the year 2012 and year 2013 in that order; another logical conclusion is that this rate will rise in near future. So much so that exclusion of very high numbers from a large country like China, Facebook in the role of a social network, will easily continue to have more than a Billion members involved with it.

The most prominent social networks worldwide are Facebook, Instagram, Badoo, Snapchat, Twitter, WhatsApp, WeChat, etc. Globally, each month, approximately 800 mn users visit YouTube for streaming videos, share their comments and every 60 seconds, more than 7000 videos are getting shared via another network viz. Twitter- which has been mostly

used in countries like United States of America, Brazil and also Japan. Twitter, notably is one of the sombre sharing platforms out there.

The difference between traditional media and for that matter social media is that social media reaches a far wider audience and that too at a much rapid pace. The 2-word term 'social media' itself can be defined using the reference of social platforms which help other users to share their or others' information, experiences, interests, stories, ideas, and also to interact, via the internet or mobile systems. The speciality of these social platforms is that they have applications like chat rooms, invites sharing, discussion forums, events update, location sharing, live videos, photo sharing, individual vs group post sharing, social status networks, web blogs, podcasts, etc.

In this newly created order of today, created mostly by the current new generation media and new generation communication-using latest technologies, businesses have to start using their blending systems and adapting programs on social media so that they try to meet the needs of their customers as well as their organization. In terms of Shoe purchase, it is one of the important fields for businesses as the customers can share content with each other.

Due to the emergence of global competitiveness, many MNCs and transnational companies like Nike, Adidas, Reebok have dared, for that matter surpassed the so called existing conventional boundaries which included only purchase, sale or other related monetary transactions. And therefore, as a result of this, the boundaries which encapsulated national markets have become blur and subsequently have become indistinct and eventually diminish. A new world order which has shed off national and adopted global vision now requires the companies to carry out their business on a global level and not just limited to single country e.g. US companies and Chinese companies dealing with all other countries in the world. For being capable of this, these companies had to continuously use their core skills and information technology prudently. Hence, social media altogether has evolved to be an extremely important tool when it comes to efficacious spreading of business information like launch of new shoes.

Social media has become a system where nearly everyone who uses the Internet enters either directly or indirectly. To be a part of this market space and to be in

this zone has proved to be essential and dire for individual customers and at the same time for businesses. And it has been like this due to the basic necessity that companies will be there where the target mass is spending its time. For being in this target mass's space companies have to build a website for themselves, promote and communicate through ads on internet; they also have to conduct various activities which are in alignment with marketing on social media for their brands. The main reason for all of this is that. through social media one can directly have a personal one to one contact with the target customer. One of the key advantages of this contact and staying in touch is fortifying of brand perception and also making people brand dependent. Now, a company like Nike which is using social media prudently can with least effort know about the existing customers and about prospects and also at the same time understand their peculiarities and preferences for its upcoming variations.

This study aims to learn how social media is affecting the buying behaviour of young consumers in different purchase frequency, age groups and educational levels.

## **Need of the Study**

Man is a social animal and the act of shopping or buying things has always been linked to social type of experience. Social networking thus permits customers to interact with different people—and so many of these people are actually unknown strangers at the point of time when one talks to them online for the 1st time.

Historically, retailers have exploited this need and mass retailers have benefited from scale – as they have served as a 'one-stop shop' for many product needs.

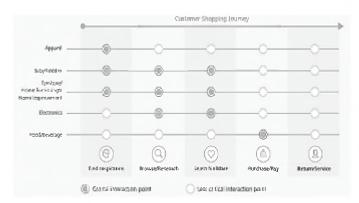


Figure: The moments that matter by category (source: Deloitte Digital)

If we see at the diagram above and assume shoes to be in the category of apparels, inspiration is needed by the customers wanting to purchase shoes. We know that there is a rapid increase in the possible ways through which consumers can search for inspiration to buy products. There is also increase in the number of ways through which consumers can surf, check, buy, and even offer their purchased products. These days there are different types of digital interactions in which almost all of the content varies with respect to product category. Also, the digital usage data used across different categories depicts, directionally, where normal retailers must increase their concentration on different category-specific digital strategies & investments.

Inspiration for making any purchase as a point in the digital journey is thought to be very important if large number of consumers use social media to buy products.

On the similar lines, the inspiration step is gauged to be very important one if consumers are not much aware of the products and thus will not know where and how to start with and also, they hardly know where they want to make a purchase. Only about thirty percent of customers have got their starting inspiration from a commercial retailer or brand's ad or communication. This is primarily the motive of the researcher, to understand how brand like Nike will be able to inspire or motivate to buy its latest product viz. Nike Epic React Flyknit which is based on React technology but is more advanced than React.

We know social media is growing much more rapidly as compared to other communication programs. Hence, its significance has risen and development has become challenging.

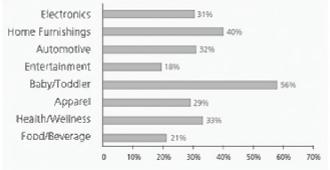


Figure: Percentage % of consumers that already use social media during their shopping by category (Source: Deloitte Digital)

It is time and again predicted that in immediate future, social media will be an important part of internet use. Across the browse / research and select / validate steps, consumers who do shopping for babies' product, electronics, furniture and house decoration products are intense users of digital content. Largely, customers in the above-mentioned categories do internet searches using search engines (google, bling, yahoo, etc.) and browse retailer sites (nike.com, puma.com, etc.) and apps more often than the average online shopper. In addition, while two-thirds (2/3rds) i.e. 67% of frequent shoppers are deliberately using product reviews for guidance, usage rates will be precisely high in the above mentioned three categories, with around 80 percent of shoppers consulting reviews prior to making a purchase decision.

Social media also gives a chance for all businesses to engross future customers and also interact with them; it promotes a heightened level of closeness with consumers and helps in creating very significant relationship with future customers.

In few of the bygone years it can be noticed that companies are using online network to exert great influence. Effectiveness of social media is at a greater level of efficacy when it is compared with all other conventional communication tools. This has given a hint to the industry leaders to express that businesses must participate in social media like Facebook, Snapchat, Instagram, Twitter, etc. so as to be successful in virtual world.

Communication of a specific brand or company with the users help in creating a favourable image of the company. It also creates a less favourable image of other users who share information and reviews about the product or purchase. The perceived risk involved in purchasing and the money involved in the transaction makes the prospect and also the existing customer to cerebrate more on quality aspect and also utility aspect of the to-be considered product. It is worth noticing that relationship between aspects like brand on one hand and consumer on the other is considered to be very important for a business as it helps evolve prospects into loyalty. Thus, companies should invest in this.

Shappers are 29 percent more illkely to make a purchase the same day when they use social media to he'p shap either belove or during their hip 90 percent us, 70 percent conversion).

Consumers who use social media during their shopping process are =4x more likely than non-users to spend more or significantly more on purchases as a result of a digital shopping experience.\*

Bespondents who consider themselves somewhat or very influenced by social media are 6x more likely to spendiston fixandy more than non-users (42 percent vs. 7 percent) due to their digital shopping experiences."

Figure: The impact of social media (Source: Deloitte Digital)

Since the debut of Adidas Ultra Boost in 2014, the shoe has been casual and ultra-comfortable running sneakers which most of the people really seem to want to wear right now. Adidas essentially shattered the standard for just how bouncy an everyday sneaker could be, and thanks to their sock-like upper also as it ushered in a new era of sneakers with laces as barely more than an aesthetic addition.

Nike, fresh off a year that saw them swing for the fences to reassert their dominance over a surging Adidas, has just delivered another major threat to the Ultra Boost's reign—the Nike Epic React Flyknit. This Epic React Flyknit, as its name implies, comes with a full Flyknit upper, which is designed to be supportive in the right places as opposed to everywhere, like the midfoot and heel which also has a plastic heel cup. But the real star of the show here is Nike's new React foam, a proprietary tech that's an improvement on Nike's previous soles, like Lunarlon. According to Nike, React delivers 13 percent greater energy return than Nike's latest generation of Nike Lunarlon foam. But even after months of launching Nike React or Flyknit has not been successful to create hype.

For all the above-mentioned reasons, it is always valuable to properly study how the target consumers are using social media and how are they conducting themselves while purchasing a product.

## Literature Review and Research Background

As internet's usage has increased, the usage rate of social media has also increased (Dryer, 2010). Social media consequently has gained more importance as it provides space to people where they can share their ideas and suggestions. In addition to that, ideas of a user, his / her experiences and thoughts about brands or companies are available for other users (Van, 2006; Sonia, 2007). Consumers can today share their ideas

with others in discussion forums- provided by different social networks. The main aim here is helping, information sharing and suggestions before finally purchasing a tangible product or service. A research study titled, 'Social Networking Sites as Advertisement Environment' carried out by researcher Haciefendioğlu (2011) discovered that the opinions of our friends about our activities on social media affect customers while they are deciding to buy a product. This can direct customers to select a specific product or company (Haciefendioğlu, 2011).

Saha, Dey, and Bhattacharaya (2010) applied marketing mix for product and used it to classify and understand significance of shoe attributes in Kolkata, India. It was observed that quality, durability, right pricing, after sale service, and convenience provided through retail shop's location are considered by shoe manufacturing companies. Consumers, societies, and companies have changed due to wide spread access of information, better social networking and enhanced communication abilities. This has been made possible with the help of internet and virtual communities (Kuruk, 2007).

To share knowledge about a specific product, service, or brand and to establish contact with other consumers (seen as objective information sources), internet users are using methods like blogs, podcasts, social networks, bulletin boards, and wikis. (Kozinets, 2002). Social media is hugely popular and has reformed marketing activities like advertising and promotion. (Hanna, Rohn and Crittenden, 2011). All the stages in consumer decision making process are influenced by social media such as dissatisfaction and / or behaviour about a product or brand. (Mangold and Faulds, 2009). Deloitte Touché' USA observed in its study that 62% of USA consumers do go through other consumer's created online reviews and that 98% of these readers find the stuff reliable; also, almost 80% of the reading consumers expressed that going through these reviews has affected their purchase intentions. (Pookulangaran, et al., 2011). Even very meagre nonpositive information from very less content or messages can have significant impact on consumer attitudes (Schlosser, 2005). Palmer (1996) has given the research community an observation that humans have a subdued need for emotional bonding with highinvolvement products that the customers buy.

Upholding connectivity within different persons who in turn use any social media platform has same benefits as gained from initiating and maintaining touch with other people in a way similar to giving social support, friendship, and intimacy. (Utpal et al., 2004). These benefits help in communication that too in specific peer groups (Ahuja and Galvin 2003).

Social media websites give individual consumers their own voice, access to product information and facilitates buying decisions (Kozinets et al., 2010). Culture affects customers' social media usage and affects online purchase intentions. (Pookulangaran et al., 2011) As social media helps in getting the brands connected directly to the final-consumers, and that too in a very meagre time and very little cost (Kaplan and Haenlein, 2010), it also puts greater emphasis on consumer way of looking, perception and behaviour (Williams and Cothrell, 2000). Also, it has always been a centre of gaze in different type of industries in the last few years.

## **Research Aim and Objectives**

At first, use of the Internet in marketing research was only a new source of information. Now the research can be done directly through surveys, without even meeting the respondent face to face.

Due to changes in internet and latest online trends, companies should use any new opportunity to improve sales, marketing and customer loyalty. Technology has given power to investigate products, criticize them equally, and more. Companies have their own pages on social networks to supplement information about products. Consumers have the propensity to relate with a company increasingly after reading reviews and comments of the consumers who have already purchased these products. Moreover, social media gives consumers power to influence other buyers through reviews.

Consumers research before buying a new product of which they don't have much idea of. Consumers also read review of others before purchasing product. Many online buyers consider the social sites as being valuable and a reliable source for researching products and services.

The current study is done with an aim to note whether any of the social platforms in any possible way try and mould their decisions whether or not consumers purchase from online.

The present research aims at 6 objectives:

- To understand the percent of customers using social media before making the purchase.
- To understand the activities done by the customers on social media.
- 3. To understand impact of educational background on social media activities.
- 4. To understand whether gender affects the activities done before purchase on social media.
- To understand whether price of shoes affects customers to move towards social media for making a purchase.

## Research Methodology

The research included 105 youthful customers who fall amidst the age group of 18-25 years and along with that fact use social media platforms (having an account in that platform) viz. Facebook and Instagram. Random sampling method was used to finalise the study group as only those customers were delivered the questionnaire who had accounts on Facebook and Instagram. Out of that 105 respondents, only those

responses were taken into account who had purchased one or more pair of shoes during last year i.e. from January 2017 onwards. On this account 4 responses were rejected and thus final sample size of 101 responses was collected. Questionnaire was delivered to the respondents through Facebook, Instagram and WhatsApp to get the required and essential data to carry out the study; the questionnaire for study was developed by researcher. For details of the questionnaire: 1st part of it included Questions related to physical activity and social media usage whereas the second part had questions related to demographic information of young people. Microsoft excel was used to apply appropriate statistical techniques. Statistical tests which made the analysis of the answers related to social media account holders worth were t-test, p-test, chi-square, anova.

## **Hypothesis**

## Hypothesis 1: Using p-test

1a. H<sub>o</sub>: Percentage of customers referring to social media before purchase is more than or equal to 70%

1b. H<sub>a</sub>:Less than 70% of respondents referred social media before making the purchase

 $H_a: p \ge 70\%$   $H_a: p < 70\%$ 

x =	61	Confidence level= 95%
n =	101	$\alpha$ =0.05
p' =	0.60	Z <sub>cr</sub> = NORM.S.INV (95%) = 1.645
p =	0.7	
q =	0.3	$Z_{obs} = (p' - p) / \sqrt{(p.q/n)} = -2.11$
p'-p=	-0.10	$P = NORM.S. DIST(Z_{ob}, TRUE)$
p. q	0.21	P= 0.02
sqrt(n)	10.05	Since, P value < α; Reject Null

This means we accept the alternate hypothesis, which implies that less than 70% of consumers referred social media before purchasing their latest shoes.

