



JOURNAL OF MANAGEMENT

Volume : 20

No. 2

July - December 2018

Bi-annual

ISSN : 0973-922x



G. H. Patel Postgraduate Institute of Business Management
SARDAR PATEL UNIVERSITY

NAAC Re-accredited with Grade 'A' (CGPA:3.25) (23-1-2017 to 22-1-2022)

VALLABH VIDYANAGAR - 388 120
GUJARAT, INDIA

Patron : Vice-Chancellor
Sardar Patel University
Vallabh Vidyanagar

EDITORIAL BOARD

- Dr. Shailesh Gandhi, Professor, Indian Institute of Management, Ahmedabad
- Dr. H. J. Jani, Advisor, CHARUSAT University, Changa, Anand. Former Director, GHPIBM.
Email: hjjani@gmail.com
- Dr. Yogesh C. Joshi, Dean, Faculty of Management and Director, MBA programme, Sardar Patel University, Vallabh Vidyanagar, Anand.
Email: joshiyogesh_2000@yahoo.com
- Dr. Darshana Dave, Professor, MBA Programme, Sardar Patel University, Vallabh Vidyanagar.
Email: davedarshana@rediffmail.com
- Dr. Hemant Trivedi, Faculty, Flame University, Pune.
Email: drhemanttrivedi@gmail.com
- Dr. Renuka Garg, Prof. & Head, Department of Business and Industrial Management, South Gujarat University, Surat.
Email: dbimsgu@yahoo.com
- Dr. Jayraj Jadeja, Professor and Dean, Faculty of Management, M.S. University, Vadodara.
Email: jdjadeja@yahoo.co.uk
- Dr. R. P. Patel, Professor, MBA Programme, Sardar Patel University, Vallabh Vidyanagar, Anand.
Email: rajnivn@gmail.com
- Dr. Manish Sidhpuria, Professor, Department of Business and Industrial Management, South Gujarat University, Surat.
Email: mvsidhpuria@yahoo.com
- Dr. Rasananda Panda, Head, General Management, MICA, Shela, Ahmedabad.
Email: panda@micamail.in
- Dr. P. K. Priyan, Professor, MBA Programme, Sardar Patel University, Vallabh Vidyanagar, Anand.
Email: priyanspu@gmail.com
- Dr. Vilas Kulkarni, Associate Professor, MBA Programme, Sardar Patel University, Vallabh Vidyanagar, Anand.
Email: kvilas@gmail.com

Editors

Chief Editor : Dr. Yogesh C. Joshi
Editor : Dr. Darshana Dave
Assistant Editor : Dr. Vilas Kulkarni
Cover Design : Ms. Tanu Sanghvi and Mr. V. K. Vaghela
Publisher : Registrar (I/c), Sardar Patel University
Weblink : http://www.spuvvn.edu/academics/publications/Synergy_July-December_2018.pdf
Email : synergymba@spuvvn.edu

**G.H. Patel Postgraduate Institute of Business Management, University Colony,
Vallabh Vidyanagar, Dist Anand, Gujarat, India. PIN: 388 120**

The responsibility for the subject matter and the views expressed in the papers published in Synergy lie solely with the authors. The editors or the University are not in any way liable for the same.

**G. H. Patel Postgraduate Institute of Business Management
SARDAR PATEL UNIVERSITY**

NAAC Re-accredited with Grade 'A' (CGPA:3.25) (23-1-2017 to 22-1-2022)

Vallabh Vidyanagar - 388 120

Gujarat, India

Synergy Journal of Management

ISSN Number : 0973922X

Source : UNIV

Subject : Economics, Econometrics and Finance (all),
Social Sciences (all)

Publisher : Sardar Patel University

Country of Publication : India

Broad Subject Category : Social Science

All manuscripts should be sent to The Editor, Synergy-Journal of Management, MBA Programme, Sardar Patel University, Vallabh Vidyanagar-388 120, Gujarat. Manuscripts can also be submitted through e-mail: synergymba@spuvvn.edu

Foreword

The Post Graduate Department of Business Management (MBA Programme) is a constituent department of Sardar Patel University (NAAC Accredited Grade A with 3.25 CGPA) is offering management programme since 1989. It is one of the leading management institutes in Gujarat state.

The University Grants Commission, New Delhi, in recognition of the quality of research in the department had elevated its status for award of special assistance under DRS - II for "Consumer Research in Rural Areas", which it completed successfully in March 2016. The department has also received SAP DRS III (2016 to 2021) for undertaking research on "Transformation of Rural Economy" for five years. The department has also received a project on "Knowledge, Attitude and Perception of Voters in Gujarat from Election Commission of India. All through its journey of providing management education, it has exemplary record in terms of quality education and placements.

The department has been contributing to research activities continuously. All the faculty members are actively involved in research publications. It also organises national level seminar every year on varied topics relevant to current scenario to promote research in Management. All the ten faculty members are recognized Ph.D. Guides. More than 100 students have successfully completed their Ph.D. degree from department and fifty are pursuing their doctoral research.

This research journal provides a platform for regular interaction and exchange of views, opinions and research findings among peer groups. I am sure that this issue of "Synergy", Journal of Management, Sardar Patel University, provides for a great deal of information sharing among teachers and research scholars belonging to the discipline.

I congratulate the editors for bringing out yet another volume of Synergy and appreciate the efforts undertaken by them.

Date : 15th March, 2019
Sardar Patel University
Vallabh Vidyanagar

Dr. Shirish Kulkarni
Vice-Chancellor

Editorial

Economic liberalization and globalization has significantly affected the Indian economy. Business organizations find themselves into more competitive environment as they grow. More number of variables are added continuously and affect these organizations. In this process such organizations are trying to find ways to be more effective and profitable. This makes a perfect case for undertaking quality research in various areas to improve decision making and make organizations competitive.

The present issue of 'Synergy' Volume 20, No 2, consists of research papers on varied topics related to management. This volume of Synergy focuses on some of the current research undertaken by researchers on topics relevant to the managers. The present issue covers research papers on issues across functional areas of Management including General Management, Rural Marketing, Consumer Behaviour, Brand Management, Finance, Human Resources, etc.

In all 18 blind peer reviewed papers have been included focusing on topics such as consumer decision making, economic nationalism, CRSs compliance, brand tribalism, ergonomics, achievement motivation, brand identity, digital revolution, transforming India initiative, spirituality, multi commodity exchange, social media, cluster branding, etc.

On behalf of our editorial team, we sincerely thank all the contributors and look forward to their continued support in sharing of facts, opinions and views in the form of research papers in forthcoming issues as well.

We humbly invite your views and suggestions to strengthen our efforts in making further improvements.

(Dr. Yogesh C. Joshi)

Director

Contents

Foreword	
Editorial	
1. A Study on the Impact of Social Media on Consumer Decision Making Process in Anand and Vallabh Vidyanagar Darshna Dave and Komal Shukla	1-11
2. Applications of Blockchain Technology In Banking : A Conceptual Approach Tejal Shah and P. K. Priyan	12-20
3. An Empirical Study of Expectations Model of Economic Nationalism Among Millennials In South Gujarat Riddhish Joshi and Yogesh C. Joshi	21-28
4. An Analysis of Mandated CSRs Compliance in Selected Power Sector Companies in India Himanshu Nagarale	29-35
5. Effect of Gender and Family Income on Brand Tribalism with Special Emphasis on Mobile Phone Users in Ahmedabad Harish Sharma	36-46
6. A Study on Identifying Work Related Musculoskeletal Injuries and Associated Ergonomic Risk Factors among Different Workers: Systematic Literature Review K. S. Prasad and Akanxa J Dhamale	47-51
7. Effect of Social Networking Sites on Life of Engineering Students in Gujarat Divyang Purohit, Mitesh Jayswal and Priya Panchal	52-58
8. Study on Perception Towards Fast Food Consumption Gautamkumar Parmar and Raju M. Rathod	59-66
9. Job Related Factors Affecting Achievement Motivation of Employees in Information Technology, Hospitality and Telecom Sectors in Gujarat Vilas Kulkarni	67-76

10. A Study of Customers Perception Toward Apparels in Online Shopping	77-82
Frince Chemmanoor	
11. Brand Identity : An Important Element of Branding	83-86
Ruta Shringarpure	
12. Idea to Implementation: Adoption of Solar Roof Top Plant (SRTP) - Offered by Gujarat Energy Development Agency (GEDA) - by Owners of Apartment Houses: A Case of "Satyam Apartment" in Surat.	87-93
Mahendra Kumar Soni	
13. Challenges of Digital Revolution in Indian Banking Sector	94-100
Mukesh Pal and Brijesh Patel	
14. A Study on Contemporary Issues and Challenges in Front of Transforming India Initiative	101-107
Ashish Joshi and Nilang Veyda	
15. Transcending from A Healthy Life to A Holistic Living - Role of Spirituality	108-113
Bhavesh Khinkhabwala and Ravi Gor	
16. Analysis of Agricultural Commodities at Multi Commodity Exchange in India	114-123
Priyanka Kansara and Kamini Shah	
17. Cluster Branding: Issues and Challenges	124-131
Bhamra Manmeet Harjit and Kaushal Kishore	
18. Consumer Buying Behaviour and Market Size of Milk in Surat City	132-137
Aashaka Thakkar and Parth Chauhan	

A Study on The Impact of Social Media on Consumer Decision Making Process in Anand and Vallabh Vidyanagar

Dashana R. Dave* and Komal Shukla**

Abstract

Purpose: A research paper on "The Impact of Social Media on Consumer Decision Making Process in Anand and Vallabh Vidyanagar" is undertaken with the main objective of determining the impact of social media on consumers' decision-making process.

Research Design/ Methodology/ Approach: For this study, the descriptive research design has been used. Primary data has been collected from 150 respondents through questionnaire by survey method using convenience sampling method.

Findings: Out of 150 respondents, 147 are using social media in Anand and Vallabh Vidyanagar. The social media usage has been increased and mass media usage has been decreasing gradually. Majority of the users (80%) prefer to purchase products from social media sites. The findings of the study can be used by marketers and media planners for effective marketing results.

Research limitations/Implications: The geographical scope of the study is Anand and Vallabh Vidyanagar. Through this model, the study is going to focus on consumers' selection process before purchase, how social media affects the purchase stages in consumer decision making process and to identify the differences between social media marketing and mass media marketing.

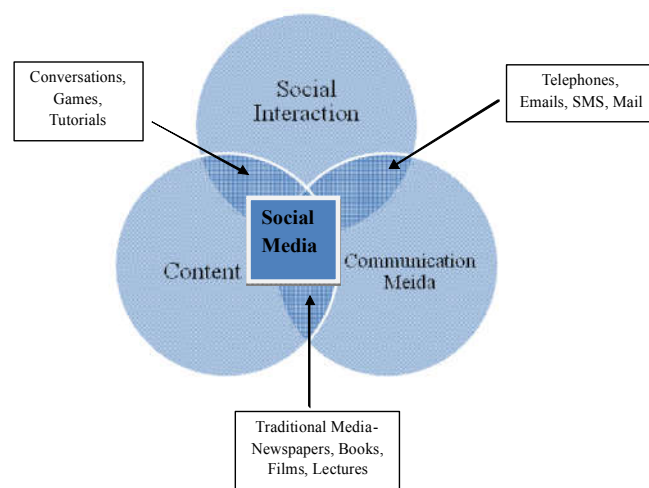
Originality/ Value: The analysis has been done by applying various statistical tools in SPSS. The intellectual content of this paper is the product of the original work and that all the assistance received in preparing this paper and sources have been acknowledged. This paper is prepared for academic purpose.

Key words: Consumer Behaviour, Consumer Decision Making Process, Social Media.

Type of Paper: Research Paper.

Introduction

Social media are interactive computer- mediated technologies that make easy the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. Social media marketing is the use of social media platforms and websites to promote a product or service. On a strategic-level, social media marketing includes the management of a marketing campaign, governance, and the establishment of a firm's desired social media culture and tone. There are mainly five types of social media: Social Networking Sites (SNS) e.g. FaceBook, Myspace; Social News Sites and Social Bookmarking Sites e.g. Digg, Reddit, Scoopit; Media Sharing Sites e.g. Youtube, Flickr; Blogs; and Microblogging (Real time information network) e.g. Twitter.



Social media components (Dann & Dann 2011, 345)

* Professor, G. H. Patel Post Graduate Institute of Business Management, (MBA department), Sardar Patel University, Vallabh Vidyanagar, Anand.

** Asstt. Professor, Anand Commerce College, Sardar Patel University, Vallabh Vidyanagar, Anand.

The social media are more and more powerful and changing the way the consumers behave, and how they make the decision to buy. "Social media" is being used to refer to online communication channels, while the term "traditional mass media" will refer to conventional communication media like TV, radio, newspapers, etc. The consumer decision making process consists of five stages: Need/problem recognition, information search, alternative evaluation, purchase decision and post-purchase behaviour. (Journal of Knowledge Management, Economics and Information Technology: The impact of social media on consumer behavior - Case study Kosovo).

Weinberg (2009) places of interest that the geographical walls which divide individuals are fragmented and new online communities are emerging and growing by social media. The social media includes a wide range of online word-of-mouth forums and information sharing formats including blogs, micro blogging sites, company sponsored discussion boards, chat rooms, customer-to-customer email, consumer product or service rating emails, creativity works-sharing and social networking sites (Mangold and Faulds, 2009 Impact Of Social Media On Consumer's Decision Making Process Among The Youth In Nairobi-United States International University-Africa).

The study on The Impact of Social Media on Consumer Decision Making Process may be significant to various stakeholders. It mainly affects to the following:

1. Scholars and Academicians

Researchers can use this study to facilitate further research on other sectors especially those that are related to social media platforms. The study provides baseline data that assists people to carry out similar studies among other organizations where the business environment is similar.

2. Companies and Organizations

The study assists online retailers to increase their profits by utilizing their sales opportunities. It also helps online retailers through social media to adapt to the changing consumer tastes and preferences to avoid heavy losses when stocks pile up.

3. Youth

Since most youth interact with social media in making decision relating to purchases of their choice, the findings of this study can be used to help the youth population establish the factors that impact on their choices based on the different stages of buyer decisions.

4. Online Consumers

Often, online shoppers are not aware of the factors that impact their decisions. The research provides measures required to ensure that consumers purchase quality products that suit their needs.

Conceptual Framework



Classic Purchase Funnel (Evan 2008)

i. Social Media

This is a group of applications that allow the creation and exchange of User Generated Content. Examples of social media platforms include: Facebook, Twitter, Instagram, Google+ and Pinterest (Kaplan & Haenlein, 2010).

ii. Consumer Decisions Process

Khatib (2016) defines consumer decisions Process as stages which consumer pass through to (1) identify their needs, (2) collect information, (3) evaluate alternatives, and (4) make the purchase decision as determined by psychological and economic factors, and are influenced by environmental factors such as cultural, group, and social values.

iii. Youth

During 2008, online social network sites like MySpace and Facebook became common Destinations for young people in the India. Throughout the country, young people were logging in, creating elaborate profiles, publicly articulating their Relationships with other participants, and writing extensive comments back and forth. By late 2009, many considered participation on the key social network site, MySpace, essential to being seen as cool at school, colleges. (Impact of Social Networking Sites (SNS) on The Youth of India, By Pratyasha Jain)

iv. Pre-purchase Stage

Kotler (2009) describes pre-purchase as process when a consumer realizes the needs and goes for an information search, makes the right decision about a product.

v. Purchase Stage

Hawkins (2010) defines Purchase stage as the stage that leads a consumer from identifying a need, generating

options, and choosing a specific product and brand. The more major the purchase decision, the more effort is typically put into the process.

vi. Post-purchase Decision

Kotler (2009) defines post-purchase decision as the final stage in the consumer decision process when the customer assesses whether he is satisfied or dissatisfied with a purchase.