## Hypothesis 2: Using t-test

 $2a. H_{o}$ : Average no of activities done on social media for shoe purchase is more than or equal to 3

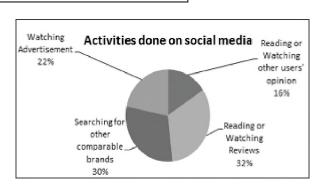
2b.  $H_a$ : Average no of activities done on social media for shoe purchase is less than 3

 $H_a: \mu \geq 3$   $H_a: \mu < 3Column 1$ 

Column1	I		t-Test: Paired Two Sar	ans	
Mean	1,36066	X <sup>1</sup>		Variable 1	Variable 2
Standard Error	0.10463		Mean	1.36066	1
Median	]		Variance	0.66776	0
Mode	1		Observations	61	61
Standard Deviation	0.81717	S	Pearson Correlation		
Sample Variance	0.66776		Hypothesized Mean Difference	0	
Kurtosis	2.99043		Df	60	
Skewness	2.07753		t Stat	3.44705	
Range	3		P(T<=t) one-tail	0.00052	
Minimum	1		t Critical one-tail	1.67065	
Maximum	4		P(T≤=t) two-tail	0.00104	
Sum	83		t Critical two-tail	2.0003	
Count	61	п			
Confidence Level					
(95.0%)	0.20929				

Contidence = 9:	Confidence = 95%					
α =	0.05					
a = 1 - alpha	0.95					
t <sub>crit</sub> =	2.0003 (from t-test excel analysis)					
t <sub>ob</sub> =	$(x' - \mu) / (\frac{s}{\sqrt{n}}) = -15.67$					
a =	= T.DIST (x.df, cumulative) = 0.00					
Since, a value less than $\alpha$ ; reject the null and accept the alternate hypothesis						

Thus, average number of activities done on social media for shoe purchase is less than 3. Also, the data which is collected from the survey suggests that these activities are Reading or Watching Reviews and Searching for other comparable brands.



## **Hypothesis 3:** Using Anova: Single Factor

3a. H<sub>o</sub>: Average number of social media activities done is same across education backgrounds.

3b. H<sub>a</sub>: Average number of social media activities done is not same across education backgrounds.

$$H_o: \mu_1 = \mu_2 = \mu_3 H_a: \mu_1 \neq \mu_2 \neq \mu_3$$

Anova: Single Factor

SUMMARY		alpha	= 0.05	
Groups	Count	Sum	Average	Variance
12 <sup>th</sup>	17	29	1.70588	0.72
Bachelors	34	38	1.11765	0.23
Masters	36	44	1,22222	0.58

#### **ANOVA**

Source of Variation	SS	dt	MS	F	P-va/ue	F crit
Between Groups	4.09826	2	2.04913	4.38	0.02	3.105
Within Groups	39.281	84	0.46763			
Total	43.3793	86	_			

Since, p value less than  $\alpha$ ; reject the null and accept the alternate hypothesis

Thus, there is significant statistical difference in the number of activities done across education background. Average number of social media activities done is not same across education backgrounds.

## **Hypothesis 4:** Using Anova: Single Factor

4a. H<sub>a</sub>: Average number of social media activities done is same across gender

4b. H<sub>a</sub>: Average number of social media activities done is not same across gender

$$H_0: \mu_1 = \mu_2 H_0: \mu_1 \neq \mu_2$$

Anova: Single Factor alpha = 0.05

**SUMMARY** 

Groups	Count	Sum	Average	Variance
male	35	47	1.34286	0.53
female	26	36	1.38462	0.89

## ANOVA

Source of Variation	SS	dŧ	MS	F	P-value	F crit
Between Groups	0.02601	1	0.02601	0.04	0.85	4.003982503
Within Groups	40.0396	59	0.67864			
Total	40.0656	60				

Since, p value is greater than  $\alpha$ ; accept the null hypothesis

Thus, there is no significant statistical difference in the no. social media activities done across gender. Male and female customers use social media to engage themselves in equal number of activities.

## **Hypothesis 5:**

5a. H<sub>o</sub>: Reference to social media before shoes purchase is independent of gender.

5b. H<sub>a</sub>: Reference to social media before shoes purchase is not independent of gender,

SM= social media

Observed		Gender		Expected		Gender
	Male	Female			Male	Female
Refer SM	35	26	Refer SM	34	27	61
		1	Do not refer	22	18	40
Do not refer SM	21	19	SM			

p = CHITEST (actual range, expected range) = 0.6296

 $\alpha = 0.05$ 

Since, p value greater than  $\alpha$ , we accept the null. Thus, Reference to social media before shoes purchase is independent of gender. This implies that Male and female customers refer to social media equally.

## Hypothesis 6:

6a. H<sub>a</sub>: Reference to social media before shoes purchase is independent of shoe price

6b. H<sub>a</sub>: Reference to social media before shoes purchase is not independent of shoe price

SM= social media

Observed	price of shoc			
	= Rs.1.000	Rs.1,000 - Rs.3,000	Rs.3,000 - Rs.5,000	Rs.5.000 - Rs.10.000
Refer SM	14	25	17	5
Do not refer SM	10	17	11	2

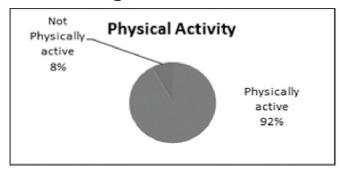
Expected	price of shoo			
	= Rs.1.000	Rs.1.000 - Rs.3.000	Rs.3,000 - Rs.5,000	Rs.5,000 - Rs.10,000
Refer SM	14	25	17	4
Do not refer SM	10	17	11	3

p = CHI-TEST (actual range, expected range) = 0.9375

 $\alpha = 0.05$ 

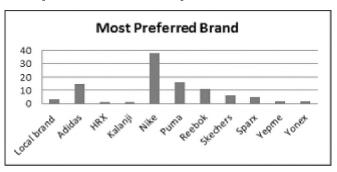
Since, p value greater than  $\alpha$ , we accept the null. Thus, Reference to social media before shoes purchase is independent of price of shoes purchased.

## **Data Findings**



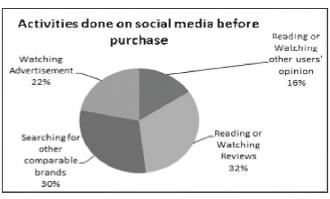
Indian customer is becoming more health conscious and is active physically. The activity which customer does is walk/run/jog/gym workout/dance/outdoor sport / court sport / cycle. Irrespective of physical activity, entire population of customers have sports shoes. The brands range from local to multinational viz. Adidas, Asics, Skechers, Nike, etc.

## Competition and most preferred brand:



As we can see from the bar graph, Nike is the most preferred brand. It is followed by a close competition between Puma, Adidas and then comes Reebok, Skechers, followed by others. Nike has come up with New Epic React technology to beat its next rival Adidas which has a star product-Ultra boost, in the foam sole segment, which gives extra comfort to the runners.

## Activities done on social media before purchase:



## **Implications**

Stakes are high in the sports shoe category. With Sparx investing heavily and inviting Akshay Kumar as the celebrity endorser, fight is going to be fierce.

Nike, has freshly launched Nike Epic React Flyknit to challenge Adidas's Ultra Boost.

The Epic React Flyknit, as its name implies, comes with a full Flyknit upper, which is designed to be supportive in the right places as opposed to everywhere, like the midfoot and heel which also has a plastic heel cup. But the real star of the show here is Nike's new React foam, a proprietary tech that's an improvement on Nike's previous soles, like Lunarlon. According to Nike, React delivers 13 percent greater energy return than Nike's latest generation of Nike Lunarlon foam.

Social media has lots of scope as about 70% of consumers referred social media before purchasing their latest shoes. Good thing for social media is customers are engaging themselves with the brands and helping the companies to increase customer touch points. These touch points can be increased as Company need not directly invest to come across customer. Social media gives brands the opportunity as reviewers and opinion leaders can make the job easier for them. Thus, average number of activities done on social media for shoe purchase is less than 3. Also, the data which is collected from the survey suggests that these activities are Reading or Watching Reviews and Searching for other comparable brands.

As research suggests, with growing education level, activity level of the customer increases on social media. This is good news for the brands as these educated customers have propensity to spend more and can be valuable prospects for the company's products. At the same time companies need to woo the young teen and adolescent customers who are passing out from 12<sup>th</sup> standard and are on the verge of graduation.

Reference to social media before shoes purchase is independent of price of shoes purchased. This implies that customers do consider shoes as a high involvement product category and are ready to invest time in the purchase; be it a less than Rs. 1,000 shoes or shoes near the price tag of Rs. 10,000.

It seems that gender equality is on a high when it comes to usage of social media before making a shoe

purchase. Both Male and female customers use social media equally before making an actual purchase and they also perform equal number of activities. Prominent among these activities are reading or watching reviews about the product they are going to purchase and searching for other comparable brands. Here lies the challenge for Nike's Epic React shoes which is competing with an already established Ultra boost from Adidas.

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## Report

Navigating the New Digital Divide - Deloitte Digital -

# AN ANALYSIS OF THE ANNOUNCEMENT OF DEMONETIZATION ON THE STOCK MARKET RETURNS

## \* Mr. Akhilesh Yadav

#### **ABSTRACT**

On the eve of 8<sup>th</sup> Nov 2016 Indian Prime Minister Narendra Modi in his address to the nation announced his decision to demonetize the 500 and 1000 Rs notes from the midnight of 9<sup>th</sup> November 2016. By this unexpected and uncertain decision the government of India had pulled 86% of the money supply out of the circulation leading to liquidity crunch. The impact of Demonetization had been felt by almost every sector of the economy. Different sectors responded in different ways to this decision and stock market on the very next day ended in red. This present paper attempts to analyze the effect of demonetization on market return by analyzing 103 day i.e. 5 months trading data before and after the demonetization day using Event analysis methodology and student's t test.

## Introduction

Demonetisation is government policy decision to curb black money, in which certain currency unit ceases to be recognized as legal tender and is replaced by new currency of the same or different denominations. On the 8<sup>th</sup> Nov 2016 at 8.00pm the honorable Prime minister of India, Mr. Narendra Modi had taken an unexpected policy decision to demonetize INR 500 and INR 1000 notes from the midnight of 9<sup>th</sup> November 2016. So old currency notes of INR 500 and INR 100 loses its value and it is not more than a piece of a paper from 9<sup>th</sup> November onwards. This decision by the government of India was taken to curb ongoing corruption, terrorist financing and black money from the economy.

This decision of the government had affected all the strata of society. As per RBI report 86% of money supply was taken out of the system. This has affected normal life of ordinary citizens to a great extent. All media houses covered the impact of this decision on lives of Indian citizen and foreign citizens who had come to India for some work or for leisure purpose. People in rural area and customers of small mom n pop

store mostly use cash to purchase materials for their daily use. Because of demonetization rural India and unorganized sector was most affected. Many news channels reported how important events like marriage functions were affected. In certain cases people committing suicide because of demonetisation had also been reported. In metro cities footfall in movie halls, and shopping malls was reported to have dropped by significant number because people were not having money to purchase things. In all the demonetisation has affected the lives of all sect of people be it rich or poor.

From business perspective the unorganized sector and MSMEs sector was reportedly the most affected sector. Because in these types of businesses majority of transaction is done in cash. As per Economic Times report (29<sup>th</sup> Jan 2016), demonetisation had led to fall in sale of two wheelers, luxury and commercial vehicles. Footfalls and new bookings were reported to fall by 50%. Long serpentine queues of people in front of the banks were seen to exchange the old currency notes by new ones. The hospitality sector, restaurants, movie halls, had reported significant drop in the footfall due to demonetisation.

<sup>\*</sup>Assistant Professor- SFIMAR

To the labour class and dealers of various products who deal mostly in cash, demonetisation brought good news as their pending dues were cleared by their masters but in old currency notes. In certain cases not only the 6 months old pending salaries of employees were cleared but also salaries were paid in advance. The banks reported huge increase in cash deposits and online transactions, e-payment and Mobile-wallets companies like Paytm, Mobikwik, PayUmoney, Freecharge reported great increase in the number of transaction being done after demonetisation. Many telecom and banking companies like Vodafone, Airtel, Idea, Reliance Jio, SBI, HDFC, and ICICI launched their own mobile payment apps.

So in all demonetisation has impacted all the sectors of the society. Some had positive and some had negative impact on them. But majority people of India were happy as they had taken it in a way that it is going to be beneficial for overall economy and it will bring down corruption and eliminate black money and fake currency out of the economy.

## **Need for the Study**

To understand the need and significance of this study it is important to understand the impact of demonetisation on different sectors of economy. As per the Economic Times (New Delhi, Jan 2017) report the following are the impacts of the demonetisation on various industries.

**Automobile:** In the month of November sales of utility vehicles was expected to be down by 40-50%, commercial vehicles 50-60% and two wheelers by 20-40%. To lure the customers and increase sales many automobile dealers and manufacturers and finance companies had started offering Auto loans at reduced rate of interest and zero down payments to increase the sales.

Hospitality and Tourism: Hospitality and tourism sector had biggest lost during the period of demonetisation. Many tour & travel companies had reported decrease in new bookings and last minute cancellation. The positive outcome was that many Indian tourist started considering visit to national monuments instead of preferring to visit out of India. This has led to boost in the income of the people dependents tour n travel business of Indian monuments. The other positive was that most of the

people started paying using credit cards and digital mode of payments.

**FMCG:** The sales dropped by 30%-40% during the first two weeks of demonetisation. Due to demonetisation the rural buying power has reduced. The essential items like toothpaste and soap showed no decrease in sales but the goods like body cream, high end shampoos, chocolates, products designed especially for niche market has shown significant decrease in the sales. The Positive for the FMCG industry was that their old long pending dues were cleared in the form of old currency notes.

**Bank and NBFC:** Bank and NBFC were biggest gainers from demonetisation as they had reported significant increase in cash deposit because of which the total money supply had increased in the organized and official sector. Banks had received the deposits in excess of Rs 6 trillion. However it was expected that this money will not be there in these account for very long, plus flushed with cash banks are under pressure to decrease their deposit and lending rate which in turn will affect the profitability of the banks. NBFC and Microfinance Institutions (MFIs) are under great pressure as their collection cycles has got disturbed after Nov 8, 2016.

**E-commerce:** The number of clicks on the e-commerce sites like Snapdeal, Flipkart, Amazon, has decreased by significant amount. The positive outcome was that the number of on cash deliveries has decreased and the online payments has increased 10 folds as per the Amazon India spokesperson.

<u>Luxury market</u> has shown large increase in the sale in the week after demonetisation but the long term sales are depended on the increase in the disposable income.

**Real estate** prices were expected to decrease due to demonetisation.

So overall it can be seen that demonetisation has affected all the sectors of the economy. Therefore in this empirical study the attempt is being made to find out how demonetisation has impacted the share market returns of the country. By December 5 the domestic equity market has reportedly slipped by 5%. CRISIL and CARE had cut their GDP projections and by 100 basis points and has also decreased their India ratings. Among all these happening it becomes very necessary and important to study the capital market which is

supposed to be indicator of economic condition of the country and barometer to indicate growth of the economy.

## Literature Review

Event studies measure how a particular event affects the stock market and tries to find out the relationship between an event and market returns. Event study methodology for the first time was explained by James Dolley (1933) in his finance literature.

**Sathyanarayana S. and Gargesha S. (2016)** in their study on impact of Brexit referendum on Indian stock market found significant impact on Nifty50 and BSE Sensex on the day of event.

**Raj, P. & Pandikumar, M. P. (2017)** in their study on Historical volatility of NIFTY returns concluded that at macro level Nifty intra—day historical volatility was not impacted by demonetisation and further suggested that "Nifty 50 is best hedged index." He further explained that downfall in one sector was absorbed by gain in other sector because of which there was no significant change in the nifty intra-day volatility.

**Sathyanarayana S. and Gargesha S. (2017)** in their study on impact of policy announcement on the market volatility explained that there is significant impact of announcement of demonetization on the historical volatility of BSE Sensex, BSE 100 and Nifty fifty indices.

**Gupta, S. (2017)** in his study on demonetisation concluded that during demonetisation E-wallet companies, the startups like Paytm, Freecharge etc. has benefitted the most.

**Joshi, H. (2018)** in his study of new product launch and stock returns during demonetisation period using cross-sectional multivariate analysis has "suggested that a new product launch has a significant positive impact on quarterly EPS growth rate, and stock returns in the long run as well as in the short run. Also, in the crisis period of demonetization, where all the firms across various industries registered negative growth in EPS and hugely negative stock returns, new product launch worked as a savior for the firm."

## **Objectives**

Effect of Demonetisation on the capital market returns have been studied on basis of the following Objective:

- 1. To analyse the effect of Demonetisation on the Nifty Returns.
- 2. To analyse the effect of the Demonetisation on the returns of different sector indices.

## **Hypothesis**

Ho<sub>1</sub>: There is no significant impact of demonetization on Nifty returns.

Ha<sub>1</sub>. There is significant impact of demonetization on Nifty returns

Ho<sub>2</sub>: There is no significant impact of demonetization on Nifty auto returns.

Ha<sub>2</sub>: There is significant impact of demonetization on Nifty auto returns

Ho<sub>3</sub>: There is no significant impact of demonetization on Nifty Bank returns.

Ha<sub>3</sub>: There is significant impact of demonetization on Nifty Bank returns

Ho<sub>4</sub>: There is no significant impact of demonetization on Nifty Fin services returns.

 $Ha_4$ . There is significant impact of demonetization on Nifty Fin services returns

 $Ho_5$ : There is no significant impact of demonetization on Nifty FMCG returns.

Ha<sub>5.</sub> There is significant impact of demonetization on Nifty FMCG returns

 $Ho_{\delta}$ : There is no significant impact of demonetization on Nifty IT returns.

 $Ha_{\delta}$ . There is significant impact of demonetization on Nifty IT returns

 $Ho_7$ : There is no significant impact of demonetization on Nifty Media returns.

Ha<sub>7:</sub> There is significant impact of demonetization on Nifty Media returns

Ho<sub>8</sub>: There is no significant impact of demonetization on Nifty Metal returns.

 $Ha_{\text{BL}}$  There is significant impact of demonetization on Nifty Metal returns

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Ho<sub>2</sub>: There is no significant impact of demonetization on Nifty Pharma returns.

Ha<sub>9:</sub> There is significant impact of demonetization on Nifty Pharma returns

 $Ho_{10}$ : There is no significant impact of demonetization on Nifty PSU Bank returns.

Ha<sub>10:</sub> There is significant impact of demonetization on Nifty PSU Bank returns

Ho<sub>11</sub>: There is no significant impact of demonetization on Nifty PVT Bank returns.

Ha<sub>11</sub>. There is significant impact of demonetization on Nifty PVT Bank returns

Ho<sub>12</sub>: There is no significant impact of demonetization on Nifty Realty returns.

Ha<sub>12</sub>, There is significant impact of demonetization on Nifty Realty returns

## Research Methodology

**Data Type and source:** Secondary data of dailywise Open, High, Low, and Close of Nifty 50, 50 shares comprising Nifty 50 and Nifty sectorial Indices were taken from national stock exchange website (nseindia.com).

**Time period:** Time horizon for this study is 100 days trading data before and after the date of demonetization. The study period is from 8<sup>th</sup> June 2016 to 7<sup>th</sup> April 2017. The selection of this time zone is because after demonetization the efforts of government to remonetize the economy has resulted to currency – to - GDP- ratio of about 9% by March end. So by the first week of April 2017 in terms of money supply the economy came back to its earlier position before the demonetization.

**Software used:** MS excel 2013 and SPSS 17.0 has been used for the data analysis.

**Analysis Method:** To analyze the data following methodology was used.

Daily Closing prices of the Nifty50, and Nifty Sector Indices i.e. Nifty Auto, Nifty Energy, Nifty Fin services, Nifty FMCG, Nifty IT, Nifty Media, Nifty Metal, Nifty Pharma, Nifty PSU bank, Nifty PVT Bank, Nifty Realty and all the 50 stocks which are part of Nifty 50 Index were taken from NSE website. To find the impact of

demonetization on the market returns daily closing price data of different indices and stocks comprising Nifty 50 index were analysed in two phases.

Step 1: daily returns were calculated using the formula

$$R_{(l,t)} = (C_t - C_{t-1}) / C_t$$

Where  $C_T$  is closing price of the stock on the 't'h day and  $C_{+1}$  is closing price of the stock on one day previous to 't'h day.

Step 2: Calculate the  $E_{(r)}$  of each index and Scrip using the below mentioned formula

$$\mathsf{E}_{\scriptscriptstyle (t)\;(i,\;t)} = \boldsymbol{\alpha}_{\scriptscriptstyle t} + \boldsymbol{\beta}_{\scriptscriptstyle t} \times \mathsf{R}_{\scriptscriptstyle \mathsf{m},t}$$

Where  $\alpha_t$  = intercept of the stock return with market return i.e. Nifty 50 returns.

 $\beta_t$  = Slope of the stock return with market return i.e. Nifty 50 returns.

 $R_m = Nifty 50 daily returns$ 

Step 3: Calculate the daily abnormal return of each index using the formula

$$A_{(i,t)} = R_{(i,t)} - E_{(i)(i,t)}$$

Step 4: Apply the one sample T test on the abnormal daily returns.

One sample t- value = 
$$\frac{A_{(l, t)}}{\sigma_{(t, pre)}}$$

In phase- II, Daily returns of Nifty 50 and Nifty sector indices was divided in different time zone i.e. 4 months daily returns before after event day, 3 months daily returns before after event day, 1 months daily returns before after event day and 1 week daily returns before after event day was calculated and T test was applied on it.

## **Testing of Hypothesis**

Event study methodology has been used to arrive the following result:

Results of One sample t test performed for Event Analysis:

		One-Sample Test		*			
	Test Value = 0						
Dates	Time line in days	t	df	Sig. (2-tailed)			
5-Apr-17	101	.616	49	.541			
3-Apr-17	100	-2.086	49	.042			
1-Mar-17	75	-2.099	49	.041			
8-Feb-17	64	2.142	49	.037			
7-Feb-17	63	974	49	.335			
5-Jan-17	41	2.404	49	.020			
2-Jan-17	38	2.968	49	.005			
26-Dec-16	33	-2.255	49	.029			
22-Nov-16	9	1.646	49	.106			
21-Nov-16	8	-1.095	49	.279			
18-Nov-16	7	1.283	49	.206			
17-Nov-16	6	.115	49	.909			
16-Nov-16	5	.521	49	.605			
15-Nov-16	4	-1.086	49	.283			
11-Nov-16	3	768	49	.446			
10-Nov-16	2	.870	49	.388			
9-Nov-16	1	202	49	.841			
8-Nov-16	0	575	49	.568			
7-Nov-16	-1	.576	49	.567			
4-Nov-16	-2	-1.374	49	.176			
3-Nov-16	-3	-1.110	49	.273			
2-Nov-16	-4	23	549	.815			
1-Nov-16	-5	.820	49	.416			

30-Oct-16	-6	1.157	49	.253
28-Oct-16	-7	.318	49	.752
27-Oct-16	-8	-2.917	49	.005
26-Oct-16	-9	.022	49	.983
25-Oct-16	-10	1.278	49	.207
24-Oct-16	-11	398	49	.693
21-Oct-16	-12	.361	49	.720
20-Oct-16	-13	130	49	.897
19-Oct-16	-14	2.651	49	.011
18-Oct-16	-15	-1.926	49	.060
17-Oct-16	-16	597	49	.553
14-Oct-16	-17	.477	49	.635
13-Oct-16	-18	.982	49	.331
10-Oct-16	-19	.339	49	.736
7-Oct-16	-20	119	49	.905
6-Oct-16	-21	1.050	49	.299
5-Oct-16	-22	1.307	49	.197
4-Oct-16	-23	.850	49	.399
3-Oct-16	-24	1.535	49	.131
30-Sep-16	-25	1.338	49	.187
29-Sep-16	-26	-2.036	49	.047
15-Sep-16	-36	-2.205	49	.032
14-Sep-16	-37	1.838	49	.072
12-Sep-16	-38	-2.764	49	.008
29-Jul-16	-67	2.442	49	.018
9-Jun-16	-102	2.233	49	.030
8-Jun-16	-103	.380	49	.706

After doing Event analysis it can be seen that p-value of 100<sup>th</sup> day, 75<sup>th</sup> day, 64<sup>th</sup> day, 41<sup>st</sup> day, 38<sup>th</sup> day, 33<sup>rd</sup> day came to be 0.042,0.041, 0.037, 0.020, 0.005 and 0.029 which are less than 5 per cent level of significance. It means there was significant change in the returns of Nifty 50 index and the shares comprising Nifty 50 index on these days. It can be concluded that the significant effect of event can be felt after 1 month onwards.

<u>Phase -2 Sector wise Analysis</u>

<u>Descriptive statistics prior to the demonetisation</u>

Particulars	Nifty50	Auto	Bank	Fin servs	FMCG	IT	Media	Metal	Pharma	PSU Bk	Pvt Bk	Realty
Mean	0.0003	0.0016	0.0010	0.0010	0.0001	-0.0010	0.0011	0.0026	-0,0009	0.0014	0.0009	-0.0002
Standard Emor	0.0008	0.0013	0.0011	0.0011	0.0009	0.0010	0.0016	0.0016	0.0012	0.0021	0.0011	0.0018
Median	0,0001	0.0022	0.0007	0.0003	-0.0005	-0.0005	0.0011	0.0028	-0.0004	-0.0002	0.0003	0.0005
Standard Deviation	0.0073	0.0114	0.0101	0.0098	0.0085	0.0094	0.0141	0.0146	0.0111	0.0189	0.0100	0.0166
Sample Variance	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0,0002	0.0001	0.0004	0.0001	0.0003
Kurtosis	0.7203	0.2738	0.4299	0.4995	1.0253	3.1399	1.7104	0.9256	3.1239	0.5080	0.5287	3.4692
Skewness	0.0957	-0.0186	0.0467	0.1494	0.0262	-0.6933	0.2677	-0.4324	-0.7952	0.2467	0.1239	-0.9601
Range	0.0361	0.0594	0.0512	0.0517	0.0472	0.0611	0.0867	0.0839	0.0727	0.1060	0.0529	0.1085
Minimum	-0.0176	-0.0277	-0.0239	-0.0241	-0.0245	-0.0396	-0.0335	-0.0466	-0.0466	-0.0474	-0.0235	-0.0698
Maximum	0.0185	0.0317	0.0273	0.0275	0.0227	0.0215	0.0532	0.0373	0.0261	0.0585	0.0294	0.0387

## **Descriptive statistics post demonetisation**

Particulars	Nifty 50	Auto	Bank	Fin Servs	FMCG	П	Media	Metal	Pharma	PSU Bk	Pvt Bk	Realty
Mean	0.0006	-0.0004	0.0008	0.0006	0.0003	0.0009	0.0008	0.0015	0.0000	0.0009	0.0006	0.0003
Standard Error	0.0009	0.0016	0.0012	0.0011	0.0012	0.0013	0.0015	0.0019	0.0012	0.0020	0.0012	0.0025
Median	8000.0	-0.0003	0.0007	0.0005	0.0004	0.0003	0.0011	-0.0001	-0.0003	0.0017	0.0004	0.0040
Standard Deviation	0.0082	0.0141	0.0110	0.0102	0.0107	0.0119	0.0141	0.0175	0.0113	0.0186	0.0111	0.0225
Sample Variance	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0003	0.0001	0.0003	0.0001	0.0005
Kurtosis	1.5383	2.6932	0.8713	0.9817	1.1714	2.9905	0.8759	1.6022	0.0913	6.5686	0.7698	8.4645
Skewness	-0.4740	-0.8541	0.2486	0.0159	-0.1966	0.1528	-0.7106	0.3336	0.3393	0.5532	-0.0920	-1.9995
Range	0.0456	0.0875	0.0620	0.0581	0.0645	0.0800	0.0709	0.1135	0.0563	0.1562	0.0605	0.1656
Minimum	-0.0269	-0.0515	-0.0270	-0.0286	-0.0341	-0.0325	-0.0430	-0.0507	-0.0263	-0.0689	-0.0331	-0.1160
Maximum	0.0187	0.0360	0.0349	0.0295	0.0304	0.0475	0.0279	0.0628	0.0300	0.0872	0.0274	0.0496