Review of Literature

Researchers have explored the consumer behavior and attitude toward social media sites and implications for marketers. A Study on the Impact of Social Media on Consumer Decision Making Process has been interpreted differently by different researchers.

Boyd and Nielsen (2006)

The top ten social networking sites developed with the passage of time, and its number of users increased from 46.8 million to 68.8 million. The rating reveals the important information about how new generation interacts with each other. (Hensel and Deis Abhinav: National Monthly Refereed Journal of Research in Commerce & Management 2010) are of view that marketers should consider positively the use of social media to influence the consumer behaviour.

Blythe (2008)

Study of consumer behaviour has shifted from why people purchase to consumption behaviour. Furthermore of the important aspects of consumer behaviour is market segmentation, because consumers within the segment are more or less similar in terms of product's needs, consumer's physical and social environments have huge influences on consumers' purchase decision and can make a big difference in their desire and motives for product purchase. The buyers' decisions are affected by numerous stimuli from their environment, the commercial environment consists of the marketing activities of various firms by which they attempt to communicate the buyers (Schiffman & Kanuk, 2005).

Chung and Austria (2010)

In this paper author has made an attempt to conduct a study to determine the factors related with social media gratification and attitude toward social media marketing messages. The results of the study show that attitude toward social media marketing messages are strongly related to social media usage gratifications such as

interaction and information, but not entertainment gratification.

Diffley and Kearns (2011)

The study has shown focused groups of different age groups for their perception about social networking sites. They suggest that companies must seek to integrate advertisements and engage consumers rather than disturbing on their privacy or irritate customers.

Hampton et al. (2011)

An average Internet user has 669 social ties; Facebook has more than 600 million daily active users, with over 1.5 million business pages (Facebook 2013), and 30 billion pieces of content shared on a monthly basis (McKinsey 2011). Approximately 500 million Tweets sent per day, at about 600 Tweets per second (Tweeter 2012). LinkedIn has more than 225 million professionals worldwide, including all Fortune 500 companies (LinkedIn 2013). The global average time spent per person on social networking sites is 6.9 hours per month (Delaney and Salminen 2012).

Gros (2012)

With regards to consumer perception, the author has observed that consumers might associate low price with low quality and also perceives that social media and brand reputation has power on purchasing decision than price of the product. The post-purchase period consists of product ownership and usage which provide contexts of satisfaction appraisal, seller-directed complaints, word of mouth transmissions and repurchase planning (Wang, 2012). In the post-purchase period, consumer word-of-mouth trans-missions provide informal communications which are directed at other consumers about the ownership, usage and experiences of goods and services. Yin, (2009) laments that the consumer behaviour may easily change time by time and social media has created a new way of consumer behaviour pattern by providing social interactive tools to share their product-related opinions in buying decision process and the influence of digital interactivity on buyers' intentions. Lee (2013) remarks that youth influence on consumers' decisions and their buying intentions may be strong and be influenced by opinion leaders who offer informal advice and information about a specific product or brand.

Rant (2014)

The author is trying to convince that perception is the process through which an individual select, organizes and

interprets the information. Selecting, organizing and interpreting information in a way to produce a meaningful experience of the world is called perception. Rant (2014) also observes that the type of information or stimuli to an individual is more sensitive and depends on each and every person. And in relation to perceived risks, According to Campbell & Goodstein, (2001) after the consumption, the consumer experiences certain levels of satisfaction or dissatisfaction, and evaluates the wisdom of the choice made in selecting the alternative.

Chen (2014)

In this paper the author accounts that in post purchase stage; consumers evaluate the outcome of their purchase decision, as it can influence their future purchase patterns. And that consumers use Social Media to talk about their own good or bad experiences and thus share feedback and opinions with peers. He elaborates that social media has become easier for consumers to spread the word quickly to hundreds of people and influence their purchase decision-making processes by offering the possibility to consumers to share their good or bad experiences with their peers.

Duffett (2017)

According to this study, the purchase goal is a planned behaviour for a consumer prepared to buy certain product. There is a relationship between brand image and purchase intention. Social media is a major factor to increase brand image on consumer, for that reason some companies use different kind of social media stimuli to motivate purchase intention. Consumers who are satisfied with the product can have a positive attitude towards the brand. It was noted that perception of quality considers subjective notation which is consumer evaluation of the product and judgment that based on some attributes, that quality perception determines consumer proneness to buy a private brand.

Kosavinta (2017)

The author concluded that consumer is more likely to make repeat purchase only if they derive an acceptable minimum level of satisfaction from the last purchases, hence satisfied consumers are more likely to share their experiences with others, generate positive effect towards purchase intention for example social media which can clearly show how dissatisfied consumers complain or switch brands.

Research Gap

A gap is something that remains to be done or learned in an area of research. It is a gap in the knowledge of the researchers in the field of research of the study. From the literature review, it is noted that the key questions are to find out the purchase process, selection of information, and consumer behaviour during purchase. However, the information search identified that difference between social and mass media marketing were not found out by the researchers.

Therefore, the goals of this study are: identifying consumers' purchase process; information search before purchase, finding out the social media influences on consumer decision making process and finding out the differences between social media and mass media marketing.

Objectives of Study

1. To study how consumers attend, process and select the information before a purchase.
2. To find out how social media influences the pre-purchase stage and the post purchase stage in consumer decision making process.
3. To identify the differences between marketing on social media and through mass media.

Research Methodology

Research Design is a framework or blue print for conducting the marketing research project. It specifies details of the procedures necessary for obtaining the information needed to structure and solve marketing research problems.

For the given study, Descriptive research is used to describe characteristics of a population. Descriptive research is a study designed to depict the participants in an accurate way. More simply put, descriptive research is all about describing people who take part in the study. The present investigations will be descriptive in nature with survey being used as the major research approach. There are three ways a researcher can go about doing a descriptive research project, and they are: observational methods, case-study methods and survey methods. The survey method by personally interviewing respondents with duly tested structured questionnaire is being implemented for this study in Anand and Vallabh Vidyanagar.

Sampling: The actual user of specific service will constitute the sample of the study. Approximately, 150 respondents were chosen conveniently for survey. Enough care was taken to make the sample proportionate and representative.

Data collection: After reviewing the existing literature on the subject and interactions with experts and academicians, a self-developed measure was used to collect data from the respondents. The respondent was the actual user of specific product representing the population in Indian context with respect to social and demographic dimensions. Primary data was collected through structured questionnaire by personally interviewing respondents and Secondary data was also collected through Internet, related books, Newspapers, Journals, Magazines, Newspapers, and Articles etc. The collected data was

analysed with suitable statistical analysis using appropriate parametric and non-parametric methods of hypothesis testing as and when required.

Variables of the study

- Dependent Variables - Consumer decision making process
- Independent Variables - Social Media, Need recognition, Information search, Pre- purchase stage, Post- purchase stage

Data Analysis and Interpretation

The collected data were coded, tabulated and analysed with help of computer software. The statistical tools employed for present studies are frequencies, percentage, and mean.

Table 1: Demographic Profile

		Frequency	Percentage
Gender	Male	90	60
	Female	60	40
Age	Below 20	75	50
	21 to 30	55	37
	31 to 40	11	7
	41 to 50	4	3
	Above 50	5	3
Occupation	Public	10	7
	Private	10	7
	Business	10	7
	Profession	15	10
	Student	80	53
	Housewife	20	13
	Others	5	3
Annual Income	Below 2.5L	100	67
	>2.5L to <5L	10	7
	>5L to <10L	30	20
	>10L	10	7
Place of Residence	VVN	90	60
	Anand	60	40
Total		150	100.00

Interpretation:

From the above Table 1, it can be said that as per the data collected, out of 150 respondents 90 were males and 60 were females. It can be observed that 50% are below the age of 20, 37% are between 21 to 30 years. 7% are between 31 to 40 are 11, between 41 to 50 are 4 and above 50 years are 5; 10 belonged to public sector, 10 belonged to private sector as well, 10 are having own business, 15 belonged to different professions like medical, charter accountant, musicians and others, it has

been taken maximum respondents of students who are the youth icon for the social media are 80, also now -a-days housewives are earning online through internet and so there are 20 housewives and other occupations like retired persons are 5. It can be further observed that 100 respondents are earning below 2.5 L per annum, 10 are earning 2.5 L to 5 L annually, 30 are generating 5 L to 10 L yearly, and 10 are having more than 10 L annual income. It can be said that 90 respondents are from Vallabh Vidyanagar whereas 60 respondents from Anand.

Interpretation:

Table 2 shows the usage of social media. Out of 150 respondents, 98 percent prefer to use social media.

Table 2: Usage of Social Media

	Frequency	Percentage
Yes	147	98
No	3	2
Total	150	100

Interpretation:

From the Table 3, is implicit that there are chances of using more than one social media sites. One respondent may use one or more than one social media site/s. Here,

it is observed that the maximum 124 (84%) use YouTube, 110 (75%) use FaceBook, 97 (66%) use Instagram, 57 (39%) use Google+, 34 (23%) use Twitter, and the minimum 17 (12%) use Pintrest out of 147 respondents.

Table 3: Usage of Different Social Media Sites

	Frequency	Percentage
FaceBook	110	75
Instagram	97	66
Twitter	34	23
YouTube	124	84
Google+	57	39
Pintrest	17	12

Table 4: Usage of media per week

Social Media	Frequency	Percentage	Mass Media (T.V., Radio, Newspaper, Magazines etc)	Frequency	Percentage
0-1 hrs.	14	10	0-1 hrs.	49	33
1 to 3 hrs.	29	20	1 to 3 hrs.	46	31
4 to 6 hrs.	33	22	4 to 6 hrs.	25	17
7to 9 hrs.	37	25	7to 9 hrs.	16	11
>10 hrs.	34	23	>10 hrs.	14	9
Total	147	100	Total	150	100

Interpretation:

The above table 4 describes the per week usage of social media and mass media. 25% users use the social media more per week where as only 9% users use the mass media more. Here, it can be said that the social media usage has increased and mass media usage has been

decreasing gradually. People these days, post their product promotion on social media and consumers purchase it from social media only. T.V news channels and radio jockeys are available on social media that's why people prefer social media more. This will give us a highlight of the actual usage differences between social media and mass media.

Table 5: Total Score and Percentage Score on Variables - Problem Recognition Stage

Variables	SA	A	M	D	SD
Social media stimulates you to recognize a need for something before buying it	36 (24%)	65 (44%)	32 (22%)	12 (8%)	2 (1%)
Social media triggers you to purchase a product through its advertisements	39 (27%)	39 (27%)	46 (31%)	12 (8%)	11 (7%)
You always achieve desire for something new through social media	36 (24%)	47 (32%)	32 (22%)	28 (19%)	4 (3%)
Social media provides solutions on what to buy, where to buy and why to buy	50 (34%)	40 (27%)	26 (18%)	18 (12%)	13 (9%)
Mean	1.0952	1.2993	0.9252	0.4762	0.2041

Interpretation:

The above table 5 offers the bird's view of the first stage of decision making process that is problem recognition stage toward social media. Strongly Agree has 1.0952 mean score and Strongly Disagree has 0.2041 mean score. Moreover, majority of respondents (34%) believe

that social media help to provide the solutions regarding purchasing the products and 44% say that social media inspire to recognize a need for something before buying. It is observed that the social media users are more likely to be aware about their problem and need recognition level. They are inspired to collect the information about the products and motivated to purchase the products.

Table 6: Total Score and Percentage Score on Variables - Information Search

Variables	SA	A	M	D	SD
I am a regular reader of blogs on Internet	10 (7%)	14 (10%)	73 (50%)	40 (27%)	10 (7%)
I use social media to write blogs	5 (3%)	10 (7%)	80 (54%)	45 (31%)	7 (5%)
I use social media to view online Advertisement	38 (26%)	56 (38%)	30 (20%)	12 (8%)	11 (7%)
I use social media for interacting with others	83 (56%)	30 (20%)	25 (17%)	7 (5%)	2 (1%)
I use social media to seek opinions about product/services	56 (38%)	45 (31%)	38 (26%)	5 (3%)	3 (2%)
Information search about a product is easier in social media	75 (51%)	33 (22%)	20 (14%)	12 (8%)	7 (5%)
Social media influences consumers to try new products based on the reviews by friends	82 (56%)	31 (21%)	21 (14%)	11 (7%)	2 (1%)
Social media is an effective tool for different opinion about new and existing products	73 (50%)	33 (22%)	29 (20%)	9 (6%)	3 (2%)
Mean	2.8707	1.7143	2.1497	0.9592	0.3061

Interpretation:

From the above Table 6, it can be understood that there are different statements asked to the respondents. Each impact has its own percentage of analysis. These are the effects of Information Search during consumer decision making. Strongly Agree has 2.8707 mean score and Strongly Disagree has 0.3061 mean score. Majority 56% users believe that Social media influences consumers to

try new products based on the reviews by friends. From the above interpretations, it is observed that the social media users are more likely aware about their problem and need recognition level. They are inspired to collect the information about the products and motivated to purchase the products. Users do not prefer to write or read a blog through internet sites but they are more likely to read them on social media sites. They prefer social media more than mass media.

Table 7: Total Score and Percentage Score on Variables - Evaluation of Alternatives during Pre- Purchase Stage

Variables	SA	A	M	D	SD
Advertisements through social media are more interesting than mass media advertising	38 (26%)	45 (31%)	40 (27%)	13 (9%)	11 (7%)
Social media advertisements are more interactive than mass media advertising	49 (33%)	31 (21%)	28 (19%)	23 (16%)	16 (11%)
Social media advertising is more informative than mass media advertising	52 (35%)	40 (27%)	35 (24%)	15 (10%)	5 (3%)
Social media is more reliable as compared to mass media like newspaper, TV, Radio etc.	47 (32%)	35 (24%)	33 (22%)	18 (12%)	14 (10%)
I refer to the opinion of experts on social media sites while considering any product or service	32 (22%)	49 (33%)	38 (26%)	16 (11%)	12 (8%)
I refer to number of likes/ dislikes while considering any product or service	59 (40%)	46 (31%)	34 (23%)	6 (4%)	2 (1%)
I am subscribed to updates and alerts regarding a brand or product through social media networking sites	42 (29%)	53 (36%)	39 (27%)	6 (4%)	7 (5%)
I respond to queries and promotional offers received through social networking sites	44 (30%)	49 (33%)	33 (22%)	11 (7%)	10 (7%)
Organizations that use social media for marketing purpose are more innovative than others who are not using it	56 (38%)	41 (28%)	36 (24%)	10 (7%)	4 (3%)
Organizations that use social media for marketing purpose are more reputed than others who are not using it	33 (22%)	29 (20%)	59 (40%)	16 (11%)	10 (7%)
Mean	3.0748	2.8435	2.551	0.9116	0.619

Interpretation:

From the above Table 7, it is being recognized that each impact has its own percentage of analysis. These are the effects of Pre- Purchase Stage during consumer decision making. Strongly Agree has 3.0748 mean score and Strongly Disagree has 0.619 mean score. From the above interpretations, it is observed that the social media users are more likely aware about their problem and need

recognition level. They go through the pre purchase stage in detail. They are inspired to collect the information about the products and motivated to purchase the products. Majority of mass media tools are available on social media and so they do visit more social media sites. The major difference between mass media and social media is that, the mass Medias put the audience in a passive position. Social media puts the audience at the centre.