Below table indicates the p value of the student's t test generated after performing equal variance T test for the purpose of hypothesis testing. For doing t test daily returns of Nifty 50 and other Nifty Sector indices before and after the demonetization day was taken across different time zones mentioned in the table.

t-Test: Two-Sampl	Assuming Ed	gual Variances @	g confidence leve	el = 95 per cent
	,	4	3	/ o p o

Indices	P(T<≖t) two-tail						
	4 months	3 months	1 months	1w eek			
Nifty50	0.836121468	0.643569214	0.818096	0.1834527			
Nifty Auto	0.323509	0.791141	0.596344	0.010731			
Nifty Bank	0.878392	0.897126	0.51091	0.852866			
Nifty Financial	0.719184	0.922988	0.515953	0.32541			
Services							
Nifty FMCG	0.869861	0.650549	0.329165	0.036882			
Nifty IT	0.238946	0.359539	0.835766	0.272587			
Nifty Media	0.913653	0.884558	0.822239	0.206436			
Nifty Metal	0.658944	0.823804	0.922413	0.679762			
Nifty Pharma	0.606274	0.518313	0.272911	0.234891			
Nifty PSU Bank	0.848805	0.794295	0.654303	0.235893			
Nifty PVT Bank	0.856794	0.964426	0.321138587	0.474652			
Nifty Realty	0.882286	0.806587	0.556143	0.103282			

From the above table it can be seen that p value of student's t test for Nifty 50, Nifty bank, Nifty Fin services, Nifty IT, Nifty Media, Nifty Metal, Nifty Pharma, Nifty PSU bank, Nifty PVT Bank, and Nifty Realty is greater than 5 per cent. Therefore we accept Hypothesis Ho<sub>1</sub>, Ho<sub>3</sub>, Ho<sub>4</sub>, Ho<sub>6</sub>, Ho<sub>7</sub>, Ho<sub>8</sub>, Ho<sub>9</sub>, Ho<sub>10</sub>, Ho<sub>11</sub>, Ho<sub>12</sub> and reject Hypothesis Ha<sub>1</sub>, Ha<sub>3</sub>, Ha<sub>4</sub>, Ha<sub>6</sub>, Ha<sub>7</sub>, Ha<sub>8</sub>, Ha<sub>9</sub>, Ha<sub>10</sub>, Ha<sub>11</sub>, Ha<sub>12</sub>

However it can be seen that for Auto and FMCG sector the p value of the T test for 1 week before and after Demonetisation data is 0.010731 and 0.036882 respectively. Whereas P value of the T test performed of 4 months, 3 months and 1 month data is well above 5 per cent level. Therefore, Ho<sub>2</sub>, Ho<sub>5</sub>, is accepted for

4 months, 3 months and 1 months and rejected for 1 week data.

Therefore it can be concluded that demonetization has no significant impact on the Nifty 50, and Nifty Sector indices such as Nifty Bank, Nifty Fin services, Nifty IT, Nifty Media, Nifty Metal, Nifty Pharma, Nifty PSU bank, Nifty PVT Bank, and Nifty Realty.

However it had significant impact on auto and FMCG sector for a week and after 1 week there was no significant impact of Demonetisation on auto, FMCG sector as well.

## Findings & Interpretations

One-Sample Test							
Dates	Time line	Test Value = 0					
Dates	in days	t	ctf	Sig. (2- tailed)			
3-Apr-17	100	-2.086	49	0.042			
1-Mar-17	78	-2,099	49	0.041			
8-Feb-17	64	2.142	49	0.037			
5-Jan-17	41	2.404	49	0.02			
2-Jan-17	38	2.968	49	0.005			
26-Dec-16	33	-2.255	49	0.029			

After analyzing the Nifty 50 index data and the stocks comprising the Nifty 50 using event analysis methodology it can be seen that there was no significant impact of announcement of demonetisation

on the returns of the market in first 30 trading days after demonetisation. However on 33<sup>rd</sup> trading day i.e. on 26 December 2016 there was significant impact seen on the market returns.

Indices		P(T<=t) two-tail					
	4 months	3 months	1 months	1w eek			
Nifty Auto	0.323509	0.791141	0.596344	0.010731			
Nifty FMCG	0.869861	0.650549	0.329165	0.036882			

Further while doing the analysis of sector indexes daily returns on the basis of two sample variance analysis it can be seen that there was no significant impact of announcement of demonetisation on the returns of different sector indexes except that of Auto and FMCG sector. Products of auto sector i.e. car, commercial vehicles are dependent on the external financing, so due to liquidity crunch in the initial few days there was impact. Similarly, FMCG sector majorly being dependent on cash sales there was dip in the sale due to liquidity crunch. So, despite being majorly dependent on cash or credit sales, Auto and FMCG sector has been impacted only for a week and after that there has been no significant impact seen on these two sector returns, as well.

#### Conclusions

After analyzing the returns from the Nifty 50 and Nifty Sector indices such as Nifty Auto, Nifty Bank, Nifty Fin services, Nifty FMCG, Nifty IT, Nifty Media, Nifty Metal, Nifty Pharma, Nifty PSU bank, Nifty PVT Bank, and Nifty Realty; the only short-term impact which was seen was on the FMCG and Auto sector was quickly absorbed by the market and in the long run FMCG and Auto sector indexes has shown no significant impact. It can be concluded that there was no significant impact on the market returns. Overall market behaved in an efficient ways. It proves that Nifty indexes are very balanced and there was no significant impact of announcement of demonetisation on the market returns. It further confirms that Indian markets are efficient markets. As per Efficient market hypothesis (EMH), in efficient market all information that is known to any market participant about a company is fully reflected in market prices. Hence, not even those with privileged information can make use of it to secure superior investment results. There is perfect revelation of all

private information in market price. It proves that Indian capital market is very efficient and quickly absorbs the news and reflects in the prices of the share in an efficient manner.

## **Suggestions**

From the above report it is clear that the announcement of demonetisation did not have significant impact on market returns. However, from the study it is evident that announcement of demonetisation and subsequent liquidity crunch created by it had impact on sales and revenue of many sectors. So, further study can be conducted on the impact of demonetisation on the sales and profits of different sectors. Also, there were reports that during demonetisation all unpaid dues such as property tax, income tax and other direct and indirect taxes which were pending since very long time, were settled by paying the dues in cash mainly in 500 and 1000 ₹ old currency notes. So, impact of demonetisation on the tax revenues of the government can also be studied.

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# PORTFOLIO CONSTRUCTION TECHNIQUES USING HEDGING AND DIVERSIFICATION

\*Mr. Pushkar D. Parulekar \*\*Mr. Anand K. Mishra

#### **ABSTRACT**

An intelligent investor is always advised to diversify portfolio to reduce risks. This could be done in the cash market as well as using derivatives. Typically, derivative is used by hedge fund to make the use of leverage. Nifty 50 (Nifty) index is fifty stock diversified index. Nifty has historically added the stock that has done well and deleted that hasn't done well based on percentage return as a criterion. In this process however, there're some companies which have remained common over the years. This study was based on common 29 Nifty Stocks from 2006 to 2016 and their monthly stock price data. The focus of this study was to construct different portfolios' using various methods of hedging and diversification and analysing them for returns. These 29 companies almost cover all the sectors such as Information Technology, Fast-Moving Consumer Goods (FMCG), Capital Goods, Steel, Banking, Pharma, Automobile and Energy Sector. 2006 to 2011 data was used as a base data to select the weights of various scripts in the portfolio and 2012 to 2016 data was used to test the data for study of performance of the portfolio. These portfolios were based on following criteria.

- Equal Weight
- Risk Return Optimum Portfolio using Markowitz Mean-Variance approach
- Market Capitalisation
- Optimum Portfolio with use of futures for short selling (Derivatives)

## Introduction

The NIFTY 50 index is National Stock Exchange of India's benchmark broad based stock market index for the Indian equity market. The word fifty is used because the index consists of 50 actively traded stocks from various sectors. So, the Nifty index is a bit broader than the Sensex which is constructed using 30 actively traded stocks on the Bombay Stock Exchange (BSE). Nifty has constituents from 24 sectors like pharma, cements, steel, FMCG, energy and so on. National Stock Exchange (NSE) is the biggest stock exchange in the country based on the trading activity. CNX Nifty is owned and managed by India Index Services and Products Ltd. (IISL). IISL is India's first specialised

company focused upon the index as a core product. So, for the purpose of this study 29 common stocks are taken from Nifty.

Very broadly, the investment process consists of two tasks. The first task is Security Analysis which focuses on assessing risk and return characteristics of available investment alternatives. The second task is Portfolio selection which involves choosing the best possible portfolio script weights from the set of feasible portfolios. Portfolio theory, originally proposed by Harry Markowitz in the 1950s, was the first formal attempt to quantify the risk of portfolio and he developed a methodology for determining the optimal portfolio.

<sup>\*</sup>Assistant Professor, St. Francis Institute of Management & Research, Mumbai

<sup>\*\*</sup>PGDM Alumni, St. Francis Institute of Management & Research, Mumbai

### **Review of Literature**

The Father of Portfolio theory Harry. M. Markowitz, Portfolio selection: Efficient diversification of investments (New York: John Wiley, 1959) discussed the procedures of selecting the optimal portfolio. Following were the key assumptions made by Markowitz about selection behaviour:

- Investor decisions are based on only three parameters, viz. the expected return and variance and correlation between the assets.
- Investors are risks-averse. This mean that when investors are faced with two investments with the same expected return but with different risks they will prefer one with lower risks.
- Investors seek to achieve the highest expected return at a given level of risks.
- Investor have identical expectations about expected returns, variances and co variances of risky assets.
- Investors have common one period investment horizon.

The procedure developed by Markowitz for choosing the optimal portfolio of risky assets consists of three steps:

- 1. Delineate the set of efficient portfolios.
- 2. Specify the risk-return indifference curves.
- 3. Choose the optimal portfolio.

The sociologist Alfred W. Jones is credited with coining the phrase "hedged fund" and is credited with creating the first hedge fund structure in 1949, although this has been disputed. Jones referred to his fund as being "hedged", a term then commonly used on Wall Street to describe the management of investment risk due to changes in the financial markets. The name hedge fund originated from the paired long and short positions that the first of these funds used to hedge market risk. Over time, the types and nature of the hedging concepts expanded, as did the different types of investment vehicles. Today, hedge funds engage in a diverse range of markets and strategies and employ a wide variety of financial instruments and risk management techniques. During the first decade of the 21st century hedge funds gained popularity worldwide, and by 2008 the worldwide hedge fund industry held US\$1.93 trillion in assets under management (AUM). However, the 2008 financial crisis caused many hedge funds to restrict investor withdrawals and their popularity and AUM totals declined. AUM totals rebounded and in April 2011 were estimated at almost \$2 trillion. As of February 2011, 61% of worldwide investment in hedge funds comes from institutional sources. In June 2011, the hedge funds with the greatest AUM was Bridgewater Associates (US\$58.9 billion), Man Group (US\$39.2 billion), Paulson & Co. (US\$35.1 billion), Brevan Howard (US\$31 billion), and Och-Ziff (US\$29.4 billion). Bridgewater Associates, had \$70 billion under management as of 1 March 2012. At the end of that year, the 241 largest hedge fund firms in the United States collectively held \$1.335 trillion. In April 2012, the hedge fund industry reached a record high of US\$2.13 trillion total assets under management.

A mutual fund represents a vehicle for collective investment. When you participate in a scheme of mutual fund you become the part owner of the investment held under that scheme. A mutual fund has actively managed funds and passive funds.

Actively managed funds are funds where the fund manager has flexibility to choose the investment portfolio within the broad parameter of the investment objective of the scheme. Since this increases the role of fund manager, the expense for running the fund turns out to be higher. Investors expect actively managed fund to perform better than market.

Tom Redmond and Ameya Karve (2017) in an article (dated Jun 28, 2017) titled "Why hedge funds find it tough to crack Indian stock market" in Bloomberg wrote that higher taxation is a major negative for hedge funds which started in 2012 in India. While India's stock market was approaching \$2 trillion in market value, its domestic hedge funds oversaw just \$603 million as of May 2017, according to Eurekahedge Pte. Contrast to that the country's mutual funds, manage an equivalent of \$284 billion, according to data compiled by Bloomberg. Worldwide, hedge funds manage more than \$3 trillion in assets. In that article Mr. Andrew Holland, CEO at Avendus Capital Alternate Strategies also stated that India is an emerging market and most stocks if shorted might led to destruction of capital.

Passive funds invest on the basis of a specific index, whose performance it seeks to track. Thus, a passive fund tracking the CNX Nifty would buy only the shares that are part of the composition of that index. The

proportion of each share in the scheme portfolio would also be the same as the weightage assigned to the share in the computation of the index. Therefore, performance of these funds tends to mirror the concerned index. Yet there are gaps in performance of these funds as compared to the index. This gap in performance is its tracking error. It can be positive or negative i.e. the passive fund performance can be better or worse than the consult index. They are also called as Index scheme. Since the portfolio is determined by the index itself the fund manager has no role in deciding on investments. Therefore, these schemes have low running costs.

## Research Gap

The research reviewed did not consider the same 29 companies. The period considered from Jan 2007 to Dec 2016 is also different. Comparison between four methods was also not observed in any of the research under review.

## **Need for study**

India being a developing economy has given very good investment opportunities in the past. However, the benefit of the same has not been taken by Indian retail investors. This study is focused on 29 large companies in India which can be classified as moderately risky considering their size. So small investors or first-time entrants into stock market who want to diversify their portfolio without using equity mutual funds can look at this study from a risk-return

point of view. As there are factors such as Management Fees, Entry load, Exist Load, Lock in period and dependence on fund manager which are shortcomings of investment in equity mutual funds as against direct investment.