Table 8: Purchase Stage

	Frequency	Percentage
Yes	118	80
No	29	20
Total	147	100

Interpretation:

From Table 8; it is being analysed that out of 147 users of social media sites, 118 (80%) users purchase the products from social media where 29 (20%) users do not purchase any product from social media.

Table 9: Total Score and Percentage Score on Variables - Post Purchase Stage

Variables	SA	A	M	D	SD
After purchasing, I discuss my dissatisfaction/satisfaction towards the product purchased on social media with my friends and fellow	33 (28%)	41 (35%)	29 (25%)	12 (10%)	3 (3%)
I just do not complain regarding the product and I use to stop purchasing the products from social media	16 (14%)	37 (31%)	7 (6%)	46 (39%)	12 (10%)
I complain via social media about the product	52 (44%)	42 (36%)	14 (12%)	7 (6%)	3 (3%)
Social Media Conveys Satisfaction and Dissatisfaction	55 (47%)	38 (32%)	18 (15%)	4 (3%)	3 (3%)
Social Media Allows for Product's Review	60 (51%)	31 (26%)	19 (16%)	6 (5%)	2 (2%)
Mean	1.8305	1.6017	0.7373	0.6356	0.1949

Interpretation:

Table 9 indicates the effects of Post- Purchase Stage during consumer decision making. Strongly Agree has 1.8305 mean score and Strongly Disagree has 0.1949 mean score. Out of 118 users of social media, 51% strongly agree that social media allows the product review after purchasing the products. 47% users believe that they can convey their post purchase satisfaction or dissatisfaction level on social media. From the above interpretations, it is observed that the social media users are more likely to be aware about their problem and need recognition level. They go through the post purchase stage in detail. Cognitive dissonance is buyer discomfort caused by post-purchase conflict resulting from dissatisfaction. Once a consumer buys a product they will enter into some degree of post- purchase behaviour. These behaviours, based on their satisfaction or dissatisfaction, will either build customer equity and brand loyalty, or lead to eroding sales and brand image issues.

Suggestions and Recommendations

As per the findings, there are few suggestions for the social media and consumer buying behaviour. Social media is

just one route of marketing. But it does not mean that without social media there will not be any good product. The human being still requires sellers' interaction to buy the products. The exchange policy should be more visible on social media. Social media is a good tool for product purchase but it has a risk of purchasing at some extent. In today's world, social media is more effective than mass media. The coming age is of social media. Social media is useful where the product is new or it is in development stage.

- Make a Social Media Marketing Plan - What, When, Where and How of SMM campaign i.e. What kind of Information will you share with the audience? When is the time to target the traffic on social media sites? Segment their consumers based on the type of social media they use.
- Use social media for more frequent exposure, in order to attract their consumer attention and increase the brand awareness.
- Be more interactive; generate ideas from their consumers (making them feel part of the brand).

- Try to be influential through the crowd, making their products go viral in social media.
- Identify and manage the opinion leaders of the digital groups, stimulating them to positively talk about their products.
- The importance of going toward using the social media to market the products as these websites attracts a large portion of the society.
- The Importance of focusing on Social Media (Facebook, Twitter and Youtube) due to its significant impact on purchasing Decisions.
- Advertisers should make the social media sites advertisements to be more appealing, trendy and catchy so that social media users, especially the youths, will not only feel like patronizing the products, but rather patronize the products. There is need for advertisers to give all the details that are needed for easy patronage of the products.

Conclusion

Since long, it has been seen the emergence of a new type of media that allows a wide range of interaction possibilities between users. These media are called Social Media. Gradually more people have been using these platforms and tools and every year new types are developing, bringing new possibilities for users. Companies started to see the opportunities to be in attendance on it to engage with their customers through a two-way communication instead of one-way communication previously used by marketers. The literature review also emphasized the importance of social networking sites having influence on consumers. The data analysis has brought out the role of social media on various stages of consumer decision making process i.e. problem recognition, information search, pre and post purchase stage, word-of-mouth, which has been demonstrated as a paramount factor to vehicle influence between people. The literature review demonstrated that it was being witnessed these last years to a shift in the consumer behaviour from being 'consumers as viewers', since consumers were nowadays more likely to be participating than watching.

References

1. Stelzner A (2011) "How Marketers Are Using Social Media to Grow Their Business", Available at: <http://www.socialmediaexaminer.com/social-media-marketing-industry-report-2011>, accessed on 20 April 2012.
2. Budzanowska-Drzewiecka, M. (2011). Social conditioning of purchasing decisions of 9-11 year-old consumers. *Journal of Customer Behaviour*, 10(2), 143-160. doi:10.1362/147539211X589555
3. Social Media Marketing: How to Turn Satisfied Customers Into 'Brand Advocates'. (<http://www.forbes.com/sites/deborahljacobs/2013/02/15/social-media-marketing-how-to-turn-satisfied-customers-into-brand-advocates/> [Retrieved 16.3.2013]).
4. Kotler, P., & Keller, K. L. 2009. *Marketing management*. Upper Saddle River, N.J: Pearson Prentice Hall.
5. Marsden, D., and Littler, D., 1998. Positioning alternative perspectives of consumer behaviour. *Journal of Marketing Management*, 1 (3), 3-28.
6. M. Solomon, G. Bamossy, S. Askegard and M. Hogg. *Consumer Behavior, A European Perspective*, 3rd edition. Edinburgh Gate: Financial Times/Prentice Hall, 2006.
7. Internet World Stats. "Top 50 countries with the highest Internet Penetration Rates - 2013". Internet: <http://www.internetworldstats.com/top25>.
8. Association of Information and Communication Technology of Kosovo. "Internet penetration and usage in Kosovo" Internet: http://stikk.org/fileadmin/user_upload/Depertimi_dhe_perdorimi_i_internetit_ne_Kosove_01.pdf, Aug., 2013 [Aug. 16, 2016].
9. Ministry of EU Integration. "A guide to implementing social media in support of Kosovo's EU Integration Process". Internet: http://www.mei-ks.net/repository/docs/Social_Media_Guideline_ENG_-_FINAL_PDF.pdf, Nov., 2013 [Aug. 26, 2016].
10. Independent Media Commission. "Advertising market research and analysis in Kosovo". In-ternet: <http://kpm-ks.org/materiale/dokument/1389360328.1626.pdf>, Sep., 2013 [Jul. 12, 2016].
11. The Social Media Bible: Tactics, Tools, and Strategies for Business Success, 3d edition. New Jersey: John Wiley & Sons, Inc, 2009.

12. The Social Media Marketing Book. Sebastopol 1005 Gravenstein Highway North: O'Reilly Media, Inc, 2010.
13. E. Helsper, W. Richter, and E.T. Meyer. (2010 April) "Consumption (incl. media and enter-tainment)" Oxford Internet Institute.

Online: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi66NPP1NfPAhUC1hoKHZ8gD5AQFggoMAA&url=http%3A%2F%2Fec.europa.eu%2Finformation_society%2Fnewsroom%2Fcf%2Fdocument.cfm%3Faction%3Ddisplay%26doc_id%3D673&usg=AFQjCNF2oey3ek0bOUtLIoxnKDTE8S9lEA&bvm=bv.135475266,d.bGg&cad=rja [Jul. 29, 2016].
14. European Parliament. "Consumer behavior in a digital envrnmnt". Internet: [http://www.europarl.europa.eu/RegData/etudes/etudes/join/2011/464441/IPOL-IMCO_ET\(2011\)464441_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2011/464441/IPOL-IMCO_ET(2011)464441_EN.pdf), Aug., 2011 [Aug. 25, 2016].
15. The New Influencers, A Marketer's Guide to the New Social Media. California: Quill Driver Books, Linden Publishing, Inc, 2007, pp. 67.
16. J. Surowiecki. The Wisdom of Crowds. New Yourk: Anchor Books, Random House Inc, 2005, pp. xiv.
17. Forbes, L.P., & Vespoli, E.M. (2013). Do social media influence consumer buying behavior? An investigation of recommendations and purchases. *Journal of Business & Economics Research*, 11(2), 107-111.
18. Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behavior*, 10(6), 356-364. doi:10.1002/cb.376
19. Kang, M., & Schuett, M. (2013). Determinants of sharing travel experiences in social media. *Jounal of travel & Tourism Marketing*, 93-107, doi:10.1080/10548408.2013.751237
20. Lehmann, B.A., Ruiter, R.C., & Kok, G. (2013). A qualitative study of the coverage of influenza vaccination on Dutch news sites and social media websites. *BMC Public Health*, 13(1), 1-13. doi:10.1186/1471-2458-13-547
21. Ostrow, A. (2010). It's Official: Facebook Passes 500 Million User. Retrieved from <http://mashable.com/2010/07/21/facebook-500-million-2>
22. Simpler III, M.F. (2012). The unjust "Web" we weave: The evolution of social media and its psychological impact on juror impartiality and fair trials. *Law & Psychology Review*, 36, 275-296. Taining, Y. (2012) The decision behavior of facebook users. *Journal of Computer Information Systems*, 52(3), 50-59.
23. The effects of social media marketing on online consumer behavior. *International Journal of Business & Management*, 8(14), 66- 9. Vinerean, S., Cetina, I., & Tichindelean, M. (2013).
24. Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1(2), 1-14. Retrieved from <http://dx.doi.org/10.1086/208584>
25. Belch, G., & Belch, M. (2003). Advertising and promotion: an integrated marketing communication perspective. Berkshire: McGraw-Hill.
26. Bernoff, J. &. (2008). Harnessing the power of the oh-so-social web. *MIT Sloan Management Review*, 49(3), 36-42.
27. Blumberg, B., Cooper. D. R. & Schindler. P. S. (2014). *Business Research Methods*. New York, NY: McGraw-Hill Higher Education. C
28. Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International journal of Advertising*, 30(1), 47-75.
29. Blythe, J. (2008). *Consumer behaviour*. Cengage Learning EMEA.
30. Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitude. *Young Consumers*, 18(1).

Applications of Blockchain Technology In Banking : A Conceptual Approach

Tejal Shah* Shailak Jani** and PK Priyan ***

Abstract

Purpose

A new disruptive force of digital technology is changing the business models and increasingly becoming a crucial factor around the world. One of the most discussed and supposedly ingenious innovations is the distributed database referred to as blockchain. However, the technology and its road of development still have a lot of common unknowns for practitioners and researchers alike, especially regarding the question, how the technology could modify or be included into the existing landscape of digital services, processes and infrastructures. The purpose of this paper is to introduce the technology, its core concepts and components and to assess the value of Blockchain technology in banking sector as a solution to creating and preserving reliable digital records, presenting some of the limitations, risks and opportunities of the approach.

Design/methodology/approach

The use cases for blockchain have been developed and blockchain fit assessment have also been performed for three transactions- consortium banking, payment and KYC transaction

Findings

The results of the analysis suggest that Blockchain technology can be used to address issues associated with information integrity in the present and near term, assuming proper security architecture and infrastructure management controls.

Research limitations/implications

We limited to only three banking transactions; however, use cases for more transactions can be developed.

Originality/value

Our framework is of high theoretical and practical value as it provides researchers and practitioners a common basis for communication and means for guided analysis of blockchain applicability.

Keywords

Applications of Blockchain, Blockchain, Benefits from Blockchain, Decentralized consensus, Features of Blockchain, Use cases, Smart contracts, Trusted Computing, Banking.

Paper type: Conceptual

1. Introduction

Blockchain, mostly known as the backbone technology behind Bitcoin, is one of the emerging technologies currently in the market attracting lot of attentions from enterprises, start-ups and media. Blockchain has the potential to transform multiple industries and make processes more democratic, secure, transparent, and efficient. With high volumes of data getting generated every day owing to digitization of records, it becomes important for every organization to effectively manage the security threats and achieve significant cost efficiencies. This is where Blockchain, with its promises of decentralized

ownership, immutability and cryptographic security of data, is catching the attention of the C-suite executives. Multiple use cases are also getting explored across industries as everyone has started realising the disruptive potential of this technology. Financial players are the first movers to capitalize on this technology even though it is still in a nascent stage. Many companies, from a plethora of nonfinancial services industries like telecom Cyber Security, Governance, Energy Management, Retail, Real estate are on its way to establish the potential Blockchain use cases.

* Assistant Professor, Faculty of Management Studies, Parul University, Vadodara

** Post Graduate Student, Faculty of Management Studies, Parul University, Vadodara

*** Professor, G. H. Patel Post Graduate Institute of Business Management, (MBA department) Sardar Patel University, Vallabh Vidyanagar, Anand

2. Literature Review

In recent times, many researches have been carried out in the field of Blockchain Technology. The studies were aimed at exploring the scope of this new Blockchain Technology, as well as, its applications. Following are the literatures reviewed for the purpose of the study.

Johansen(2017) did a comprehensive review on the Blockchain, as a Technological Enabler for Innovation, it was found that Blockchain technology has certain features that is well applied within the financial industry, but still lacks to find the appropriate use of large scale Blockchain usage within modern society. Research also points towards the technological features as becoming drivers for disruption and innovation for the technology. It was also found that one of the main issues of Blockchain technology is scalability.

Crowdfunding is a critical utility particularly for small market enterprises as the new venture amidst a pervasive threat of employment crisis and insecurity. Traditional crowdfunding has been thwarted by concerns of malpractices such as money laundering, information asymmetry, and fraud that prompts legislative restrictions on the fundraising activities.

Gebert (2017) carried out research on the Application of Blockchain Technology In Crowdfunding, it was found that the blockchain technology is a tool that provides immense hope for a revival of crowdfunding across the world. The blockchain technology provides a distributed public ledger that enhances transparency such that participants can conduct affairs without concerns of imposition over the internet.

Krause (2017) found that, the blockchain technology is still in an early stage and has to prove itself in practice. The time horizon for the technology's availability for broad use in financial services is estimated to be 5-10 years. It was further found that the technology could remove trusted third parties, decrease costs and ultimately increase profits for various players within the industry.

White & Brown (2016) focused on creating a value-based society & researched on the Future Applications of Blockchain, it was found that the defining characteristic of a blockchain is that it is a trustworthy open ledger of work or transactions that are independently verified by multiple agents. Independent verification imbues the blockchain with a degree of robustness that enables its contents to be trusted.

Seebacher and Schüritz (2017) found that the Blockchain technology addresses many important aspects, such as facilitating co-creation of value, ensuring availability of information and offering mechanisms of coordination. It also creates a trusted environment through its transparent nature, making information publicly available throughout its entire network, while also assuring the integrity and immutability of data. Decentralization allows for the protection of privacy, through pseudonymization, and creates a reliable and versatile setting.

Trautman(2017) investigated the role of disruptive Blockchain technology in the future of Financial Services, it was found that laws and regulations could be programmed into the blockchain itself, so that they are enforced automatically. In other situations, the ledger can act as legal evidence for accessing (or storing) data, since it is (Computationally) tamper-proof.