## **Objective of Study**

The main objective of the study was to construct and compare performance based on returns of portfolios using following methods:

- 1. Equal Weight
- 2. Risk Return Optimum Portfolio using Markowitz Mean-Variance approach
- 3. Market Capitalisation
- 4. Optimum Portfolio with use of futures (Derivatives for short selling)

Compounded annual growth rate (CAGR) for these portfolios over a period of five years from 2012 to 2016 was considered for the evaluation purpose.

## Research Methodology

This research is based entirely on secondary data.

Population: All the companies that were part of the Nifty from 1<sup>st</sup> Jan 2007 to 31<sup>st</sup> Dec 2016.

Sample Size Considered = 29 stocks. Stocks of the companies which were part of Nifty fifty index from January 1\* 2007 to December 31\* 2016.

List of these 29 companies selected are as stated below:

SR			
No.	Company Name	Industry	Company Symbol
1	ACC Limited	CEMENT & CEMENT PRODUCTS	ACC
2	Ambuic Coment Ltd.	CEMENT & CEMENT PRODUCTS	AMBUJACEM.
3	Bharat Heavy Electricals Limited	CONSTRUCTION	BHEL
4	Bharat Petroleum Corooration Ltd.	energy	BPCL
5	Ciolo Ltd.	PHARMA	CIPLA
6	GAIL (India) Ltd.	energy	GAIL
		CEMENT & CEMENT	
7	Grasim Industries Ltd.	PRODUCTS	GRASIM
8	HCL Technologies Ltd.	IT	HCLTECH
9	HDFC Bank Ltd.	FINANCIAL SERVICES	HDFCBANK

10	Hero MotoCorp Ltd.	AUTOMOBILE	HEROMOTOCO
11	Hindalco Industries Ltd.	METALS	HINDALCO
12	Hindustan Unilever Ltd.	CONSUMER GOODS	HINDUNILVR
13	TTC Ltd.	CONSUMER GOODS	HC
14	ICICI Bank Ltd.	FINANCIAL SERVICES	icicibank
15	Infosys Ltd.	IT	INFY
16	Larsen & Toubra Ltd.	CONSTRUCTION	LT
17	Mahindra & Mahindra Itd.	AUTOMOBILE	M&M
18	Maruti Suzuki India Ltd.	AUTOMOBILE	MARUTI
19	Oil & Natural Gas Corporation Ltd.	ENERGY	ONGC
20	Power Grid Corporation of India Ltd.	ENERGY	POWERGRID
21	Reliance Industries Ltd.	ENERGY	RELIANCE
22	State Bank of India	FINANCIAL SERVICES	SBIN
23	Sun Pharmaceutical Industries Ltd.	PHARMA	SUNPHARMA
24	Tata Consultancy Services Ltd.	IT	TCS
25	Tala Motors Lid.	AUTOMOBILE	TATAMOTORS
26	Tata Steel Ltd.	METALS	TATASTEEL
27	Tech Mahindra Ltd.	IT	TECHM
28	UltraTech Cement L.d.	CEMENT & CEMENT PRODUCTS	ULTRACEMCO
29	Wipro Ltd.	IT	WIPRO

For the purpose of this study five years data is taken for selection and another five years data is taken for evaluation because its five years could be taken as one economy cycle. (Total ten years monthly data).

Based on 29 stocks under consideration the 2006 to 2016 timeframe is divided into two halves'.

2006-11 used as first 5 years timeframe is used to calculate the weightage of various stocks based on various methods. 2012-16 is used as second 5 years' timeframe to evaluate the performance based on weightages calculated in the first 5 years' time frame between 2006-11.

Number of Observations = 3480 Observations (29 Stocks \* 10 years data \*12months) Non-Probability convenience sampling was used to choose the sample. Data was taken from Jan 2006 to Dec 2016.

Out of all the observations, observations for first 5 years (i.e. 2006-11) were used to determine weights based on the four methods viz.

- 1. Equal Weight
- 2. Risk Return Optimum Portfolio using Markowitz Mean-Variance approach

- 3. Market Capitalisation
- 4. Optimum Portfolio with use of futures (Derivatives for short selling)

It was assumed that all four portfolios started with the initial corpus of 10 million or 1 crore Indian rupees.

## **Data Collection and Analysis**

Secondary data was used for this research. It was collected from Capitaline Database. Data was authenticated from financial website of the exchange viz. as, National Stock Exchange, Security Exchange Board of India (SEBI).

Monthly Returns were calculated from 2006 to 2016 using following formula

Return for the Month Jan = (Closing Price at the end of month - Closing Price at the beginning of month) - 1

#### Covariance

Covariance reflects the degree to which the returns of the two securities vary or change together. A positive covariance means that the returns of the two securities

move in the same direction whereas a negative covariance implies that the returns of the two securities move in opposite direction.

For "n" number of Assets in the portfolio

## **Expected Return**

$$E(R) = \sum_{i=0}^{\infty} w_{i*}E(R_{i})$$

Where  $w_i$  is the weight of the individual component in E  $(R_i)$  is the expected return from the individual component.

## **Implied Risk**

$$\begin{split} \sigma_{_{p}} &= \sum \sum_{i} w_{_{i}*} w_{_{j}*} \sigma_{_{i}*} \sigma_{_{j}*} r_{_{(i,j)}} \\ &= i \quad j \\ \text{I and } j \text{ vary from 0 to n.} \end{split}$$

Where  $w_i$  and  $w_j$  is the weight of the individual component

 $\sigma_{_{\! i}}$  and  $\sigma_{_{\! i}}$  are standard deviations of the individual components.

r (i,j) is coefficient of correlation between the components which can take value from -1 to +1.  $\sigma_{i^*}\sigma_{i^*}r_{(i,j)}$  is an indication towards covariance.

Risk free rate (Rfr) was considered to be 0.

Objective was to maximise the Sharpe Ratio of the Portfolio in case of Portfolio 2 and Portfolio 4.

Since Rfr was assumed to be 0.

Sharpe Ratio = (Expected Return/Implied Risk)

Data of closing prices for the reference is put in Annexure I.\*\*\*\*

Portfolio 1: Equal Weight Intial Corpus: 10000000

Company			Value on 31st December
Symbol	Weight	Amount Invested	2016
ACC	3.45%	344828	403714
Ambuja	3.45%	344828	457920
BHEL	3.45%	344828	174976
BPCL	3.45%	344828	1834558
CIPLA	3,45%	344828	613123
GAIL	3.45%	344828	394756
Grasim	3.45%	344828	597690
HCL	3.45%	344828	1473168
HDFC BANK	3.45%	344828	974420
Hero Moto Coro	3.45%	344828	550893
Hindalco	3.45%	344828	461506
HUL	3.45%	344828	699431
IÇIÇI BANK	3.45%	344828	642916
INFY	3.45%	344828	503653
ITC	3.45%	344828	620921
L&T	3.45%	344828	701564
M & M	3.45%	344828	599175
Maruti	3.45%	344828	1997525
ONGC	3.45%	344828	385706
POWER GRID	3.45%	344828	632126
Reliance	3.45%	344828	538627

SBIN	3.45%	344828	532863
SUN PHARMA	3.45%	344828	873051
TATA MOTORS	3.45%	344828	920580
Tata Steel	3.45%	344828	426589
TCS	3.45%	344828	702802
Tech M	3.45%	344828	1175390
ULTRATECH	3.45%	344828	960788
Wipro	3.45%	344828	410342
Partfolio value on 3	31si Decen	nber 2016	21260775

Portfolio 2: Optimal Portfolio using solver (Markowitz Mean-Variance approach without short selling)

#### Intial Corpus: 10000000

Based on Risk, Return and covariance matrix of 29 stocks under consideration in the period 2006 to 2011 and solver function in excel only 5 stocks got selected.

This portfolio was considered without using futures for short-selling. This kind of weightage strategy could be used by an equity mutual fund manager based on quantitative data without using his/her discretion.

Company Symbol	Weiaht	Amount Invested	Value on 31st December 2016
GAIL	1.87%	186831	213883
TIUL	10.382%	1038222	2105877
Hero Moto Coro	23.80%	2380441	3802971
ITC	35.27%	3526939	6350856
SUN PHARMA	28.68%	2867567	7260247
Portfolio value on 31st December 2016			19733834

## Portfolio 3: Portfolio based on Market Capitalisation

For all the 29 companies under consideration portfolio weights based their market capitalisation as on 31<sup>st</sup> December 2011 was calculated and used for calculations.

This is typically done by an index fund manager who allocates money as per the weightages in index. Most major indices in India are based on free float market capitalisation.

Company Symbol	Weight	Amount Invested	Value on 31st December 2016
ACC	0.99%	99090	116011
Ambuja	1.11%	110601	146874
BHEL	2.71%	271403	137718
BPCL	0.80%	80196	426659
CIPLA	1.19%	119241	212017
GAIL	2.26%	225927	258640
Grasim	1.06%	105961	183663
HCL	1.24%	124407	531491
HDFC BANK	4.64%	463961	1311068
Hero Moto Corp	1.77%	176627	282177
Hindalca	1.03%	102968	137808

HUL	4.19%	418/62	849396
ICICI BANK	3.66%	366337	683020
INFY	9.18%	917608	1340253
ITC	7.29%	728568	1311911
L&T	2.83%	282530	5/4816
M & M	1.94%	194339	337685
Maruti	1.23%	123172	713512
ONGC	10.19%	1019180	1140002
POWER GRID	2.15%	215149	391103
Reliance	10.53%	1053444	1645499
SBIN	1.77%	477291	737559
SUN PHARMA	2.39%	239257	605763
TATA MOTORS	2.43%	242730	648012
Tata Steel	1.49%	149335	184743
TCS	10.55%	1054594	2149395
Tech M	0.34%	33918	115615
ULTRATECH	1.48%	148416	413528
Wipro	4.55%	454992	541437
Portfolio value on 31st December 2016		18130673	

## Portfolio 4: Optimal Portfolio using solver with shorting

Based on Risk, Return and covariance matrix of 29 stocks under consideration in the period 2006 to 2011 there were both positive and negative weights to various scripts.

This portfolio was considered with use of futures for short-selling. This kind of weightage strategy could be used by a hedge fund manager based on quantitative data without using his/her discretion. The limitations of this portfolio are it does not consider any stop loss also

shorting done using futures needs to be rolled over from current month expiry to next month expiry. Calculations also do not consider premium or discount which futures may have with respect to cash. However cash and future are expected to converge on the day of expiry of the contract. Another limitation of this portfolio is high positive and negative weightages to individual scripts. For example ICICI bank (-64.53%) and GAIL (61.02%) which might not be done in practice.

Company Symbol	Weight	Amount Invested	Value on 31st December 2016
ACC	-7.06%	-705730	-826249
Ambuja	-24.32%	-2432137	-3229802
BHEL	-15.53%	-1552580	-787828
BPCL	-25,77%	-2576559	-13707857
CIPLA	-26.63%	-2663165	-4735256
GAIL	61.02%	6102397	6985984
Grasim	43.78%	4378427	7589127
HCL	58.97%	5897224	25194050
HDFC BANK	-14.30%	-1430091	-4041175
Hero Moto Corp	39.41%	3940904	6295952
Hindalco	-42.29%	-4228941	-5659881
HUL	50.00%	5000026	10141806

ICICI BANK	-64.53%	-6452545	-12030488
INFY	16.57%	1656892	2420047
ITC	-3.75%	-374632	-674589
L&T	63.43%	6342878	12904805
M & M	32.79%	3279180	5697923
Maruti	-49.73%	-4972830	-28806728
ONGC	-16.97%	-1697139	-1898331
POWER GRID	-26.09%	-2408555	-4781917
Reliance	-29.62%	-2962469	-4627428
SBIN	34.15%	3415209	5277533
SUN PHARMA	48.43%	4843152	12262129
TATA MOTORS	-20.04%	-2004303	-5350855
Tata Steel	9.28%	927648	1147601
TCS	48.33%	4833150	9850565
Tech M	-51.52%	-5152424	-17562715
ULIRATECH	30.35%	3035462	8457658
Wipro	-18.38%	-1838446	-2187736
Partfolio value on 31st December 2016 *			3316340

<sup>\*</sup>The above portfolio has shorts which for the academic research purpose were assumed to be rolled over the period of 5 years. Many of these short positions have led to erosion of the amount invested originally. This supports what Mr. Andrew Holland, CEO at Avendus

Capital Alternate Strategies said to Bloomberg about hedge funds in India. He said "India is an emerging market. In the West, it's quite easy to say, this company is terrible and it'll go down to here. Most times it will. In India it doesn't work that way. Shorts kill you."

## **Observations**

To generalise the results Compound Annual Growth Rate (CAGR) is calculated. Total investment period for all 4 portfolios was 5 years and initial investment in all the cases was Rs. 10000000 or Rs. 10 million.

CAGR = (Value as on 31st December 2016/ 10000000)  $^{(1/5)-1}$ 

Portfolio Number	Method	Value as on 31st December 2016	CAGR in (%)
1	Eaual Weiant	21260775	16.3%
2	Optimal Portfolio without short selling	19733834	14.6%
3	Market Capitalisation	18130673	12.6%
4	Optimal Portfolio with short selling	3316340	-19.8%

## Limitations & Future scope for the further study

- I. Study was based on the data of 29 common Nifty companies over the period of 10 years.
- II. Only Return as a parameter was considered.
- III. Study was based on large cap companies.
- IV. Past performance was not a perfect indicator of future.
- V. Study assumed Infinite divisibility (Tracking error = 0)
- VI. Dividends were not considered.
- VII. Portfolios were expected to remain static over 5 years.

## Conclusion

## Based on this study following conclusions can be drawn

- Retail Investor could use simple logic such as equal weightage-based portfolio and can earn inflation beating return.
- 2. Investment in large companies over a long period of time gives higher return as compared to fixed deposits.
- Simple techniques such as diversified portfolio with equal weightage worked better as compare to complex techniques such as hedging using futures.
- 4. Stop losses were more relevant for hedge funds because of potentially higher losses.