Aggrawal(2017) investigated the scope of Blockchain Technology for Financial Inclusion. It was found that Blockchain can play significant role in the Financial Inclusion process. It further found that Financial Inclusion using block chain for internal and cross border payments can lower costs, shorten settlement time, and provide better user experience. Besides it suggested that regulators should engage, intervene at early stage and shape the innovation.

Guo and Liang (2016) while examining Chinese Banking sector & the use of Blockchain Technology, found that Blockchains could revolutionize the underlying technology of the payment clearing and credit information systems in banks, thus upgrading and transforming them. It also further identified some challenges like regulation, efficiency, and security that has sparked extensive debate in the process of each new financial innovation, to enhance the efficiency of the banking industry.

3. What is Blockchain

A Blockchain is a digital, immutable, distributed ledger that chronologically records transactions in near real time. The prerequisite for each subsequent transaction to be added to the ledger is the respective consensus of the network participants (called nodes), thereby creating a continuous mechanism of control regarding manipulation, errors, and data quality. It creates a digital ledger of transactions and thereby allowing to share it among a distributed network of computers and it also maintains a continuously-growing list of records called generally called "blocks" which are secured from tampering and revision.

A blockchain implementation comprises of two kinds of records: blocks and transactions. In each block contains a timestamp and a link to a previous block is provided by the secure hash algorithm. The prime advantage is that it uses cryptography which allows different users to modify the transactions on a secured network each one accessing their node of data. If majority of nodes agree that the transaction performed looks valid, identifying information which matches the blockchain's history and thus a new block is added to the chain. The two types of blockchain are public and private. Ledgers are public if:

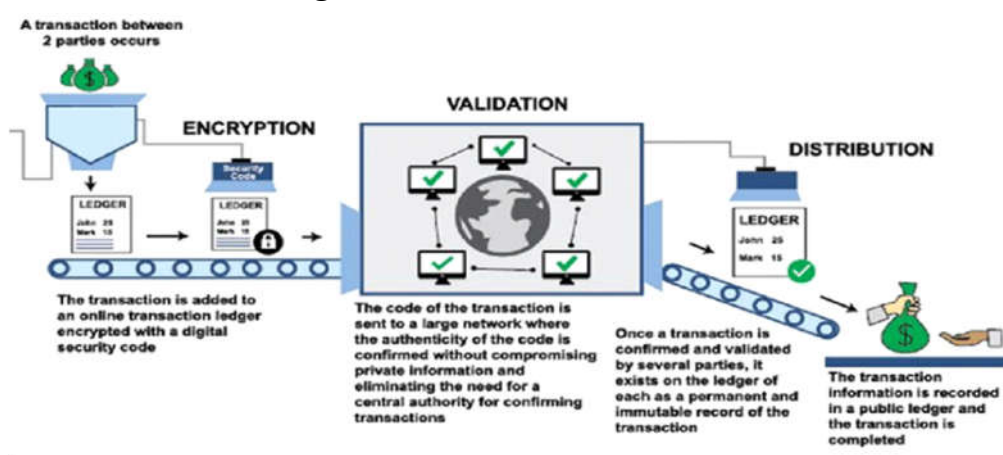
1. Anyone can write data, without permission granted by another authority.

2. Anyone can read data, without permission granted by another authority

In Private Blockchain network the participants are known and trusted and there is a level of confidentiality. For example, in a conglomerate, many of the mechanisms aren't needed or they are replaced with legal binding contracts making everyone whoever has signed the contract to abide to these rules

The blockchain architecture consists of a few fundamental concepts like decentralization, digital signature, mining and data integrity.

Figure 1: Blockchain Architecture



Source: Anatomy of a typical Blockchain Transaction, SachsInsights

(i) **Decentralization:** Rather than one central authority overpowering others in the ecosystem, blockchain explicitly distributes control amongst all peers in the transaction chain.

(ii) **Digital signature:** Blockchain enables an exchange of transactional value using public keys by the mechanism of a unique digital sign i.e. code for decryption known to everyone on the network and private keys known only to the owner to create ownership.

(iii) **Mining:** In a distributed system every user mines and digs deep into the data which is then evaluated according to the cryptographic rules and it also acknowledges miners for confirmation and verification of the transactions.

(iv) **Data integrity:** Complex algorithms and agreement among users ensures that transaction data, once agreed upon, cannot be tampered with and thus remains unaffected.

4. Benefits From Blockchain

Blockchain, as discussed in the above section by virtue of its design and architecture, offers some inherent benefits which the industry has been looking for quite some time now.

4.1 **Near real time:** Blockchain enables the near real-time settlement of recorded transactions, removing friction, and reducing risk

4.2 **No intermediary:** Blockchain technology is based on cryptographic proof instead of trust, allowing any two parties to transact directly with each other without the need for a trusted third party.

4.3 **Distributed ledger:** The peer-to-peer distributed network records a public history of transactions. The blockchain is distributed and highly available.

4.4 **Irreversibility & Immutability:** The blockchain contains a certain and verifiable record of every single transaction ever made. This prevents past blocks from

being altered and in turn stops double spending, fraud, abuse, and manipulation of transactions.

4.5 Smart Contracts: Stored procedures executed in a Blockchain to process pre-defined business steps and execute a commercially/legally enforceable transaction without involvement of an intermediary.

5. Blockchain Fit Assessment Framework

Banks across the country have successfully initiated collaboration with specialized firms (Fintech) and/or consulting firms to build proof-of-concepts and explore various potential use-cases, which explains how Blockchain can address and resolve few pain points in the current state process.

5.1 Major issues those banks face today

The Indian banking industry today is faced with issues such as rising costs of operations, increasing susceptibility to fraudulent attacks on centralized servers and challenges in ensuring transparency. All this, primarily because most of the banking transactions - from opening customer accounts to making global payments - may require intensive manual processing and documentation, involve costly intermediaries and is timeconsuming as these transactions need to be validated by various participants

at various point in time causing the delay thereby resulting in almost lack of fraudproof real time solution.

5.2 What are banks looking for?

Banks are continuously exploring new ways to perform transactions quicker for an enhanced customer service, while ensuring cost efficiency in its operations and assuring transparency to customers and regulators.

For this, Blockchain potentially provides a solution for banks as it inherently helps eliminate intermediaries, maintain immutable log of transactions and also facilitates real-time execution of transactions. This could potentially reduce the TAT for banking transaction, reducing costs of manual work, and leading to enhanced customer service and satisfaction.

5.3 The Blockchain Fit Assessment Framework

Based on the above discussion of what are the current pain points of Banking Industry and benefits of blockchain, a Blockchain Assessment Framework is developed to evaluate whether a particular process or use-case is the right fit for a Blockchain based solution. For a process or a use-case to classify as Blockchain-fit, majority of the questions provided in the framework need to be answered in the affirmative.

Table 1: The Blockchain Fit Assessment Framework

Factor	Assessment Framework	Impact of Blockchain Fit
Intermediary	<ul style="list-style-type: none"> • High fees for intermediary? • Latency due to processing through intermediary? • Does the intermediary exist due to lack of trust? 	Blockchain's distributed ledger technology facilitates disintermediation, thereby reducing costs and lowering latency.
Transparency	<ul style="list-style-type: none"> • Are multiple participants involved? • Does increase in transparency into the transaction help the participants 	The hash/ pointers of the records written on the Blockchain are immutable and irreversible, not allowing modifications and eliminating risk of fraud.
Information Storage	<ul style="list-style-type: none"> • Is the same information being stored in multiple locations? • Is data consistency an issue? 	Blockchain's distributed ledger and consensus mechanism allows data consistency across multiple participants.
Manual Processing	<ul style="list-style-type: none"> • Does the process involve manual operations? • Is the cost of Reconciliation high? 	Blockchain maintains automated audit trail of transactions, thereby reducing manual processing for data validations and reconciliations.
Trust	<ul style="list-style-type: none"> • Is there trust among participants? • Do multiple participants have the right to modify transactions? • Is there a risk of fraudulent transactions? 	Smart contracts allow codification of business rules, validations and reconciliation, thereby reducing manual processing.
Documentation	<ul style="list-style-type: none"> • Is the documentation paper-based? • Is there a large number of documents / reports required to be generated? 	Smart contracts allow business validations and automated reconciliation for straight through processing.
Time Sensitivity	<ul style="list-style-type: none"> • Will the transactions benefit from being real-time or synchronous? 	Blockchain enables the near real-time settlement of recorded transactions, reducing risk and providing an enhanced customer experience.

6. Use-cases or Processes Where Blockchain Can Play A Key Role

Presented below are some specific use cases, where we

believe that Blockchain can play a key role for helping Indian banks and financial institutions realize significant benefits.

6.1 Consortium Banking

Corporations undertake multiple large projects such as development of roads, train systems, airports, factories, new business centres, etc., which requires large-scale financing. Procuring these large funds necessitate the institutions to come together to form consortium and diversify the financial risk among its members. Such participation in lending will enable a bank to limit the commitment in respect of any one party.

Various regulatory prescriptions regarding conduct of consortium / multiple banking / syndicate arrangements were withdrawn by Reserve Bank of India in October 1996 with a view to introducing flexibility in the credit

delivery system and to facilitate smooth flow of credit. However, Central Vigilance Commission, Government of India, in the light of frauds involving consortium / multiple banking arrangements which have taken place recently, has expressed concerns on the working of Consortium Lending and Multiple Banking Arrangements in the banking system. The Commission has attributed the incidence of frauds mainly to the lack of effective sharing of information about the credit history and the conduct of the account of the borrowers among various banks.

We have examined this landscape using our assessment framework and find a near-perfect candidate for adoption of a Blockchain based solution.

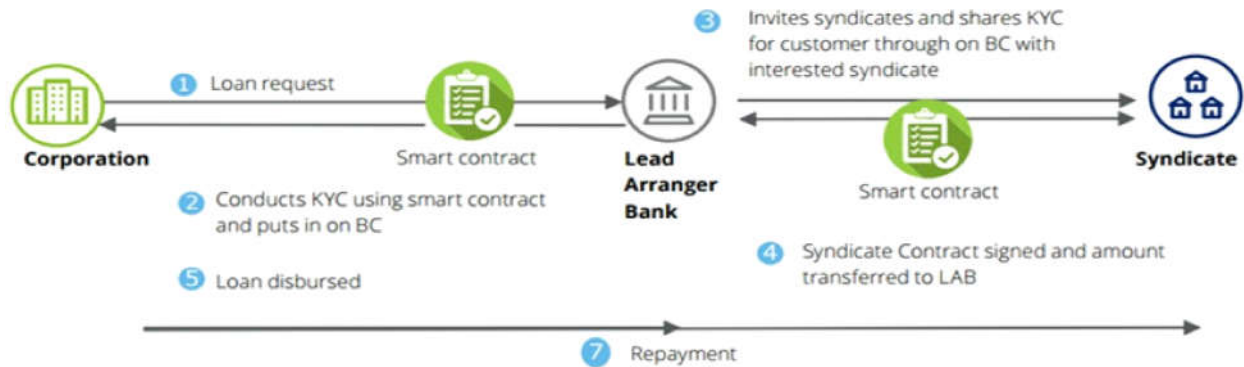
Table 2 : Blockchain Fit Assessment of Consortium Banking

Factor	Consortium Banking Fit
Intermediary	Yes – agents & intermediaries are appointed at high fees to manage and administer the process.
Transparency	Yes – consortium members seek transparency customer's rating, loan administering, etc. while customers seek transparency in underwriting.
Information Storage	Yes – customer information has to be gathered from multiple sources for underwriting. Each member also stores a copy of the customer details
Manual Processing	Yes – the entire lifecycle is very paper intensive with customer details, negotiated terms and conditions among members, etc
Trust	Yes – multiple participants are involved in the transactions including agents, customers, consortium members, etc. who may not be well known to each other, causing a lack of trust.
Documentation	Yes – There are multiple documentations required at consortium formation, as well as payment with a lot of validations for bills, items of purchase, etc. This is not due to regulatory reporting requirement.
Time Sensitivity	Yes – the turnaround time can be reduced and risk lowered if payment settlements become real time.

Table 3: Current pain points of consortium banking and solution provided by Blockchain

Current Pain Points	How Blockchain Can Help
Time-consuming process: Selection of members based on financial soundness and industry expertise, evaluation of borrower's financial background and then negotiation of term and conditions is a tedious and time consuming process for the Lead Arranger.	Faster syndicate formation: Automated selection criteria for syndicate formation in programmable smart contracts.
Intermediary Fees: Agents and intermediaries have to be appointed at high fees to manage and administer the process	Technology integration: Automated due diligence and analysis of information for loan underwriting through Blockchain, reducing TAT.
Manual Processing: The technology systems are obsolete and processes are manual and paper intensive, taking a long time as well as increasing the cost of operations.	Digitization of documents: Agreements, contracts, terms and condition documents, etc. are digitized on the Blockchain and validations and checks are automated.
Duplication of effort: The lack of technology integration for due diligence and underwriting causes referencing of different applications and sources during the process. Document duplication also leads to risk of fraud.	Document immutability: Immutability feature of the Blockchain eliminates need for multiple copies of the same documents being held.
Delayed settlement cycles: Delayed settlement cycles for payments lock up capital and increase default risk.	Reduced settlement periods: Blockchain can facilitate near real-time loan funding and payment settlements with activities executed via smart contracts.

Figure 2: Blockchain Solution for Consortium Banking



Source: Deloitte University Press

6.2 Payments

The Indian banking sector has been growing successfully, innovating and trying to adopt and implement electronic payments to enhance the banking system. Though the Indian payment systems have always been dominated by paper-based transactions, e-payments are not far behind.

Looking at the nature of today's payment processing services, it makes it difficult to follow the movements of

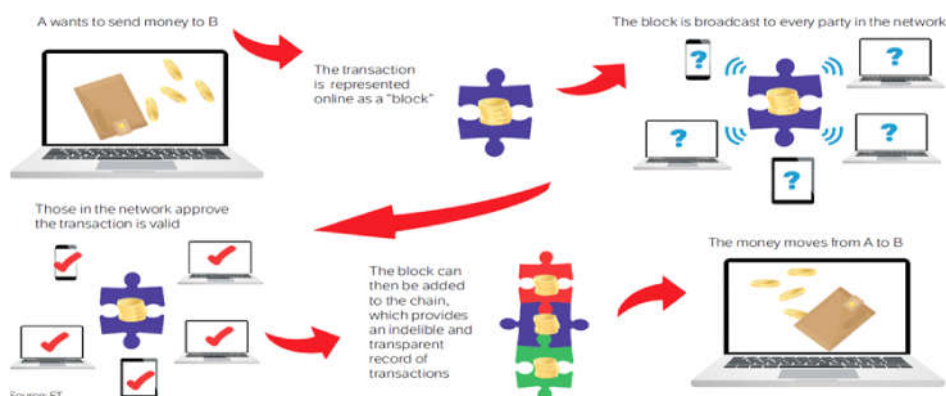
money. Even with current Know Your Customer rules, it can be challenging to link the name on a bank account to an identifiable person or company - though new "beneficial ownership" rules may make it easier in the U.S.

We have examined this landscape using our assessment framework and find a near-perfect candidate for adoption of a Blockchain based solution.