5. More complex techniques may not lead to higher returns which is the basic objective of investment in equity as asset class.

## **Recommendation**

- 1. Equity could be considered as an asset class for long term investment.
- 2. Simple buy and hold strategy with equal weights could be adopted by long term retail investors.

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## **Annexure I**

	Closing price on 31st December	Closing price an31st Decemb
Company Symbol	2011	2016
ACC	1,136.90	1,331.05
Ambuia	155.35	206.3
BLICL	238.85	121.2
BPCL	119.45	635.5
CIPLA	319.9	568.8
GAIL	383.65	439.2
Grasim	497.75	862.75
HCL	193.8	827.95
HDFC BANK	426.85	1,206.20
Hero Moto Corp	1,905.15	3,043.65
Hindalco	115.85	155.05
HUL	407.4	826.35
ICICI BANK	136.93	255.3
INFY	691.91	1.010.60
ITC	134.2	241.65
L&T	663.1	1,349.10
M & M	681.8	1,184.70
Maruti	918.3	5,319.55
ONGC	171.07	191.35
POWER GRID	100.1	183.5
Reliance	692.95	1,082.40
SRIN	161.91	250.2
SUN PHARMA	248.83	630
TATA MOTORS	176.8	472
Tata Steel	335.5	415.05
TCS	1,160.65	2,365.55
Tech M	143.43	488.9
ULTRATECH	1,166.50	3,250.20
Wipro	398.7	474.45

The prices stated in the above table consider corporate events such as stock split and bonus issue.

# STUDY THE RELATIONSHIP BETWEEN ORGANISATIONAL ENVIRONMENT OF MUMBAI COLLEGES AND EXCHANGE OF DATA & INFORMATION AMONG TEACHING STAFF FOR THE PRACTICE OF KNOWLEDGE MANAGEMENT

\*Ms. Shaili V. Gala

#### **ABSTRACT**

Education is closely related with Knowledge Management (KM). Higher education institutions (HEls) have significant opportunities to apply KM practices to support every part of their mission. KM can be used to support educational administration, which in turn supports teaching and learning. Educational administrators and teachers have begun to look at how they might use information systems to assist in creating effective learning environments. The practice of KM mainly depends upon the following factors: Organizational Climate, organizational culture, organizational leadership, climate for exchanging data etc. This paper tries to find out the relationship between the organizational environment and exchange of data for the practice of KM. Mumbai district was divided into six zones. Arts and Commerce colleges of Mumbai were taken as population for the study and from 74 colleges' primary data was collected. 712 responses were analyzed using SPSS package.

**Key words:** Organizational Environment, Organizational Climate, Organizational Culture, Organizational Leadership, exchange of data and Information.

#### Introduction

According to Michael Koenig (2008) there are several reasons for why Knowledge Management (KM) is required in recent time.

First, because of the boom of Information and Communication Technology (ICT), the World has become global village. ICT has altered our work style as well as social lifestyle. Our life revolves around these technologies. Ever increasing online and off-line information has compelled organization to manage knowledge.

Second, organizations have to compete for their survival in this stiff competition era. In order to stay competitive and survive, organizations are establishing their own KM systems.

Third, with the regulatory reforms at the national levels and fast growing global environment, organizations have realized that the culture of the organization should change from hoarding to sharing knowledge. Collaboration among various units of the organization in a synergic way will increase the trust and work morale of staff resulting in increased productivity. Not only it will cut the cost but also fulfill the goals and objectives of the organization effectively.

Fourth, present micro and macro environment of any organization force it to increase productivity with few resources. In order to achieve this, the organization needs to be managed properly.

A complete knowledge management system must contain four elements. These are:

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<sup>\*</sup>Assistant Professor, S. P. N. Doshi Women's College, Cama Lane, Ghatkopar West, Mumbai 400086.

- Knowledge creation and capture,
- (2) Knowledge sharing and enrichment,
- (3) Information storage and retrieval, and
- (4) Knowledge dissemination.

Chris Collison and Geoff Parcel (2001) mentioned in their book 'Learning to fly: Practical Knowledge Management from Leading and Learning Organizations' that "You cannot manage knowledge – nobody can. What you can do is to manage the **environment** in which knowledge can be created, discovered, captured, shared, distilled, validated, transferred, adopted, adapted and applied." Let us check in this paper whether organizational environment influences the exchange of data in Mumbai Colleges or not.

#### **Review of Literature**

- **S. Rajalakshmi (2011)** in her thesis "Sharing and Capturing Tacit Knowledge in Higher Education" writes that switch over of job is common by faculties, so education institutions should develop knowledge database to store and to capture knowledge. With the main objective of the study to share and capture tacit knowledge faculties and to develop a knowledge portal 'Info-Ca-Sh', the researcher concluded as following.
- Out of many tools and techniques for knowledge sharing and capturing like Peer Mentoring, Storytelling, Video Sharing, Community of Practices, Document Libraries, researcher found Blogs and Knowledge Portal are more suited for sharing and capturing tacit knowledge.
- For various reasons higher faculties were not ready to share their knowledge with others. Research found that only 1.72% out of 10% of codification has been predicted from the faculties who shared and captured knowledge on the portal.
- The knowledge sharing community among the faculties should be strengthened as it was found that the potency of socialization and percentage of network connectivity among faculties is very low.
- Out of 25 only 5 faculties form group for sharing tacit knowledge in the institution, which shows lack of awareness or interest among them.

Here the author has discussed about tacit knowledge mainly, which is difficult to store as switching over of staff is frequent. In this thesis other factors for KM are not taken into consideration. Kalaiselvi K (2013) in his thesis "A Knowledge Management Approach for Sharing and Transferring Tacit Knowledge in Higher Education Domain" attempted improvement of tacit knowledge sharing activities in higher educational institutions, by using the knowledge management approach. He denotes that there is a lack of research in knowledge sharing in higher education. So, it should be encouraged by a proper reward system. In order to fill the research gaps in the optimization of knowledge sharing and transferring, he proposed to use the game theory to represent the contribution of knowledge by the subject matter experts. He suggests that a user-friendly knowledge community can be practiced using the knowledge portal system named K-Guru system. He emphasized on the various methods for extracting tacit knowledge like communities of practice, blogs, wiki like tools, enterprise knowledge portal, and discussion boards etc. He also proposes to identify new sources of tacit knowledge sharing methods and new methods for codification of tacit knowledge. Author has not highlighted many exciting knowledge portals like INFIBNET, Emerald.

# **Objectives**

#### **Main Objective:**

To study the relationship between organizational Environment of Mumbai Colleges and Exchange of Data & Information among teaching staff for the practice of knowledge Management.

#### **Sub Objectives:**

- To study the organizational climate of colleges from different zones.
- To analysis the organizational culture of colleges from different zones.
- To check the organizational leadership of colleges from different zones.

# Research Methodology

Primary data is collected through multi options, closed ended questionnaire and through observation method and informal interview. Questionnaire was reframed after pilot survey and Google form and Excel sheet were prepared as soft copy of questionnaire. For data analysis SPSS Package (version 20) is used.

To do this empirical research, Arts and Commerce degree colleges of Mumbai and suburban Mumbai districts are selected as population. Cluster sampling and convenient sampling were used for data collection. Mumbai city district and its suburban district were divided into 6 zones. Alike 6 Lok Sabha seats, Mumbai 6 clusters are:

- Mumbai Central Zone: It includes Kari Road to Matunga, Lower Parel to Khar and Sewri to Kings Circle stations.
- 2) Mumbai South Central zone: It includes Sion to Vidhyavihar, GTB Nagar to Mankhurd Station.
- 3) Mumbai North Zone: It includes Borivali to Goregaon stations.
- Mumbai North East Zone: It includes Ghatkopar to Mulund including Pawai.
- 5) Mumbai West Zone: It includes Santacruz to Jogeshwari stations.
- Mumbai South Zone: It includes Mumbai CST to Chinchpokli and CST to Cotton Green and Churchgate to Mahalaxmi stations.

Out of total 118 colleges, 70 colleges were approached out of which 64 colleges allowed to meet their staff. Around 1400 aided and unaided staff was approached either personally or via Email or WhatsApp or Google form. Besides colleges, orientation program and refresher program centers were visited and questionnaire was distributed. Out of which 712 responses of 74 college staff was received and accepted, rejecting 40 incomplete responses. Data is collected from September 2015 to August 2016.

Table 1.1 Zone wise responses collected

Zone	Frequency	Percent
Central	98	13.8
South Central	111	15.6
North	65	9.1
North East	170	23.9
North West	135	19.0
South	133	18.7
Total	712	100.0

# **Hypothesis**

Following null hypotheses are tested.

- There is no significant difference in the organizational climate of the different zones.
- There is no significant difference in organizational culture scores of six different zones.
- There is no significant difference in organizational leadership scores of six zones.

# Analysis and Interpretation of Data

5-point Likert scale: 1=Poor, 2=Not satisfied, 3=Good, 4=Very Good, 5= Excellent was used to test organizational climate. Following are the results.

**Table 1.2 Mean Score of Organizational Climate:** 

Statements	Mean Score
Whether Mission, Vision, Objectives are clear	4.2247
Policies, Procedures Communicated Regularly	3.8736
Communication of Departmental Policies and Programs	4.0098
Details of Good Work, Achievements Communication	3.8525
Communication of Seminar, Workshop Details	3.7598
Communication of Financial Details	3.2711
Coaching and Mentoring of Young Staff	3.6198
Responses to Employees' Ideas	3.5829
Creating and Acquiring Knowledge from Different Sources	3.6461
Exchange of Ideas and Knowledge among Staff	3.6220
Application of Best Practices in the Institute	3.7781

Source: primary data, SPSS 20

The above analysis shows the organizational climate of the HEIs of Mumbai is pretty good. The lowest score is 3.2711 for the communication of financial details. For everyone financial security is of prime concern and if organization is not transparent about it then it demoralizes the employees. Organization has to be very clear and accurate about the financial details of its staff. Aided colleges have to deal with government for staff salary and other monetary gains, so they have to be efficient in dealing with them. Details of provident fund, taxes, pension & gratuity rules etc. should be updated regularly to the staff. More efforts are needed to enhance the overall organizational environment. Mumbai is financial capital of India. Its colleges and institutes should be country's best one. All the colleges should try their best to enhance its work culture.

1) **Null Hypothesis H<sub>o</sub>:** There is no significant difference in the organizational climate of the different zones.

**Alternative Hypothesis H**<sub>1</sub>: There is significant in the organizational climate of the different zones.

Table 1.3 Mean Score of organizational climate:

Zone	N	Meon	Std. Deviation
Centrol	98	77.3548	12.40853
South Control	111	72.2028	15.88423
North	65	75.3840	14.03589
North East	170	75,1551	14.62836
Yorth west	135	76,7141	14.49201
South	133	73.3557	15,25487
Total	712	74.9793	14.64576

Source: primary data, SPSS 20

The significant value obtained from F-Test is 0.069 which is greater than the standard value of 0.05, so null hypothesis is accepted. There is no significant difference among the different zones for the organizational Environment. So, we can say that the organizational climate of all the zones is more or less the same. The table 1.3 shows the average score of all the zone lies around 74. 9793 score. On an average same type of organizational climate prevails in the colleges.

2) **Null Hypothesis-H**<sub>0</sub>: There is no significant difference in organizational culture scores of six different zones.

**Alternate Hypothesis-H<sub>1</sub>:** There is significant difference in organizational culture scores of six different zones.

To test above null hypothesis ANOVA is obtained and F-test is applied. Organizational culture is non-numeric (qualitative) attribute so F-Test is used. Results are as follows:

Above results indicate that calculated p-value is 0.006. It is less than standard p-value 0.05. Therefore, test is rejected. Null hypothesis is rejected. Hence alternate hypothesis is accepted.

So, conclusion is there is significant difference in organizational culture scores of six different zones. To understand findings of the hypothesis, mean score for each zone are obtained. It is presented in the following table.

Table 1.4 F- Test for Organizational Environment Variable:

	Sum of	df	Mean	F	Significant	Result
	Squares		Square		value	
Between Groups	2186.140	5	437.228	2.053	.069	Accepted
Within Groups	150322.042	706	212.921			
Total	152508,182	711				

2) Source: primary data, SPSS 20

Table 1.5 Descriptive Statistics of Organizational Culture:

	Sum of	Difference	Mean	F	p-value	Result
	Squeres		Square		, (	
Between Groups	4319.146	5	863.829	3.317	.006	Rejected
Within Groups	183837.727	706	260.393			
Total	188156.873	711				

**Table 1.6 Zone-wise Organizational Culture Score:** 

Zone	N	Mean
Central	98	74.2602
South Central	111	68.4685
North	65	73.5385
North East	170	74.9412
North West	135	76.0185
South	133	72.1241
Total	712	73.3883

**Null Hypothesis-H**<sub>0</sub>: There is no significant difference in organizational leadership scores of six zones.

**Alternate Hypothesis-H**<sub>1</sub>: There is significant difference in organizational leadership scores of six zones.

Table 1.7 ANOVA Test for Organizational Leadership Score:

	Sum of Squores	Difference	Mean Square	F	Sig.	Result
Between Groups	5263.297	5	1052.659	3.648	.003	
Within Groups	203695.422	706	288.520			Rejected
Total	208958.719	711				

Above results indicate that calculated p-value is 0.003. It is less than standard p-value 0.05. Therefore, test is rejected. Null hypothesis is rejected. Hence alternate hypothesis is accepted. Conclusion, there is significant

difference in organizational leadership scores of six different zones. Following table shows zone wise mean score.

Table 1.8 Organizational Leadership score:

Zone	N	Mean
Central	98	76.2041
South Central	111	68.9369
North	65	75.6923
North East	170	76.1882
North West	135	76.8889
South	133	73.2632
Total	712	74.6011

#### Analysis of climate for exchanging the data

Table 1.9 Do You Get Information When You Need:

	Yes	No	Tolal
South Central	95	16	111
North	-58	7	65
North Fost	150	20	170
North West	121	14	135
South	125	8	133
Total	642	70	712

The above table shows 70 respondents say they are unaware about the availability of information. North east has the highest 20 such respondents. Same way North East has 150 respondents who get information when needed. The table 1.10 below shows prevailing

system in exchanging the information. Again, north east has highest respondents in the lowest categories. Only 13 respondents are there in the excellent category. 237 in not satisfied and 72 in poor categories are there for prevailing system of exchanging data. This is disturbing.