Table 4: Blockchain Fit Assessment of Payments

Factor	Payments Fit
Intermediary	Yes – intermediaries such as correspondents, counter-parties increases latency.
Transparency	Yes – applicant, beneficiary, bank, correspondents, etc. are involved in the transaction. Higher transparency would increase trust in the system, and speed up the process.
Information Storage	Yes – common information is stored across the participants such as banks, correspondents, counter-parties.
Manual Processing	Yes – it is required throughout the lifecycle of the process. Manual processing is performed by the correspondents and banks.
Trust	Yes – multiple participants are involved in the transactions and make changes/ issue instructions. Since these may be unknown to each other, there is a lack of trust and possibility of fraudulent activities.
Documentation	No – Large number of documents are required to be generated.
Time Sensitivity	Yes – it will help in providing enhanced customer experience, and reduce the exposure risk of banks.

Figure 3: Blockchain Solution for Payment



Source: PwC Digital Services

6.3 KYC

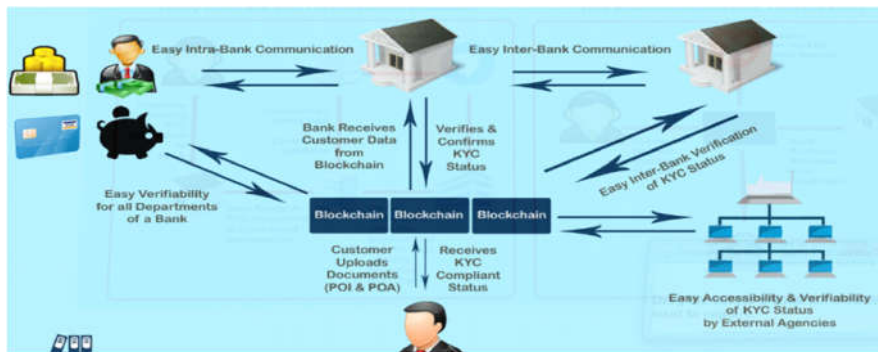
KYC processes are generally repetitive, inconsistent, and duplicated, leading to high administrative overheads and costs. Currently KYC documents are: i) Collected and stored internally, using a document management system or internal database ii) Shared with multiple external agencies for validation on an individual basis iii) Updated by banks in their internal repository upon successful validation and reported to central agencies. However, initiatives by private entities such as The Society for Worldwide Interbank Financial Telecommunication (SWIFT), banking consortiums, and government bodies

have led to an upsurge in the number of KYC registries. These registries act as centralized repositories that store all documents and information related to KYC compliance, whereas the central registry stores digitized data tagged to a unique identification number for each customer. Every bank and financial institution has to perform the KYC process individually and upload the validated information and documents to the central registry. By using the unique ID, banks can access the stored data to perform due diligence whenever customers request for a new service within the same banking relationship or from another bank.

Table 5: Blockchain Fit Assessment of Consortium Banking KYC

Factor	KYC Fit
Intermediary	NO – intermediaries as such are not present.
Transparency	Yes – applicant, company, bank, government, etc. are involved in the transaction. Higher transparency would increase trust in the system, and speed up the process.
Information Storage	Yes – common information is stored across the participants such as banks, companies, government.
Manual Processing	Yes – it is required while verifying the documents. Manual processing is performed by everyone who accepts KYC.
Trust	Yes – multiple participants are involved in the transactions and make changes/ issue instructions. Since these may be unknown to each other, there is a lack of trust and possibility of fraudulent activities.
Documentation	Yes – The applicant statements are all paper-based. This is not due to regulatory reporting requirements.
Time Sensitivity	Yes – it will help in providing enhanced customer experience, and reduce the exposure risk of banks.

Figure 4: Blockchain Solution for KYC



Source: FT Confidential Research

7. New Concerns Related to Implementation of Block Chain

7.1 Integration concern

Blockchain applications offer solutions that require significant changes or complete replacement of existing systems. In order to make the switch, financial institutions must strategize the transition.

7.2 Control, Security, and Privacy

While private or permission blockchain and strong encryption exist, there are still cyber security concerns that need to be addressed before the general public will entrust their personal data to a blockchain solution.

- (i) **Ledger Level Security:** Membership to the blockchain needs to be restricted to participants who have been subject to required scrutiny.

- (ii) **Network Level Security:** Blockchain systems typically consist of multiple subcomponents in addition to the blockchain software - these may include conventional "shadow" databases, messaging, and other services. It is recommended that communication between components of different nodes is made secure from a networking stand point.
- (iii) **Transaction Level Security:** Transaction level security is critical for financial institutions. Transaction accuracy and immutability is what drives the firms' books and records.

7.3 Uncertain regulatory status

If the government regulation status remains unsettled, blockchain will face a hurdle in widespread adoption by financial institutions

7.4 Nascent/ Experimental Stage

While most of the banks have started experimenting or developing proofs-of- concept around blockchain, there itill are not any major breakthroughs in blockchain applications in the real sense.

7.5 Cultural adoption

Blockchain represents a complete shift to a decentralized network which requires the buy-in of its users and operators.

7.6 Initial Cost

Blockchain offers tremendous savings in transaction costs and time but the high initial capital costs could be a deterrent, which is a major concern for banks.

8. Conclusion

Although the potential of Blockchain is widely claimed to be at par with early commercial Internet, banking firms needs to understand the key features of the technology and how it can solve the current business issues as on one hand, internet enabled exchange of data while on other, the Blockchain can involve exchange of value. Banks need to identify opportunities, determine feasibility and impact, and test proof of concepts.

However, the questions around regulations will have to be resolved through focused discussions with competent regulatory authorities and incorporation of their thought-process. We concluded that regulators should engage, intervene at early stage and shape the innovation. This will allow them to understand the technology, assess the risk, and enable the tailor-made solutions to their specific obstacles.

References

1. Aggrawal R, "Block Chain & Financial Inclusion" Mach 2017. Accessed November 13, 2017 Retrieved from <http://finpolicy.georgetown.edu/sites/finpolicy.georgetown.edu/files/Blockchain%20and%20Financial%20Inclusion%20120417.pdf>.
2. Baruri, P, "Blockchain Powered Financial Inclusion" October 2016, Accessed December 21, 2017 Retrieved from <http://pubdocs.worldbank.org/en/710961476811913780/Session-5C-Pani-Baruri-Blockchain-Financial-Inclusion-Pani.pdf>
3. Bhunia, Priyankar. "Consortium of Banks, Together with IMDA Singapore, Completes Proof-of-Concept for ASEAN's first Industry KYC Blockchain," October 28, 2017. Retrieved from <https://www.opengovasia.com/consortium-of-banks-together-with-imda-singapore-completes-proof-of-concept-for-aseans-first-industry-kyc-blockchain/>
4. Cocco, L., Pinna, A., & Marchesi, M. (2017). Banking on blockchain: Costs savings thanks to the blockchain technology. *Future Internet*, 9(3), 25.
5. Glaser, F. (2017). Pervasive decentralisation of digital infrastructures: a framework for blockchain enabled system and use case analysis.
6. Guo, Y., & Liang, C. (2016). Blockchain application and outlook in the banking industry. *Financial Innovation*, 2(1). Accessed January 08, 2018, Retrieved from <https://doi.org/10.1186/s40854-016-0034-9>
7. IDBRT. (n.d.). (2017) Blockchain Technology to Banking and Financial.pdf. (Baruri; Baruri) Accessed January 22, 2018, Retrieved from <http://www.idrbt.ac.in/assets/publications/Best%20Practices/BCT.pdf>
8. Indian blockchain consortium BankChain selects Azure as cloud partner. (2017, June 12). Accessed February 3, 2018, Retrieved from <https://www.cryptoninjas.net/2017/06/12/indian-blockchain-consortium-bankchain-selects-azure-cloud-partner/> IDBRT. (n.d.). Blockchain Technology to Banking and Financial.pdf.

9. Krause, E. G., Velamuri, V. K., Burghardt, T., Nack, D., Schmidt, M., & Treder, T.-M. (2016). *Blockchain Technology and the Financial Services Market: State-of-the-Art Analysis*. Bangalore, India: Infosys Consulting. Retrieved April 20, 2017, from <https://www.infosys.com/consulting/insights/Documents/blockchain-technology.pdf>
10. Kotak Mahindra Bank Sees a Blockchain Banking Consortium in Future - The Hindu BusinessLine." Accessed January 11, 2018. Retrieved from <https://www.thehindubusinessline.com/money-and-banking/kotak-sees-a-blockchain-banking-consortium-in-future/article9704425.ece>.
11. Korpela, K., Hallikas, J., & Dahlberg, T. (2017, January). Digital supply chain transformation toward blockchain integration. In proceedings of the 50th Hawaii international conference on system sciences.
12. Mainelli, M., & Smith, M. (2015). Sharing ledgers for sharing economies: an exploration of mutual distributed ledgers (aka blockchain technology).
13. MICHAEL, J., COHN, A., & BUTCHER, J. R. (2018). *BlockChain technology*. The Journal.
14. MonishShah, Suchintan Chatterjee. (April 18, 2017). *Blockchain in banking*. Deloitte. Retrieved from <https://www2.deloitte.com/in/en/pages/strategy/articles/blockchain-in-banking.html>
15. Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and cryptocurrency technologies: a comprehensive introduction*. Princeton University Press.
16. Nguyen, Q. K. (2016, November). *Blockchain-a financial technology for future sustainable development*. In *Green Technology and Sustainable Development (GTSD)*, International Conference on (pp. 51-54). IEEE.
17. Olleros, F., & Zhegu, M. (2016). *Research Handbook on Digital Transformations*. Edward Elgar Publishing. Retrieved January 20, 2018, from <https://doi.org/10.4337/9781784717766>
18. Peters, G. W., & Panayi, E. (2016). Understanding modern banking ledgers through blockchain technologies: Future of transaction processing and smart contracts on the internet of money. In *Banking Beyond Banks and Money* (pp. 239-278). Springer, Cham.
19. Pilkington, M. (2016). *11 Blockchain technology: principles and applications*. Research handbook on digital transformations, 225.
20. Seebacher, S., & Schüritz, R. (2017, May). *Blockchain technology as an enabler of service systems: A structured literature review*. In *International Conference on Exploring Services Science* (pp. 12-23). Springer, Cham.
21. Trautman, L. J. (2016). *Is disruptive blockchain technology the future of financial services?*.
22. *The role blockchain technology can play in accelerating financial inclusion*. (2017, March). Retrieved December 2017, from digitalchamber: <https://digitalchamber.org/assets/blockchain-and-financial-inclusion.pdf>
23. Yli-Huumo, J., Ko, D., Choi, S., Park, S., & Smolander, K. (2016). *Where is current research on blockchain technology?-a systematic review*. PloS one, 11(10), e0163477.

An Empirical Study of Expectations Model of Economic Nationalism Among Millennials in South Gujarat

Riddhish N. Joshi* and Yogesh C. Joshi**

Abstract

Purpose - The purpose of this paper is to examine the influence of various dimensions of economic nationalism on behavioural intention of millennials.

Design/methodology/approach - Primary research using structured questionnaire was directed in South Gujarat amongst millennial age group consumers to investigate the expectations model of economic nationalism and their behavioural intention.

Findings - The result of the study finds that behavioural intention of millennials to avoid and discourage foreign products is largely affected by their expectations with respect to Indian firms and general public.

Research implications - The study enhances the understanding about the expectations of people with respect to Indian government, Indian firms and general public about their role to restrain the magnitudes of foreign operations in host countries.

Originality/value - The research provides practicing marketers as well as international researchers a deeper understanding about the relationship between dimensions of expectations model of economic nationalism and behavioural intention among millennials.

Keywords - Economic nationalism, economics, consumer behaviour, globalization

Paper type - Research Paper

1. Introduction

Economic nationalism has been and will continue to be an argumentative subject. While it is certainly not a modern philosophy, its appearances in today's international economy have been constant and critical.

According to Heilperin (1960), it is difficult to discern the precise meaning of economic nationalism but the term was widely used during interwar years in 20th century. Liberal economists often use this term to define the policies they don't like. As per the view of Kofman (1990), economic nationalism is everything that did not fit in with the liberal explanation of economy and development. At best economic nationalism is an open-ended word, used by its antagonists, more that by its protagonists (Hadgson, 1933).

According Helleiner and Pickel (2005), economic nationalism denotes to policies directed by the idea of shielding the domestic economy from perils including but not limited to the consequences of free trade. Such policies

include tariffs and other constraints on free trade that are repellent to neoliberals yet might be in the interest of economic development. It can be understood as a set of attitudes or set of themes rather than a coherent and disciplined form of economic or political philosophy (Gilpin, 1987).

Economic nationalism is really a complex set of relationships between nation and economy that can indeed include neoliberalism in its various forms and provide not just theory but empirical descriptions to exhibit their argument (Winters, 2006). Although economic nationalism has been around for some time, elucidations vary and it is often confused with the similar yet distinct concepts of nationalism, patriotism, ethnocentrism and consumer ethnocentrism (Akhter, 2007).

The trend toward economic nationalism has also been powered by greater global income inequality, growing reliance on individual merchandises for government revenues, too many countries hitching their economic prosperities to China, and a growing inclination for oil-

* Research Scholar, G.H. Patel P. G. Institute of Business Management, Sardar Patel University, Vallabh Vidyanagar and Assistant Professor, S.R. Luthra Institute of Management, Surat

** Dean, Faculty of Management, Director and Professor, G.H. Patel P.G. Institute of Business Management, Sardar Patel University, Vallabh Vidyanagar

producing countries to continue to produce oil outside prohibited multilateral agreements (Wagner and Disparte, 2016).

The economic foundation for economic nationalism relies on the wish to defend native business welfares. When overseas companies come to a nation with improved

pecuniary resources and marketing expertise, they are observed as a danger to indigenous trade. Economic nationalism therefore develops a reaction to the anxiety of trailing control of inland trades to overseas companies and the parallel progress of an indeterminate future (Miller, 1990; Reich, 2010).

Table 1: India's International Trade Statistics (In Billion Rupees)

Year	Exports			Imports			Balance of Trade		
	Oil	Non-Oil	Total	Oil	Non-Oil	Total	Oil	Non-Oil	Total
1977-78	0.16	53.92	54.08	15.51	44.69	60.2	-15.35	9.23	-6.12
1978-79	0.14	57.12	57.26	16.77	51.34	68.11	-16.63	5.78	-10.85
1991-92	10.22	430.2	440.42	131.27	347.24	478.51	-121.05	82.95	-38.09
1992-93	13.79	523.09	536.88	171.42	462.33	633.75	-157.63	60.76	-96.86
1993-94	12.48	685.04	697.51	180.46	550.55	731.01	-167.98	134.49	-33.5
1994-95	13.09	813.65	826.74	186.13	713.58	899.71	-173.04	100.07	-72.97
1995-96	15.18	1048.36	1063.53	251.74	975.05	1226.78	-236.56	73.31	-163.25
1996-97	17.1	1171.07	1188.17	356.29	1032.91	1389.2	-339.18	138.16	-201.03
2001-02	101.07	1989.11	2090.18	667.7	1784.3	2452	-566.63	204.82	-361.82
2002-03	124.69	2426.68	2551.37	853.67	2118.39	2972.06	-728.98	308.29	-420.69
2003-04	163.97	2769.69	2933.67	945.2	2645.88	3591.08	-781.23	123.82	-657.41
2004-05	314.04	3439.35	3753.4	1340.94	3669.71	5010.65	-1026.9	-230.35	-1257.25
2005-06	515.33	4048.85	4564.18	1946.4	4657.69	6604.09	-1431.07	-608.84	-2039.91
2006-07	845.2	4872.59	5717.79	2585.72	5819.35	8405.06	-1740.52	-946.75	-2687.27
2014-15	3460.82	15503.63	18964.45	8428.74	18942.12	27370.87	-4967.92	-3438.49	-8406.41
2015-16	1985.76	15158.48	17144.24	5400.69	19458.58	24859.27	-3414.93	-4300.1	-7715.03

Source: Directorate General of Commercial Intelligence and Statistics

Above table shows India's exports (oil and non-oil), imports (oil and non-oil) and trade balance (difference between exports and imports). As oil consumption is huge and inevitable, the data is classified in oil and non-oil product categories to have an improved picture of trade balance of India. Since 1977-78 oil accounts for major deficit. Non-oil goods contributed for positive trade balance for many years in late 70s and after 1991-92 till

2003-04 with more exports as compared to imports. The consumption of imported non-oil goods have increased a lot from 2004-05, started contributing negatively and it reached to a level in 2015-16 that the deficit of non-oil goods crossed the deficit of oil products. The table evidently signifies that the consumption of imported goods have increased a lot in India and it has created an environment of threat for indigenous manufacturers.

International business, international marketing, political science and literature repeatedly discuss and present numerous thoughts which seem very much linked to the concept of economic nationalism like nationalism, patriotism, ethnocentrism, and consumer ethnocentrism but are abstractly dissimilar. Unlike other four concepts, economic nationalism pursues to protect domestic possessions, businesses, and folks from the control of overseas organisations, who are considered members of the out-group (Akhter, 2007).

2. Literature Review

Review of literature is very important to critically summarize the present knowledge in the area under exploration. It also aids to establish merits and flaws of earlier work, lead to categorise them in the contemporary research and also support to eliminate probable deficiencies. It also conveys perspective and contributes in detecting the gap. The present review scrutinized numerous literature in the viewpoint of the current research area.

The notion of economic nationalism recommends that production, exchange, consumption and accumulation can reinforce the national communal and that national power can be and used for such devotions (Crane, 1998). Economic nationalist politics abandon one of the vital concepts of economics--that of gains from trade: the idea that, when people trade willingly, they are both better off--they interchange things they worth for things they value even more (Wrong, 1998).

The flaws of economic nationalism are greater or lesser than those of its two rivals, economic liberalism and economic socialism. Indeed, all three leave open questions and provoke us with difficult predicaments (Levi-Faur, 1997).

It is deceptive to apprehend this phase of globalisation and economic liberalisation as inevitably indicating the downfall of economic nationalism. Economic nationalism does not stance any challenge to economic liberalism, furthermore, the intensifying approval of liberal economic policies in the contemporary phase should not be muddled with the supremacy of economic liberalism (Helleiner, 2002). New Statesman (2009) stated that the world cannot return to the world of closed economies. The powers of globalisation, directed by state-of-the-art technologies such as the internet and the entertainment industry, are alluring and irreversible. The way forward must be for governments, working in concert, to attempt

to soften the effects of globalisation, to regulate markets more efficiently, while keeping them free and open. The alternative, a retreat into protectionism and economic nationalism, would only make the present-day crunch even shoddier.

The blatant choice we face is either a common assurance to internationalism or a return to economic nationalism led by industrial policy. At present, the second seems to be the more prospective (Leipziger, 2010). Canada's big businesses favoured globalization to nationalism. They wanted a world where they could sell their holdings to whichever consumer from whatever country offered the utmost price. And they wanted reciprocal rights to invest Canadian money overseas (Walcom, 2007).

The idea of a single services market bridging all its member states was one of the establishing ideas of the European Union and Economic nationalism will not shape tomorrow's Europe. The Commission will exercise its authorities if companies abuse their dominant positions on the marketplace (The Associated, 2006). In a righteous series, globalisation both moulded and banked on healthy economic development and in line with the same individual countries surrendered national interest as pay backs. Reversal of the trend to global integration and rise of new nationalism, including more closed economies with restricted trade or capital flows, is motivated by numerous reasons and in turn economic nationalism is a threat to global prosperity (Satyajit, 2013).

The apparent conviction of economic nationalism is that mounting international business may threaten the survival and expansion of few indigenous companies and hurt the domestic economic well-being (Han, 1988). Economic nationalism thus not only stimulates behaviours in livelihood of national businesses, organisations, and goods, but also amplifies the division between indigenous and overseas companies. (Slater, 1998).

Based on literature review, it can be summarised that economic nationalism is always observed in incongruous manner by several economists and researchers. Many researchers sight it negatively and contemplate it as threat to global economic health while many pose a conflicting view and ponder it as boosting a domestic economy. Both school of thoughts present their supporting arguments also.

3. Research Methodology

The expectations model of economic nationalism was developed by Akhter (2007) based on the foundation

that it is not possible to protect domestic economy from the influence of overseas companies by individual alone. Foreign firms perform diverse economic, financial and political activities to accomplish their goals in a host country so people realise the influence that these corporations command and apply in the host country. Therefore, they anticipate others who are in control of resources and enjoy decision making power, to perform such activities that end up in dipping the power of overseas companies over domestic economy.

The model proposes that economic nationalism can be measured by expectations that individuals have of others, specifically the government, indigenous firms, and the general public at large in curbing the doings of overseas firms. So as per this model, somebody can be considered

to do the same. The items in the model are modified based on objectives of the current research.

3.1 Research Objectives:

Objectives express the precise purposes of the study and are outlined based on the research problem identified. Present study aims at following objectives.

1. To ascertain expectations with respect to various dimensions of economic nationalism amongst millennials.
2. To recognise millennials' behavioural intentions with respect to avoid and discourage foreign products.
3. To study influence of various dimensions of economic nationalism on behavioural intention of millennials.

Figure 1 Proposed Research Model



Descriptive research design has been used. Data were collected through a structured questionnaire using non probability convenience sampling technique from millennial age group (people who are born between 1982 and 1999) consumers in South Gujarat region. Dimensions of expectations model of economic nationalism and behavioural intention were measured using a seven point Likert scale with extremes being "Strongly Disagree" and "Strongly Agree". Different socio-demographic data of respondents were also collected.

3.2 Millennial Age group:

"Millennial" term was first coined by Neil Howe and the late William Strauss, in the mid-90s and wrote Millennials Rising in 2000 (Pollak, 2015). Millennials, also known as Generation Y or the Net Generation, are the demographic cohort that directly follows Generation X. The precise delineation of millennials varies from one source to another but generally starting age of Millennials

is usually considered to apply to individuals who reached adulthood around the turn of the 21st century (Rouse, 2015).

4. Results and Findings

Generalization of the outcomes based on collected data is attempted through data analysis. This section offers the profile of respondents and also mean score of responses on various dimensions of expectations model for economic nationalism and behavioural intention. It also identifies the predictive power of this dimensions on behavioural intention using multiple regression.

Table 2: Socio-demographic summary of respondents

Socio-demographic Profile of Respondents		Gender		Total
		Male	Female	
Occupation	Student	74	73	225
	Self Employed	8	6	
	Salaried	46	18	
Educational Qualification	Graduate	27	33	
	Post Graduate	101	64	
Monthly Family Income (In Rs)	< 25000	56	35	
	25000 - 50000	40	29	
	50001 - 100000	25	19	
	> 100000	7	14	
Place of Residence	Urban	82	72	
	Semi Urban	36	22	
	Rural	10	3	
Total		128	97	

Source: Primary Survey

The above table describes the socio-demographic profile of respondents. There are total 225 respondents which

comprises of 128 males and 97 females. The average age of respondents is 23.7 years.

4.1 Mean score and reliability statistics:

Table 3: Mean score and reliability statistics for various dimensions of the model and behavioural intention

Statements		Mean	Mean of Means	Cronbach's Alpha
Expectations with respect to Indian Government				
1	Indian government should set a limit on foreign investments in India	4.38	4.43	0.720
2	Indian government should not allow foreign firms to send their profits back to their country.	4.68		
3	Indian government should control foreign business involvements in all sectors of Indian economy.	4.62		
4	Indian government should have a restrictive set of rules for foreign business.	4.81		
5	Indian government should not buy foreign products.	3.48		
6	Indian government should set an upper limit on market shares of foreign companies in India.	4.62		
Expectations with respect to Indian Firms				
1	Indian firms should NOT sell their businesses to foreign firms.	3.89	3.92	0.765
2	Indian firms should NOT form strategic alliances with foreign firms.	3.15		
3	Indian firms should NOT sell their technologies to foreign firms.	3.80		
4	Indian firms should NOT buy foreign products if Indian products are available.	4.84		
Expectations with respect to General Public				
1	Indian public should boycott foreign products.	3.88	3.80	0.870
2	Indian public should encourage others to boycott foreign products.	3.74		
3	Indian public should avoid working for foreign firms.	3.38		
4	Indian public should openly express/write against foreign business practice.	4.06		
5	Indian public should support politicians who want to reduce foreign business presence in India.	3.84		
6	Indian public should encourage public officials to take actions against foreign firms.	3.88		
Behavioural Intention				
1	I intend not to buy foreign products.	3.80	4.07	0.821
2	I intend to recommend friends only to buy Indian products.	4.28		
3	I intend to buy foreign products only if Indian products are not available.	4.56		
4	I intend to discourage friends from buying foreign products.	3.63		

Source: Primary Survey

From the above table, it can be notified that the respondents' expectations with respect to Indian government to control foreign companies and their operations in India are moderately high. They score moderately low when it comes expectations from Indian firms and general public. Respondents score neutral on their own behavioural intention to buy and favour foreign products.

The values of Cronbach's Alpha for expectations with respect Indian government, Indian firms, general public

and behavioural intentions are 0.720, 0.765, 0.870 and 0.821 respectively which displays high level of reliability.

Now further analysis identifies correlation between dimensions of expectations model of economic nationalism along with behavioural intention to avoid and discourage foreign products. It also measures the predictive power of these three dimensions for behavioural intention. Multiple regression test determines the extent to which these dimensions can project consumers' behavioural intention.

4.2 Correlation:

Table 4: Pearson Correlation matrix

		Expectations with respect to Indian Government	Expectations with respect to Indian Firms	Expectations with respect to General Public	Behavioural Intention
Expectations with respect to Indian Government	Pearson Correlation	1			
	Sig. (2-tailed)				
Expectations with respect to Indian Firms	Pearson Correlation	.505**	1		
	Sig. (2-tailed)	.000			
Expectations with respect to General Public	Pearson Correlation	.532**	.556**	1	
	Sig. (2-tailed)	.000	.000		
Behavioural Intention	Pearson Correlation	.432**	.529**	.681**	1
	Sig. (2-tailed)	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Primary Survey

From the above matrix, it can be seen that positive correlation exists between all the constructs and they are statistically significant.

4.3 Multiple Regression

'Dimensions of expectations model of economic nationalism and behavioural intention'

Table 5: Predictive Power of Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.705 ^a	.497	.490	1.03685

a. Predictors: (Constant), Expectations with respect to General Public, Expectations with respect to Indian Government, Expectations with respect to Indian Firms

Source: Primary Survey

The "R" column characterises the value of R, the multiple correlation coefficient. Here the value of R is 0.705 which specifies a good level of prediction. The "R square" column denotes the coefficient of determination which is the proportion of variance in the dependent variable that can be explicated by the independent variables. Here R square value is 0.497 which signifies that independent variables i.e. expectations with respect to Indian government, expectations to with Indian firms and

expectations with respect to general public explain 49.7 per cent of the variability of dependent variable "behavioural intention".

Table 6: Regression Model Fit Test

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	234.756	3	78.252	72.788	.000 ^b
	Residual	237.589	221	1.075		
	Total	472.346	224			

a. Dependent Variable: Behavioural Intention

b. Predictors: (Constant), Expectations with respect to General Public, Expectations with respect to Indian Government, Expectations with respect to Indian Firms

Source: Primary Survey

The "Regression Model Fit Test (ANOVA)" table reflects whether the overall regression model is good fit for the

data. As $P < .0005$, it can be said that the regression model is good for the data.

Table 7: t-statistics for Independent variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.767	.304		2.525	.012	.168	1.365
	Expectations with respect to Indian Government	.051	.081	.037	.631	.529	-.108	.210
	Expectations with respect to Indian Firms	.209	.061	.206	3.426	.001	.089	.330
	Expectations with respect to General Public	.593	.067	.546	8.916	.000	.462	.724

a. Dependent Variable: Behavioural Intention

Source: Primary Survey

The regression can be written as,

Behavioural Intention = $0.767 + 0.037$ expectations with respect to Indian Government + 0.206 expectations with respect to Indian firms + $.546$ expectations with respect to general public.

From the above table, it can be seen that expectations with respect to Indian firms and general public added statistically significantly to the prediction of behavioural intention to avoid and discourage foreign products.

5. Conclusion

The study enriches the knowledge about the expectations of people with respect to Indian government, Indian firms and general public about their role to curtail the consequences of foreign operations in host countries. Consumers have moderately high expectations from government to control and regulate the foreign business in India. Their expectations are moderately low with respect to Indian firms and general public. They score neutral on their own behavioural intention.

Now a days a global economy has become more assimilated and disturbances caused by economic nationalism can have venomous outcomes. Economic

nationalism plays very vital role to moderate the trade environment in each country even in the scenario of globalization and opening of various economies. Economic nationalism can become hurdle to achieve financial and marketing goals from MNCs so they need work with pre-emptive approach which not only plan their strategies but also ensure that they are in a better position to tackle highly economic nationalistic consumers.

References

- Akhter, S. H. (2007). Globalization, expectations model of economic nationalism, and consumer behavior. *Journal of Consumer Marketing*, 24(3), 142-150.
- Crane, G. T. (1998). Economic nationalism: Bringing the nation back in. *Millennium*, 27(1), 55-75.
- Gilpin, R., & Palan, R. (1987). *International Political Economy*.
- Han, C. M. (1988). The effects of cue familiarity on cue utilization: the case of country of origin. In *Conference of the Academy of International Business*, San Diego, CA.

- Heilperin, M. A. (1960). The Economic Nationalism of John Maynard Keynes. *Studies in Economic Nationalism*, 97-128.
- Helleiner, E. (2002). Economic nationalism as a challenge to economic liberalism? Lessons from the 19th century. *International Studies Quarterly*, 46(3), 307-329.
- Helleiner, E., & Pickel, A. (Eds.). (2005). *Economic nationalism in a globalizing world*. Cornell University Press.
- Hodgson, J. G. (Ed.). (1933). *Economic nationalism* (Vol. 9, No. 1). The HW Wilson Company.
- Leipziger, D. (2010). Economic Nationalism Dies Hard: How Political Forces Are Resurrecting "Industrial Policy". *Harvard International Review*, 32(2), 64.
- Levi-Faur, D. (1997). Economic Nationalism: From Friedrich List to Robert Reich. *Review of International Studies*, 23(3), 359-370.
- Kofman, J. (1990). How to define economic nationalism? A critical review of some old and new standpoints. *Economic Nationalism in East-Central Europe and South America*, Genève, LibrairieDioz, 24.
- Miller, A., & Thomas, R. (1990). What is managed trade?--and will it work?. *Newsweek*, 115(10), 26-26.
- New Statesman (2009, February 9). A retreat into economic nationalism would be a disaster for Britain. p.4. Retrieved from <https://www.newstatesman.com/politics/2009/02/british-workers-britain>.
- Pollak, L. (2015, October 20). What is Millennial? Everything you've always wanted to know but were afraid to ask [Blog Post]. Retrieved from <https://www.lindseypollak.com/what-is-a-millennial-everything-youve-always-wanted-to-know-but-were-afraid-to-ask/>.
- Reich, R. B. (2010). *The Work of Nations: Preparing Ourselves for 21st Century Capitalis*. Vintage.
- Rouse, M. (2015, January). Millennials generation. WhatIs.com. Retrieved from <http://whatis.techtarget.com/definition/millennials-millennial-generation>.
- Satyajit, D. (2013, June 26). Rise of economic nationalism is threat to global prosperity. Independent (UK)
- Slater, J. (1998), "What's in a name", *Far Eastern Economic Review*, March 26, pp. 14-15.
- The Associated, P. (2006). Barroso: EU Against Economic Nationalism.
- Walcom, T. (2007, April 21). Economic nationalism rest in peace. *Toronto Star* (Canada). Retrived from <https://www.pressreader.com/canada/toronto-star/20070421/282699042685883>
- Wagner, D., & Disparte, D. (2016). THE RISE OF ECONOMIC NATIONALISM. *Risk Management*, 63(4), 28.
- Winters, C. A. (2006). Economic Nationalism in a Globalizing World. *Journal Of Economic Issues* (Association For Evolutionary Economics), 40(1), 237-
- Wrong, A. (1998). *The Odd Bedfellows of Economic Nationalism*.