Table 1.10 Prevailing System of Exchanging Data in the Organization:

				Scale			Total
		Excellent	Very good	Good	Not Satisfied	Poor	
	Central	2	8	31	45	12	98
	South Central	2	17	56	30	Ó	111
Zone	North	2	8	29	17	9	65
Zons	North Eas-	3	22	72	53	20	170
	North West	1	10	60	52	12	135
	South	3	6	71	40	13	133
Total		13	71	319	237	72	712

Source: primary data, SPSS 20

100% 90% 80% ■ Poor 70% 60% ■ Not satisfie d 50% ■ Good 40% 30% ■ Very good 20% 10% 0% Centralouth CentralNorth North Eartorth West South

Figure 1.1 Prevailing System of Exchanging Data in the Organization:

Source: primary data

Table 1.11 Support of Colleagues for Exchange of Data:

Zone	Excellent	Very good	Good	Not satisfied	Poar	Total
Central	1	4	39	39	15	98
South Central	0	7	50	43	11	111
North	0	9	21	25	10	65
North East	2	7	65	67	29	170
North West	2	7	54	50	22	135
South	0	5	56	53	19	133
Total	5	39	285	277	106	712

Source: primary data, SPSS 20

The above table 1.11 shows support of colleagues for exchange of data. Again, north east has the highest in the lower categories. South Central and North have zero respondents in excellent category. Average category - Good has the maximum respondents 285.

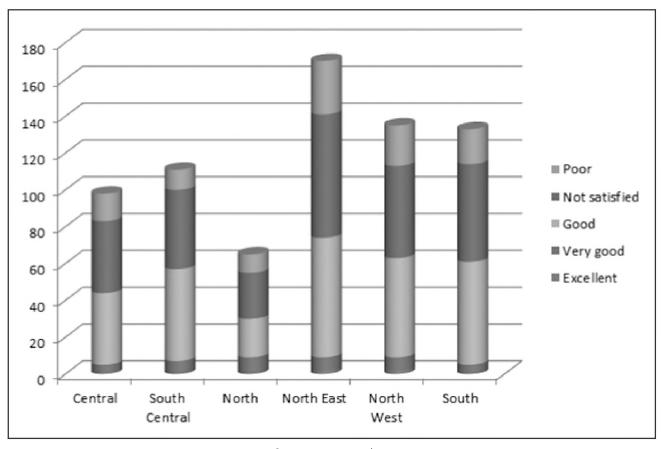


Figure 1.2 Support of Colleagues for Exchange of Data:

Source: primary data

Table 1.12 Support of Heads for Exchange of Data:

Zone	Excellent	Very good	Good	Not satisfied	Poor	Total
Central	1	2	30	38	27	98
South Central	0	12	49	37	13	111
North	0	6	19	23	17	65
North East	2	5	69	49	45	170
North West	2	7	49	53	24	135
South	1	5	49	55	23	133
Total	6	37	265	255	149	712

Source: primary data, SPSS 20

The table above 1.12 also has the same responses like previous table. Sharing of the data, information and knowledge is one of the important factors of KM. Colleges should work on it and improve the system. Explicit and tacit knowledge are very important aspects from any organization's point of view. Institutes need to take concrete efforts for sharing and storing both the

knowledge. Storytelling, seminars, workshops, conferences, meetings, get to gathers, trips, picnics are few ways to exchange explicit and tacit knowledge among the staff. Better the communication in the organization, better is the understanding and relationship among the staff and also, between the management and staff.

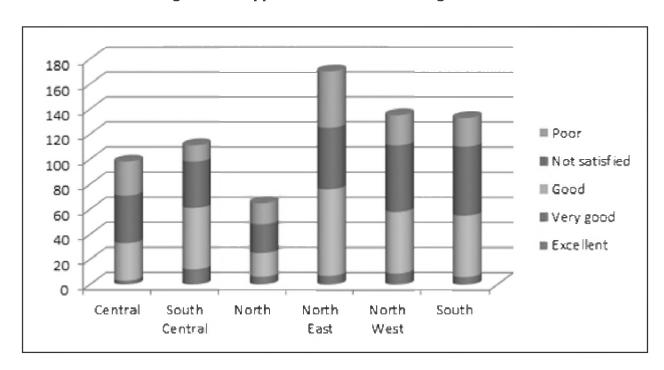


Figure 1.3 Support of Heads for Exchange of Data:

Source: primary data

Let's correlate exchange of data with organizational culture. Researcher has used Pearson Correlation formula for the same.

Table 1.13 Correlations of Organizational Culture and Exchange Data Variables:

		Organizational	System of	Support of	Support of	
Variables		Culture score	institution for	Colleagues	heads for	
			exchanging	for exchange	exchange	
			of data	of date	of date	
Organizational Culture score	Pearson Correlation	1	.504**	.487**	.522**	
	Sig. (2-tailed)		.000	.000	.000	
	N	712	712	712	712	
**. Correlation is significant at the 0.01 level (2-tailed).						

The above table shows organizational culture and the system of exchanging data has positive and significant correlation. If the organization culture improves it will help not only in improving the institutional system of exchanging the data, but also in support of colleagues and heads for exchange of data. The 1.14 table below

also shows positive relationship between organizational leadership and exchange of data. The correlation is significant at the 0.01 level (2-tailed). Improved leadership will lead to improved exchange of data. This shows KM factors are inter linked and related to each other.

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Table 1.14 Correlations of Organizational Leadership and Exchange of Data Variables:

Variables		Organization	System of	Support of	Support of heads	
		al leadership institution for Colleagues for		for exchange of		
		score	exchanging data	exchange of data	data	
Organiza Tional	Paarsan Correlation	1	.495''	.478	.506**	
leadershi p score	Sig. (2-tailed)		.000	.000	.000	
	Ν	712	712	712	712	
		•				

# **Conclusion & Suggestions**

There is a positive relationship between organizational environment and exchange of data & information on Mumbai colleges. HEIs should focus on improving its leadership and organizational culture so as to gain the fruits of KM. Open and dynamic leaders will not only lead the organization ahead, it will build sound organizational culture which in turn will boost the morale of the employees. According to the APQC, leadership and organizational culture are two of the most important factors for KM. Nothing makes a greater impact on an organization when its leaders model the behavior they are trying to promote among employees. It is said that success and failure of any organization mainly depends on its leadership and management which in turn improve the overall performance of the organization. So, to stand firm in this competitive world, HEIs' leaders must recognize sharing and exchanging all the types of information and knowledge among the stakeholders properly and timely, which will help to build the foundation for KM.

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# MARKETING TO THE MILLENNIALS - AN APERCU'

# \*Dr Shrawankumar B. Roongta

#### **ABSTRACT**

With the advent of e-commerce and the telecom revolution that has encapsulated world consumer markets in the 21<sup>st</sup> century, the purchasing power and consumption patterns have undergone a major shift. Although it would be unscientific to generalise the trends seen across markets, one fact cannot be ignored by businesses and marketers that, the demographic structure of the "most valuable" consumers across most categories has rapidly evolved primarily due to the mobile and internet-based revolution.

This paper aims to focus on the "Millennial" category of consumers, sometimes termed as Generation 'Y', defined as consumer between the age of 18 to 35 [in 2018]. Three characteristics define this set of consumers across world markets – they are technologically literate, family centric and ambitious. The paper aims at highlighting their relevance, characteristics and preferences. The aim is to bring to the notice of the marketers the essential attributes of this segment and the strategies that could be employed to target this set.

The paper primarily used publicly available data, research findings and information relating to the "Millennials" from research publications, government surveys, research reports of various firms involved in business, marketing or consultancy. The paper aims at providing a much-needed overview of this segment, which can be used as a basis of specific descriptive, causal or other exploratory research concerning consumer segments. It aims at adding to the current body of knowledge on consumer, segmentation and marketing.

**Key Words:** Millennial, Generation Y, Consumer, Marketing, Segmentation, E-commerce, Mobile, Telecom, Digital Marketing, Data, App, Strategy, Markets.

#### Introduction

Conventionally, marketers targeting a large set of consumers with different products and services have attempted to segment the market in smaller cohorts which are identifiable, approachable and reachable.

This was primarily undertaken to focus the marketing efforts in a cost-effective manner and generate better returns on marketing investments such as advertising and distribution. Segmentation later on also facilitated product development and market expansion via product extension or brand extension.

Geographic, demographic, psychographic and behavioural segmentation came to represent the basic

tenets of segmentation and targeting strategy in marketing practice.

As markets became globalised and freedom of expression found wider acceptance across societies and nations, a new culture – termed as consumer culture developed facilitating wider consumption of products and services across markets. The conventional segmentation framework did not entirely facilitate its basic purpose of identification of the most suitable segments for a specific product or service. For example: teenagers buying expensive apple phones or retired couple going on month long cruise holidays. The basket of consumption also underwent a rapid

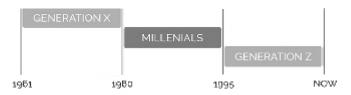
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<sup>\*</sup> MMS, Ph.D. [University of Mumbai] Marketing Consultant, London

transformation with regards to the share of discretionary purchases.

It is primarily for the above reason that marketers started experimenting with generational segmentation which was based on age but refined the segments into their psychographic profile and derived preferences for products and services based on behaviour influenced by the generational cohort they were part of. Hence, generational segmentation can be termed as an attempt to integrate the conventional variables into a more broad-based identification tool for marketers.

Marketers then tried to identify and assign a set of common characteristics of each of this segment, enabling them to make decision with regards to communication strategy and product development for each segment.



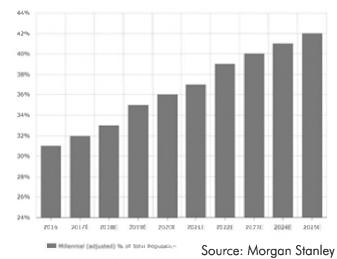
Businesses, broadly speaking aim at targeting the consumer segment, for their products and services, that are most cost effective to communicate, are most profitable and loyal over a long period of time. Hence the marketing managers are always challenged to identify and focus of such segments for effectiveness and efficiency of their marketing efforts and business objectives.

A leading consultancy and financial services firm, Goldman Sachs, has termed this generation as the one of the biggest cohorts of consumer segments in history. They believe that this generation has reached its median age of prime consumption now and will dramatically influence the buying and selling of almost every products category and services from housing to hair styling. Their 2017 report, estimate, puts its number in USA alone at 90 million plus. Their priorities of late marriage and home purchase, they believe will alter the consumption basket in a significant way.

2011 Indian census puts the number of Indian Millennials at nearly 500 million. A report by a reputed international firm, Morgan Stanley, released a report on Indian Millennials in April 2017, stating their influence on four key sectors of the economy. The report states that 70 per cent of household incomes is

contributed by millennials in most household in India. Their Alpha wise survey revealed that most millennials prefer to own their own four-wheeler, which the report suggests, could lead to a sustained growth for passenger car Industry. The report also indicates millennials will drive demand for housing, data services and retail credit for other purchases.

Millennials to Become More Than a Third of India's Population



It is in the above backdrop that this research article attempts to provide an overview of the size, nature, importance; and the role and influence of Millennial consumer segment on businesses, marketing and communication in India.

The study is aimed at providing a valid, fact based and compelling case for marketers to measure, evaluate and target this segment [Millennial] of the consumer market to enable them to create competitive edge and first mover advantage in India's ever growing and extremely competitive marketing environment in the years and decades to come.

#### **Review of Literature**

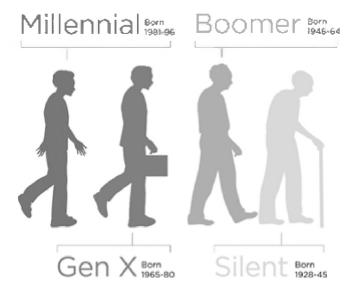
Segmentation as a key Strategic tool

Market segmentation was developed as part of the economic theory to explain and narrate the practice of a firm marketing homogenous product in a market with heterogeneous demand characteristics. The essential aim of the theory was to indicate the purpose of segmentation in terms of allocating limited marketing resource in a focused manner for generation of optimal profits.

Baker (1960) first proposed that 'uniqueness' as a variable is essential for segmenting the markets in subgroups. Thomas (1980) crystallised the idea further into assigning test variables like measurability, accessibility, stability and sustainability. Wind and Bell (2007) demonstrated that segmentation was essential to design effective business and marketing strategies. Kelley (2010) stated that due to the emergence of global consumer culture, consumers with similar demographic characteristics were exposed to and desirous of similar set of buying behaviour and preferences.

#### Millennial Consumers

Edmund & Turner (2005) proposed in the Generational Cohort theory that historical and social events influenced the values, belief, attitudes and inclinations of generations across commonly identified cohorts [Baby Boomers, Generation, X, Y and Z].



Moore (2012) stated that Millennial Generation, born between 1982 and 2000, are a set of consumers in US dominated by technology in every area of their life. Tsao (2008) established the significant role of technological advances in the lives of the Millennial consumers. Various estimates in US suggests half of all spending in consumers markets are done by millennials (Marketing Breakthroughs Inc. 2008).

In 2010, the reputed online marketing website eMarketer conducted a survey which highlighted that *Millennials* shared their product experience online more often than the general consumers. Gerzema &

D'Antonio (2011) stated that *Millennials* were more likely to be *marketing mavens* (those who disseminate information about products and services used by them) than other set of consumers. This has an important practical implication for marketing managers in terms of targeting the "early adopters" *Millennials* which might result in sales pickup immediately post launch.

One of worlds' most reputed consultancy and financial services firm undertook an extensive study about Indian consumers in 2016, which highlights the existence, nature and importance *Indian Millennials*. The report states that there exist 440 million *Millennials* in India. The size of India's *Millennials* population is larger than that of China and 4 times as big as US.

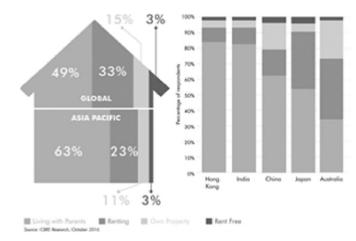
In 2017, India's leading business newspaper, Economic Times published an article stating three large trends in terms of the buying behaviour of *Indian Millennials*. The first trend was the preference of this segment of consumer towards "access" to products / services rather than "ownership". The second trend is the role and presence of digital technology in every aspect of their living and consumption. And the third significant trend the report suggested was of increased awareness and adoption of, or at least the intention of, healthy living and a concern towards environment.

#### Millennials – The Peculiar Spendthrift

A study by Insead's *Emerging Markets Institute* quoted in one of its large-scale study of *Millennials* that this segment would constitute almost 75 per cent of the work force by 2025 [Deloitte]. This in turn would meant that, for global marketers, this segment would have the largest purchasing power any generation cohort has ever had in the last century.

CBRE (2015) report on *Millennials* in Asia Pacific stated that this segment spent over 30 per cent of its income for leisure-based products and services. 25 per cent of these *Millennials* go shopping to socialise, this finding has an important implication for marketers, especially Mall Owners and Retail brands in high streets and shopping districts. The report mentioned that almost 70 per cent of *Millennials* in Asia Pacific stay with their parents, this can again have huge impact on the composition of their shopping basket due to high disposable income. Lack of mortgage and rental expenses might mean higher propensity to spend on other items.

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As per CBREs' report (2015), the attitude of *Millennials* towards property buying and rental (a major part of expense / spend for most consumer segments / generational cohorts) is quite remarkable in terms of their preference. The *Millennials* would not buy property in a less desirable location, even if that means delaying the purchase of own home. Their attitude towards property, the report stated, indicates that they preferred having a joyful lifestyle than invest their income in mortgage.

The report recommended that this peculiar buying behaviour [with respect to housing] had significant implication for residential property developers and financial services companies. The report suggested development of more affordable houses for rent and sale in locations preferred by *Millennials* and innovative mortgage structure for *Millennials* who find it difficult to accumulate savings which can be used for down payments. Anecdotal evidence across major world cities, job centres, showed that rentals were going up and home ownership amongst first time buyer was not showing an upward trend. With the number of *Millennials* expected to go beyond 4 billion; it also has major policy implications for governments and local councils.

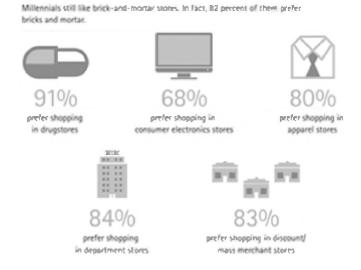
McCrea (2011) stated that US Millennials are by nature multi-taskers which allows them to make better use of their time. Bell, Connell and McMinn (2011) stated about US Millennials that they have short attention span, high need for structure and lower tolerance for ambiguity; this in turn has implication for marketers in terms of product design and communication messages targeting this segment. Burges (2010) suggested that US Millennials have high

desire for affiliation and social media forms a significant element of this aspect of their behaviour.

#### Millennials - Pro-technology

Kanga (2015) stated that *Indian Millennials* had a predisposition towards sophisticated technological products. They also constituted the largest share of smartphone users in India. Technology plays a key role in the way communication messages are relayed and consumed by a consumer, this segment hence will have to be targeted by marketers in future using communication method more suited to technology-oriented viewing device like smartphones.

Global Consultancy firm, Accenture, in its 2013 report on *Millennials* stated that contrary to commonly held view about this segment being pro-online shopping, they desired a seamless experience of online and offline buying experience. This meant that offline retail brand would need to have a relevant and functional online presence to target them.



Source: Accenture, 2013

Time Magazine. (2013) carried a cover story about Millennials and termed them as lazy, narcissistic and a generation which felt entitled to certain lifestyle or things. The coverage stated that even though Millennials across nations were demographically slightly different, rapid globalisation, influence of western culture and social media has given them a common characteristic in terms of their priorities and buying preferences.

#### Conclusions and Recommendations

Considering the literature reviewed from scholarly research studies, to reports of international consultancy firms and articles in business media, it can be derived that existence and importance of *Millennials* has gained practical relevance. Businesses and Marketers would need to design their offering, communication and systems to cater this this generational cohort across industries and across markets.

Brands would need to provide seamless experience throughout the *Millennials* buying decision making process, using technology and integrated value chain.

Brands would need to communicate with *Millennials* using multiple media, with social media and smartphone as the core of their media plan and strategy.

Brands would have to adopt values and ideals of the *Millennials* to gain acceptability in terms of being modern, responsive and personalised.

Brands would need to design their products and service in a manner that allows usage through accessibility than ownership. Hotel Industry, Travel Industry and Entertainment Industry are prime examples of this trend. With 75 per cent consumers moving in the *Millennials* cohort, most marketers would need to remodel their businesses.

Brands would need to have a meaningful social media presence, as *Millennials* would expect a more personalised, responsive and easily accessible service, especially with regards to the post purchase behaviour.

Significant opportunities and challenges would arise for businesses, brands and marketers in the coming decade in terms of product design, communication strategy and delivery of product / services to this valued segment of the consumer market.

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# THE STUDY OF MOTIVATIONAL DRIVES AMONG DEGREE COLLEGE STUDENTS WITH SPECIAL REFERENCE TO MCCLELLAND'S THEORY OF MOTIVATION- A CASE EXAMPLE

# \*Prof. Kiran Manglani

#### **ABSTRACT**

Motivation is the drive or need which influences people to strive or put effort. There are various motivational theories which are categorized into process theories and content theories. The well-known theory of all is the McClelland's theory of motivation wherein he classified the people influenced by three types of drives viz; Achievement, Power and Affiliation. Different types of people experience different drives in different phases of life. The study is based on Likert scale analysis of R. Steers and D. Braun stein test of finding out different drives of motivation in the selected groups as stated by McClelland and thereby highlighting different factors and traits of personality in relation to motivation.

#### **Keywords**

Motivation, Achievement, Affiliation, Power, Need

#### Introduction

Motivation is the industrial setting that can be defined as the willingness to exert high levels of effort towards organizational goals and to satisfy some individual need.

According to Baron and Greenberg, Motivation is the set of processes that arouse, direct and maintain human behaviour towards attaining some goal.

In 1943 Abraham Maslow identified described five human needs as ordered in a prepotent hierarchy. The hierarchy starts with lower level needs such as physiological needs, safety and security needs, social needs to higher level needs of self-esteem and selfactualization.

David McClelland in his 1961 book, "The Achieving Society", then identified three motivators we all experience: a need for achievement, a need for

affiliation, and a need for power. Out of these, any dominant factor of motivation become the characteristics of different people.

According to McClelland, these motivators are learned with environment playing a very important role in it.

According to McClelland, we all have three motivating drivers, and one of these will be our dominant motivating driver, irrespective of age, sex and culture. This drive of motivation is dependent upon the learned experiences and lifestyle.

These characteristics are as follows:

#### **Achievement motivation:**

They want to accomplish the goals of self-actualization, they have internal locus of control, they demand high level of feedback mechanism, often they want to pursue task single handed. They are similar to type A personality.

<sup>\*</sup> Anna Leela College of Commerce and ShobhaJayaram Shetty College for BMS.

#### **Affiliation motivation:**

They love to work in group. They believe in group dynamics and cohesiveness. They enjoy the essence of share and give and take. They want to take moderate risks, that too with team spirit.

#### **Power Motivation:**

They need challenges, competitions and a drive for winning. They influence others by winning, they view life as a race and wants to control others through their powerful skill and dominance.

Based on R. Steers and D. Braun Stein, "A behaviourally based measure of manifest needs in work settings", Journal of Vocational Behaviour, October 1976, a statistical analysis was made to the data collected of 50 students of Mass media Faculty.

Mass Media students are always known for the overt behaviour and are high achievers group. They perform extremely well in group. The Psychology of such students states that they are extrovert, highly creative and flamboyant. Their curriculum is based on certain application-based subjects like Organizational behaviour wherein there are different motivational theories. One of the theory was McClelland's theory of motivation and the behaviourally based Likert scale was provided to them. On the analysis of the same, it was observed that students experienced more of Achievement motivation. The Likert scale was provided to all the students of mass media, and the predominant factor analysis was done. The variables which were used to test the motivation drives were:

For Achievement Motivation:

- 1) Challenging and motivating task
- 2) Realistic Goal settings
- 3) Performance/Role at work place

For Affiliation Motivation:

- 1) Being Talkative/extrovert
- 2) Being liked by others
- 3) Close relationship and bonding with co-workers
- 4) Belonging to groups and having networks/ Group cohesiveness

For Power Motivation:

- 1) Competition and winning
- 2) Being In charge

- 3) Confronting people
- 4) More control over the events

# **Objectives**

- 1) To know about different motivational drives in the selected group.
- 2) To see the teaching learning application of R. Steers and D. Braun strain Likert Scale which was behavioural based.
- 3) To highlight the different factors of Motivational drives and their importance in a student's life.

#### Review of literature

Motivation, is a concept of Psychology. It has been mentioned in many psychological books. One of the prominent reference book relating to the psychology at work place is "Organizational Behaviour" by Stephen Robbins, Prentice Hall, 2010.

The following Research articles were also reviewed for the same:

A Behaviourally-Based Measure of Manifest Needs in Work Settings. Steers, Richard M.; Braun Stein, Daniel N. Journal of Vocational Behaviour, 9, 2, 251-265, Oct 76.

# **Research Methodology**

This paper is based on the primary and secondary data. Basically, primary data is collected from the mass media students of Anna Leela College of Commerce and Economics and Shobha Jayaram Shetty for BMS. The sample size is 50 students. It is eventually the case study or case example of Motivational test with the basis of Behaviourally based Likert scale R. Steers and D. Braunstein test applied on the students.

# **Hypothesis**

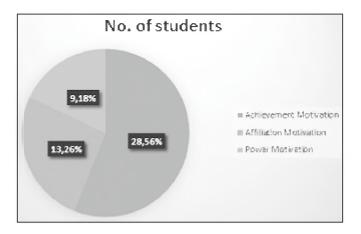
- 1. There is difference in motivational drives experienced on the basis of gender.
- 2. Mass Media students belongs to the high achievers group.

# **Relevance of Study**

The study was conducted by the way of innovative teaching-learning process of Organisational

behaviour subject by taking the motivation theory in a unique way. The students were benefited by these motivational tests and different aspects of their personality was understood. Further at larger level, the results of the study will be useful to the educators in designing curricular, co-curricular and Extracurricular activities for the students by taking motivational drives as the base.

# **Facts and Findings**



Out of 50 students, the following pie chart shows distribution of drives of motivation:

It was observed that students of mass media were more onto the achievement motivation. As the curriculum was more involving exposures to the media, these students were profoundly engaged in the competitions and winning. They regularly participated in different intercollegiate competitions and performed many group activities. Although, the overt behaviour of such students also made them a little more social as compared to other faculty students. But the predominant factor of motivation was Achievement followed by affiliation and lastly the power. Students in the selected group showed more of achievement motivation and often targeted on short and long terms goals by participating in all-round activities in the college and off the college. They tend to show the competent and excellence motivation. McClelland suggested other characteristics and attitudes of achievement-motivated people.

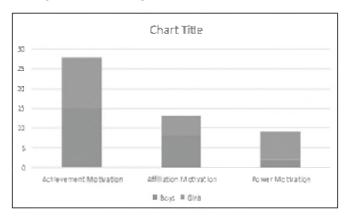
- 1. Achievement is considered influential factor than awards and rewards.
- 2. Task achievement is the soul of life.
- 3. Achieving is end, but financial incentives are only means.
- 4. Success, position and security comes next to achievement.
- 5. Knowledge of result and feedback is significant.
- Achievement-motivated people constantly seek improvements and ways of doing things better.

The chi-square statistic, p-value and statement of significance appear beneath the table.

Results							
	Achievement	Power	Affiliation			Row Totals	
Boys	15 (13.44) [0.18]	2 (4.32) [1.25]	7 (6.24) [0.09]			24	
Girls	13 (14.56) [0.17]	7 (4.68) [1.15]	6 (6.76) [0.09]			26	
Column Totals	28	9	13			50 (Grand Total)	

The chi-square statistic is 2.9222. The p-value is .231977. The result is not significant at p < .05.

#### Comparative Analysis based on the Gender:



Girls were found high on power motivation. It indicates that the girls were also interviewed and they expressed that wanted to get themselves empowered in the corporate world and opposed Glass ceiling effect. They exhibited the personality trait of confronting with the people they didn't agree with. These girls were also found to indulge in such co-curricular and extracurricular activities where they often worked to gain more control over the events around them.

For the testing of the Likert scale, the mean values were taken into use for analysing and finding the summation of all the sub variables out of main three variables like achievement, affiliation and power Motivation and Chi square test was used to determine the level of significance and for hypothesis testing. The first hypothesis was rejected as there was no difference in the motivation drive experienced on the basis of gender but girls were more on the power motivation and the second hypothesis was accepted as overall the study showed that selected group belonged to high achievers.

# **Conclusion**

Drives of motivation varies from person to person. There exist subjectivity and individual difference in case of motivation. In the study with the help of psychological parameters and Likert scaling analysis, it was observed that the girls and boys tend to show different motivational drives which are classified into achievement, power and affiliation. People with power motivation are more competitive and prefer performance over anything else. People having achievement motivation are determined and affix short term and long-term goals for them. Lastly affiliation motivation people often tend to form and reform groups and love the joy of sharing and are friendly in nature. As the study was conducted by the way of innovative teaching-learning process of Organisational behaviour subject by taking the motivation theory in a unique way. The students were benefitted by these motivational tests and understood different aspects of their personality, further at larger level, the results of the study will be useful to the educators in designing curricular, co-curricular and Extra curricular activities for the students by taking motivational drives as the base.

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