An Analysis of Mandated CSRs Compliance in Selected Power Sector Companies in India

Himanshu Nagarale*

Abstract

Abstract Purpose - The purpose of this paper is to analyse whether the corporate organisations working in India are really making contribution for general welfare of society or actual fact is something different.

Design/methodology/approach - Purposive sampling technique is used for the selection of listed sample companies from a recognised stock exchange of India. For the purpose of the study, top 10 listed companies are selected out of the total 31 listed companies available on Bombay Stock Exchange. Selection of listed companies is based on market capitalization criteria.

Findings - It concludes that sample selected companies for study purpose want to follow the legal requirement not only in words but also in true spirit of lawmakers who were behind formulating such act or rules, as maximum numbers of companies are contributing more than 2 percentage of net worth for CSR expenditure. This shows companies are actually taking seriously the CSR expenditure and accepted Corporate Social Responsibility as an effective tool for societal development.

Originality/value - The Originality of this research lies in identifying the actual contribution made by companies engaged in power sector companies in India with that of statutory requirement as per Companies Act.

Keywords - CSR in India and its applicability, Power sector Companies, CSR spending, Co's Act 2013

Paper type: Research paper

1 Preface

Profitable companies make important contribution to society by the way of job creation and providing finance for the general welfare of the population. The main objective of the companies is to create value and generate financial results within the legislative framework of the society in which they operate. But, companies are not supposed to work for profit only. As companies are working and operating within a society, they have an impact on social development where they operate. Therefore, they must have responsibility that extends beyond value creation and profitability. Perhaps, answer to company's responsibility towards society is Corporate Social Responsibility (CSR).

CSR is way of conducting business now-a-days, as corporate entities/business entities are under mandatory compliance of contribution of at least 2 percent of last three years' average profit towards society in which they operate. Before August, 2013 there was no such mandatory compliance for corporate entity/business entity. CSR is basically the responsibility of companies towards

people, society and the environment that are affected by their activities.

India has fifth largest power generation capacity in the World. The country ranks third globally in terms of Electricity production. Electricity production in India reached 902.9 Billion Units (BU) during April-December 2017. As per the 13th Five Year Plan, India is targeting a total of 100 GW of power capacity addition by 2022. (I B E F, 2018) Power sector is heavy capital-intensive sector which provides benefits in long run and this becomes a reason for selection of power sector companies for conducting this research study.

2 Literature Review

Sharma (2013) in her study "the Role of Corporate Social Responsibility in Organisation" tried to generate awareness and to understand meaning, significance, dimensional aspects of CSR and how to manage it. She had made efforts to study three dimensional aspects of CSR which includes economic aspects, social aspects and environmental aspects. She concluded that CSR is

* Faculty Member, Department of Accounting and Financial Management, Faculty of Commerce, The Maharaja Sayajirao University of Baroda, Vadodara

one of the way to bring overall positive impact on communities, cultures, societies and environments in which they operate.

Chatterjee (2010) conducted an important study titled about "Corporate Governance and Corporate Social Responsibility: The case of Three Indian Companies". The objective of the study was to analyse the corporate governance (CG) practices of three prominent Indian firms (i.e. ITC Ltd., Infosys Technologies Ltd., and Reliance Industries Ltd.), based on four parameters namely, 'Approach to Corporate Governance', 'Corporate Structure and Practices', 'Board Committees' and 'Corporate Social Responsibility activities'. He stated that amongst three companies, Infosys Technologies Ltd. is doing much better Corporate Governance and Corporate Social Responsibility as compared to other two companies. All three companies believe in creating Long-term shareholder value.

Shanmugan (2013) engaged in the study of "Environment CSR activities of manufacturing units in India - An Empirical Study". Major focus of the study was to found out the status of Corporate Social Responsibility activities relating to 'environment' in Indian manufacturing sector. The research objectives were to understand environment CSR profile, to find out relationship between environment CSR and its factors & difference between environment CSR across six classifications, namely, manufacturing sector, and type of organization, region, experience, turnover and workforce. It was concluded that the automobiles units have obtained the highest scores for environment CSR (82.45%). Automobile units give more importance to the environment and take measures to safeguard the same. She also recommended that tree plantation activities inside and outside the premises and integrated watershed development can improve environmental CSR.

Kumar (2016) undertake an important study regarding "Corporate Social Responsibility - A case study of Balco Power Plant (Vedanta)". The objectives of the study were to highlights the concept of CSR and practices exhibited by Balco Power Plant. The study based on the secondary data collected from websites, annual reports, newspapers and CSR reports. It was concluded that Balco actively exhibits social responsibility in various fields like Health, Education, Women Empowerment, Safety and Environment protection. There is Integrated Management System to upgrade and improve the quality, health and environment management system.

Mishra (2014) carried out research regarding "A Study of Corporate Social Responsibility in Indian Organizations". The objective of the study was to identify the scope and analyse CSR practices adopted by Indian Organizations. The entire study based on the secondary data collected from the different sources. It was concluded that CSR is not a method for brand construction but it helpful to create an integral brand between its employees. CSR cannot consider as extra but it becomes core element of all businesses.

3 Research Problem

Business in India is not one man show, it requires important contribution of owners, employers, suppliers, and most important ultimate consumers. As business requires best coordination between above five factors to survive and to achieve profit in such a competitive business environment, Indian Companies definitely have an impact on social development where they operate. Therefore, we can say that Indian companies have responsibility beyond the value creation and profitability. Corporate Social Responsibility is matter of clarifying exactly what will be responsibility of companies and how it can be fulfilled. It becomes mandatory requirement as per Companies Act, 2013.

Now-a-days, people become so dependent on electricity based product that spending a day without electricity is just imagination only. Power Sector of India is one of the major contributors in economic development. 100 per cent FDI allowed in power sector has boosted FDI inflows in this sector. Moreover, schemes like Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) have already been implemented for rural and urban areas respectively. Cumulative FDI inflows into the sector in April 2000 - September 2017 were US\$ 12.3 Billion. (IBEF, 2018). Therefore, in this paper major focus is on mandatory compliance followed by selected listed power sector companies in India.

4 Objectives of the Study

- 1) To understand CSR requirement as per Companies Act, 2013
- 2) To analyse mandatory compliance followed by selected listed companies in India.

5 Sample Size

For the purpose of the study, top 10 listed companies are selected out of the total 31 listed companies available

on Bombay Stock Exchange. Selection of listed companies is based on market capitalization criteria. These 10 selected listed companies represent 88.81 percent of total listed power sector companies engaged in the business of power generation and distribution.

6 Research Period

As CSR mandatory compliance became effective from April 1, 2014 for all the companies registered with the Registrar of Companies, financial year 2014-15, 2015-16 and 2016-17 has been selected for research period.

7 Research Methodology

For the purpose of the study, secondary data has been collected from National and International journals, government reports, publications from various companies' website including annual reports of various selected companies and CSR policy reports etc. which provides information for Corporate Social Responsibility fulfilled by companies.

8 CSR requirement

According to section 135 of the Companies Act, 2013,

every company having net worth of rupees 500 crore or more, or turnover of rupees 1000 crore or more, or a net profit of rupees five crore or more during any financial year, shall spend two percent of average net profit of preceding three financial years on Corporate Social Responsibility (CSR) in pursuance of its policy in this regard. The Act requires such companies to constitute a Corporate Social Responsibility Committee which shall formulate and recommend to the Board a Corporate Social Responsibility Policy which shall indicate the CSR activities to be undertaken by the company as specified in Schedule VII to the Act.

By requiring the companies, with a minimum net profit of five crore INR, to spend on CSR activities, the Companies Act, 2013 is likely to bring in many SMEs into CSR fold. This will bring set of challenges to be faced by all companies in different sector to comply with environmental and social standards without sacrificing quality and price (CA Guidance Note, 2018).

9 Findings

Table 1: CSR Expenditure by Sample Companies as percentage of profit.

Sr. No.	Company	CSR spent as percentage (%) of Average profit 2014-15 (Rs. in crore)	CSR spent as percentage (%) of Average profit 2015-16 (Rs. in crore)	CSR spent as percentage (%) of Average profit 2016-17 (Rs. in crore)
1	NTPC Limited	1.448	3.625	2.438
2	Power Grid Corporation of India Limited	2.000	1.901	2.172
3	NHPC Limited	2.000	3.358	3.428
4	The Tata Power Company Limited	2.085	2.051	2.000
5	Neyveli Lignite Corporation Limited (NLC)	2.000	3.702	1.712
6	Reliance Infrastructure Limited	1.528	2.292	2.000
7	Adani Power Limited	0.000	0.000	0.000
8	SJVN Limited	1.926	1.896	2.190
9	Reliance Power Limited	1.998	2.000	1.994
10	CESC Limited	2.000	2.000	2.001

Source: Annual Reports of the Companies

It is quite apparent (Table 1) that in the year 2014-15, there is only one company i.e. Tata Power which incurred CSR expenditure of Rs.31.1 crore which was 2.085 percentage of average profit of last three years during

the year instead of mandatory requirement of Rs.29.8 crore. CSR spending was exactly 2 percentage in case of Power Grid Corporation limited, NHPC Limited, NLC Limited and CESC Limited which shows almost more

than 50 percent numbers of companies accepted and strongly followed CSR compliance. In the year 2015-16, highest CSR spending recorded by NLC limited as Rs.41.60 crore spent during the year by company for Health and Sanitation, Sports, Rural development projects, Women empowerment, Education and special education, Employment enhancing vocational skills. After NLC limited, NTPC and NHPC stands to second and third position in terms of CSR spending as a percentage of average net profit for last three years. Exactly two percentage of average profit was spent by Reliance Power limited and CESC limited. In 2016-17, NHPC limited made highest contribution in the form of CSR spending

of Rs.75.82 crore as against the mandatory requirement of Rs.44.23 crore as per the Companies Act,2013 requirement. NHPC also received Excellence award in CSR/Environment Protection and Conservation at the 8th India Pride Awards 2016-17. There were total three numbers of companies which incurred CSR spending greater than 2 percentage of average net profit of last three years average net profit and it includes NTPC Limited, Power Grid Corporation Limited and SJVN limited. There was only one company which do not spent any amount of net profit on CSR activities i.e. Adani Power Limited and reason behind this zero percentage contribution to CSR activities was heavy amount of loss suffered by the company in three years.

Table 2:Details on CSR Compliance and Non-Compliance (2014-15)

<i>Spent CSR Expenditure (as % of Average Profit of last three years)</i>	<i>2014-15 No.of Companies</i>
< 2 %	5
= 2 %	4
> 2%	1
Total	10

Figure 1: CSR Compliance in 2014-15

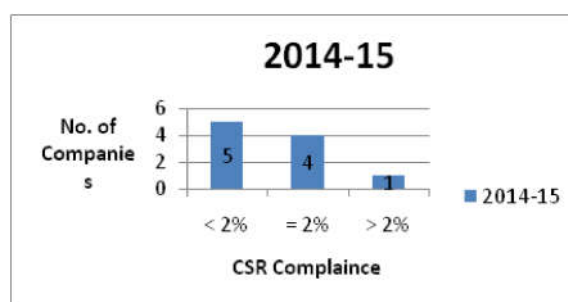


Table 2 indicates that the compliance with CSR expenditure was below two percentage in case of 50 per cent companies, exactly equal to 2 percentage in case of 40 per cent companies and only 10 per cent companies' CSR expenditure was more than two percentage of average profits of last three years.

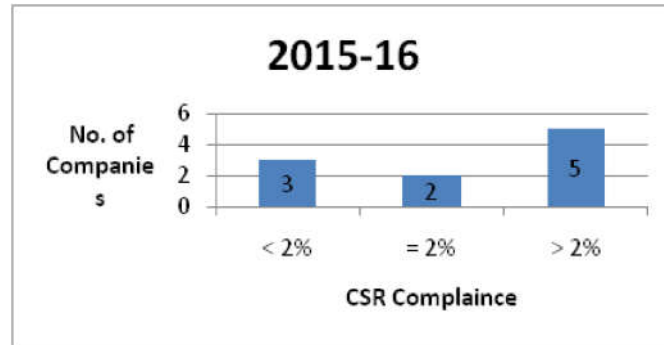
The graphical presentation of CSR compliance (Figure 1) portrays that there is an overall decreasing trend throughout the period under study. It shows in the first year after mandatory implementation of Sec.135, very few numbers of companies were strictly followed such CSR compliance.

Table 3: Details on CSR Compliance and Non-Compliance (2015-16)

<i>Spent CSR Expenditure (as % of Average Profit of last three years)</i>	<i>2015-16 No.of Companies</i>
< 2 %	3
= 2 %	2
> 2%	5
Total	10

Source: Table No.1

Figure 2: CSR Compliance in 2015-16



As evident (Table 3) in 2015-16, effect of mandatory compliance can be seen by way of 40 per cent decline in the numbers of companies who spent below two percentage and 50 per cent of decline registered in numbers of companies who spent exactly equal to two percentage, whereas numbers of company increase and reaches to five who spent more than two percentage as compare to immediately previous financial year.

The graphical presentation of CSR compliance (Figure 2) conveys that there is an overall increasing trend during the period under study. In the second year after implementation of Sec. 135, numbers of companies increased which spent more than mandatory requirement and it is be positive sign of CSR compliance.

Table 4: Details on CSR Compliance and Non-Compliance (2016-17)

<i>Spent CSR Expenditure (as % of Average Profit of last three years)</i>	<i>2016-17 No. of Companies</i>
< 2 %	3
= 2 %	2
> 2%	5
Total	10

Source: Table No.1

Figure 3: CSR Compliance in 2016-17

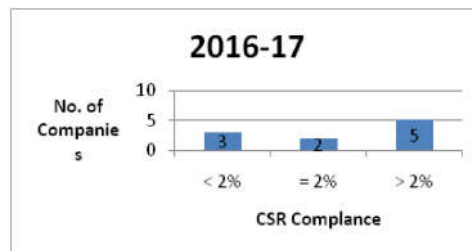


Table 4 indicates that in 2016-17, no change has been found in numbers of companies who spend less than two percentage and those who spent greater than two percentage as well as those who spent equal to two percentage of net profit compare to immediately preceding previous year. Even though numbers of companies were same but it is no indicating that CSR compliance was same in 2015-16 and 2016-17. Actually, compare to last year 2015-16, NTPC, NHPC and NLC limited had been spent lessor amount on CSR activities.

Thus, there was only one company i.e. NHPC which made CSR spending greater than three percentage in financial year 2016-17.

Table 5: Details of Unspent CSR expenditure

Sr. No.	Company	2014-15 (Rs. in crore)	2015-16 (Rs. in crore)	2016-17 (Rs. in crore)
1	NTPC Limited	78.3	6.01	
2	Power Grid Corporation of India Limited	63.09	-	-
3	Reliance Infrastructure Limited	10.33	-	-
4	SJVN Limited	0.95	1.59	-
5	Neyvelli Lignite Corporation Limited (NLC)	-	-	6.27

Source: Annual Reports of the Companies

As evident from table 5, drastic changes and compliance can be seen in the case of unspent amount of CSR reporting. Almost 40 percent of companies in 2014-15, have registered with unspent amount of CSR expenditure but in 2015-16, this numbers of companies declined by 50 percent and reached to two numbers of companies as compared to immediately preceding financial year 2014-15. Its further declines and reached to only one number of companies who report unspent amount of CSR expenditure that is reduction by 50 percent as compared to immediately preceding financial year 2015-16. In third year after implementation of Sec.135, corporate organisation spent at least mandatory requirement and make sure that there will be no unspent amount out of the mandatory provision for CSR spending.

10 Conclusion

Corporate Social Responsibility refers to ensure business success including social and environmental developments. It extends the meaning of business up to new level in the form of satisfying demand of shareholders, customers and other stockholders such as employees, supplier, and the community at large.

From this it becomes clear that companies want to maintain statutory requirement and trying to maintain the legal compliance so far as the requirement of CSR expenditure is concern.

References

- (2018, February 10). Retrieved from CA Guidance Note: http://csrsupport.org/doc/Guidance_Note_by_ICAI_CSR_150515.pdf
- (2018, February 11). Retrieved from Tata Power Limited: <https://www.tatapower.com/investor-relations/anlreport-archive.aspx>
- (2018, February). Retrieved from <http://www.trendingtopmost.com/worlds-popular-list-top-10/2017-2018-2019-2020-2021/india/largest-power-generation-companies-india-world-best-famous-revenue-market-cap/>
- (2018, February 10). Retrieved from Moneycontrol: <http://www.moneycontrol.com/stocks/marketinfo/netprofit/bse/power-generation-distribution.html>
- (2018, February 12). Retrieved from Ministry of Corporate Affairs: www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf
- Chatterjee, D. (2010). Corporate Governance and Corporate Social Responsibility: The Case of Three Indian Companies. *International Journal of Innovation, Management and Technology*, 1(5), 507-510.
- Ernst & Young. (2018, February 06). Retrieved from EY - Make in India: <http://www.ey.com/in/en/issues/ey-make-in-india-on-the-path-to-glory>
- I B E F. (2018, February 13). Retrieved Feb 01, 2018, from Indian Brand Equity Foundation: <https://www.ibef.org/industry/indian-power-industry-analysis-presentation>
- IBEF, I. B. (2018). Report on Power Sector.
- Kumar, S. L. (2016, March). Corporate Social Responsibility-A Case Study of Balco Power Plant (Vendata). *International Research Journal of Management, IT and Social Sciences*, 3(3), 132-143.
- Mishra, L. R. (2014, December). A Study of Corporate Social Responsibility in Indian Organizations. *Indian Journal of Applied Research*, 4(12), 438-440.

- National Hydro Power Corporation Limited. (2018, February 10). Retrieved from NHPC Limited: nhpcindia.com/newwebsite/NHPC-annual-reports.htm
- National Thermal Power Corporation Limited. (2018, February 05). Retrieved from NTPC Limited: www.ntpc.co.in/
- Neyveli Lignite Corporation Limited. (2018, February 05). Retrieved from NLC India Ltd: nlcindia.in/index.php?file_name=investor_02
- Power Grid Corporation of India. (2018, February 12). Retrieved from Power Grid: www.powergridindia.com/_layouts/PowerGrid/User/ContentPage.aspx?Pid=186
- PricewaterhouseCoopers . (2018, February 11). Retrieved from PwC: <https://www.pwc.in/assets/pdfs/publications/2013/handbook-on-corporate-social-responsibility-in-india.pdf>
- Shanmugam, K. (2013). Environment CSR initiatives of manufacturing units in India An empirical study. *African Journal of Business Management*, 7(16), 1560-1570.
- Sharma, Y. (2013, Sep-Oct). Role of Corporate Social Responsibility in Organization. *IOSR Journal of Business and Management*, 13(4), 01-08.

Effect of Gender and Family Income on Brand Tribalism with Special Emphasis on Mobile Phone Users in Ahmedabad

Harish J. Sharma*

Abstract

Purpose

Purpose of this paper is to evaluate impact of Gender and Family Income i.e. demographic variables on Brand tribalism, specifically for Mobile phone users in Ahmedabad city of Gujarat, India as 'Brand tribalism', which is some sort of financial, physical, emotional bondage that brings the brand seller and buyer together and consumers-buyers so linked can't be the result of demographic division or any sort of present day society parameters and hence presumed that these variables may not affect such strongly bonded seller & buyer.

Methodology/approach

This is a combination of single cross sectional, descriptive research. Primary data was collected through questionnaire of closed ended type having multiple choice and likert questions from 260 respondents. Data collected was interpreted for basic descriptive analysis, reliability test, factor analysis and hypothesis testing.

Findings

Findings derived from this study includes that male and female are equally emotionally attached to a particular brand, product or service. Secondly opinion of group having family income of '8 lacs & above' differs indicating that this group is having strong financial, physical, emotional bondage with particular brand, product, service than other income groups.

Research limitations/implications

Samples collection is confined to Ahmedabad city only and thus is not representative of entire population of India. Also only gender and family income have been considered however many other demographic variables are available that can be considered. Types of research methods adopted are also limitations as well.

Originality/Value

Although research frame work is confined to two demographic variables and one city of India only however this research is original and data is interpreted for specific purpose only. Limitations of this study may be transferable to conduct further research considering other cities, different demographic variables and with other statistical tools in same area of 'Mobile phone user' or in other area of interest.

Key words: Consumer Research, Brand tribalism, Consumer tribe.

Paper Type: Research paper

1. Introduction

A consumer tribe is a gathering of individuals associated by comparable utilization of qualities and uses goods and services to make a community & are heterogeneous. They can't be the result of demographic division or any sort of present day society parameters (Cova and Cova, 2002).

'Brand Tribalism' a concept introduced by Cova and Cova in 2002 designating a community of individuals formed on the base of emotional attachment to a particular brand, product or service, it focus on the strong linkage amongst the group members.

'Mobile Phones' are rapidly becoming media for wireless communication as well as for "click and mortar" model of business. The point of this research is to comprehend influence of Gender and Family Income on Brand tribalism.

2. Literature review

Consumer tribe is new concept in social theory and have made a significant impact on marketing (Cova & Cova, 2002; Cova & Salle, 2008; Gronroos, 2006; Kozinets, 1999; Penaloza & Venkatesh, 2006). This differs from historical tribes by having a new social order, wherein

* Sr. Section Engineer (W. Rly) and Research Student of B.K. School of Business Management, Gujarat University, Ahmedabad

status within a tribe is achieved by different and specific values & are grouped around something emotional rather than rational (Cova & Cova, 2002).

Social influences are the most important influence on an individual's consumption decisions (Bagozzi, 2000). Involvement with a tribe is an expression of self-identity, so the consumer tribe shares not only moral values or opinions, but also consumption and preferences. This provides opportunity for marketers to access a group of consumers that actually connect with each other and share consumption preferences. In a recent study among smart phone users, Taute and Sierra (2014) discovered a positive relationship between tribalism and loyalty.

Lifestyle has a great impact on consumer behaviour and brand preferences. Very often, consumers tend to choose brands that are considered "appropriate" for their self-image. Accordingly, companies will try to position their brands in order to fit into consumers' lifestyle. In addition to expressing their identity through the everyday choices they make, consumers will often seek new ways in which they can express their personal identity. As a result, consumers can use brands as a relevant mean of self-expression. Brands can be used as valid medium for showing status signaling in everyday circumstances (Catalin & Andreea, 2014).

Researchers measure construct of tribal brands in different ways. Cova and Cova (2002) emphasize 'linking value, social interaction of the communal type etc.' Other researchers, such as Moutinho et al. (2007), use a factor structure, such as 'Brand liking, sponsor favorability etc.' Veloutsou & Moutinho (2007) measures brand tribalism in five dimensions namely 'Degree of fit with the individual consumer life style, Passion in Life, Reference group acceptance, Social visibility of brand, Collective memory'. These dimensions are divided in 18 questions (sub dimensions) as under,

1. Degree of fit with the individual consumer life style
 - a. This brand is right for me
 - b. Using this brand does something good for me
 - c. This brand fits my image
 - d. This brand is related to the way I perceive life
2. Passion in Life
 - a. This brand makes a contribution in life
 - b. There is something about this brand that goes beyond its tangible characteristics

- c. This brand is almost become part of my life.
3. Reference group acceptance
 - a. I would buy this brand because I am sure that my friends approve of it
 - b. I am very loyal to this brand because my friends also use it
 - c. My friends buy this brand and I buy it too just because I want to be like them
 - d. I achieve a sense of belonging by buying the same brand my friends buy
 - e. I often discuss with friends about this brand
4. Social visibility of brand
 - a. Wherever I go, this brand is present
 - b. I know of many people who own/use this brand
 - c. I know that people feel good about this brand
5. Collective memory
 - a. When my friends buy this product they consider this purchase
 - b. When my friends buy this product they choose this brand
 - c. My friend refers this brand to his relative also.

Measurement of brand tribalism as per Veloutsou & Moutinho (2007) is considered in this study.

Mobile phones are rapidly becoming the communication device in people's lives. Application delivery channels like Apple's AppStore, Google's Play store are transforming mobile phones into App Phones, capable of downloading a myriad of applications in an instant. Importantly, today's smart phones are having powerful sensors, like an accelerometer, gyroscope, GPS etc., and are usable to individual, group, and community. Nowadays mobile phones are changing many sectors of economy, including business, healthcare, social networks and transportation etc. (Nicholas Lane et al.(2010). Since activities like Mobile phone purchasing, downloading application on it and applications' use is not confined to any boundary hence in this study Mobile phone is chosen.

3. Research Methodology

This chapter includes Scope of Study, Research objectives, Hypothesis formulation, Research Design, Methods of Data collection, Sample Size.

3.1 Scope of the Study

The findings of this study will be helpful to improve the

understanding of the concept of Effect of Gender and Family Income on brand tribalism.

Objectives are as follows:-

1. To find the effect of Gender and Family income on Brand tribalism specifically for mobile phone usage.
2. Which demographical variable is most important for strengthening brand tribalism in the use of mobile phone?

3.2 Hypothesis

• 3.2.1 Gender

H_0 There is no significant difference in male and female for their tendency toward Brand tribalism.

• 3.2.2 Family Income

H_0 Family income significantly does not affect Brand tribalism.

3.3 Research design

The design of this paper is a combination of single cross sectional descriptive and analytical research design. For this research, the universe of the study is the mobile phone users in Ahmedabad city of Gujarat, India. As per TRAI's Telecom Services Performance Indicators for the period of April-June, 2017, published on 28 Sept. 2017, total wireless phone users in Gujarat state is 73.62 million (7.362 Cr.) in June-2017. Ahmedabad has population of 80,19,000 in 2018 (estimated on 1.1.2018) at a growth rate of 9.21 percent, and is about 12.58 percent of total population of Gujarat².

Considering same ratio in mobile phone users, approximate mobile phone connections are about 92,53,272 in Ahmedabad. More mobile phone connection than population shows that people are having more than one mobile connection.

To collect the primary data, questionnaire was prepared. Brand tribalism measured on five point scale from strongly disagrees to agree.

Total 260 respondents contacted and data is collected.

3.4 Applied tests

- Basic descriptive analysis.
- Independent 2 tailed test.
- One way ANOVA.
- Exploratory factor analysis.
- Reliability and validity tests.

4. Data Analysis

Data collected through questionnaire has been analysed through SPSS 20 for the following

- Proportion of types of Mobile Phone and operating system Gender and income wise.
- Reliability of scales development.
- Effect of Gender & Family income on the dimensions of brand tribalism.

4.1 Basic data analysis

Table 4.1.1 (Phone type V/S Gender and family income)

				Type of Mobile Phone	
				Smart Phone	Feature Phone
Gender	Male	Income	Less than Rs. 2 lakh	37	4
			Rs.2 lakh to 5 lakh	64	1
			Rs. 5 lakh to 8 lakh	54	4
			Rs. 8 lakh and above	16	1
	Female	Income	Less than Rs. 2 lakh	17	0
			Rs.2 lakh to 5 lakh	15	2
			Rs. 5 lakh to 8 lakh	33	1
			Rs. 8 lakh and above	11	0
			Total	247	13

From above table it is concluded that female having family income of "Less than Rs. 2 lakh" and "Rs. 8 lakh and above" are not using feature phones.

² <http://worldpopulationreview.com/world-cities/ahmedabad-population/> retrieved on 23 .1.2018

4.1.2 (Phone operating system V/S Gender and Family income)

				Type of Operating system				
				iOS	Blackberry OS	Android	Nokia Software	other
Gender	Male	Income	Less than Rs. 2 lakh	0	0	38	3	0
			Rs.2 lakh to 5 lakh	6	3	55	1	0
			Rs. 5 lakh to 8 lakh	5	0	49	4	0
			Rs. 8 lakh and above	2	1	14	0	0
	Female	Income	Less than Rs. 2 lakh	0	0	17	0	0
			Rs.2 lakh to 5 lakh	0	1	16	0	0
			Rs. 5 lakh to 8 lakh	1	1	30	2	0
			Rs. 8 lakh and above	3	1	7	0	0
			Total	17	7	226	10	0

Form above table it is concluded that Android is most preferable mobile phone operating system. Other OS like Bada, MeeGo, Palm etc. are not being used by respondents.

4.2 Reliability of scale development

4.2.1 Degree of fit with life style

4.2.2 Passion in Life

Table 4.2.1

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.907	0.919	4

Table 4.2.2

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.979	0.98	3

4.2.3 Reference group acceptance

Table 4.2.3

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.965	0.965	5

4.2.4 Social Visibility of Brand

Table 4.2.4

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.924	0.928	3

4.2.5 Collective memory

Table 4.2.5

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.887	0.886	3

Cronbach's Alpha value for all the factors is greater than 0.5 and even 0.8 hence it indicates a high level of internal

consistency for the development of scale with the respective factor.

4.3 Factor analysis for phone features

Table 4.3.1(KMO and Bartlett's Test for phone features)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.617
Bartlett's Test of sphericity	Approx. Chi-Square	792.667
	df	45
	Sig.	0.000

4.3.1 Kaiser-Meyer-Olkin Measure of Sampling Adequacy. High values (closer to 1.0) indicates that a factor analysis may be useful with data. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. In this case value is 0.617 which shows that factor analysis will be useful.

4.3.2 Bartlett's test of sphericity. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful. Here value is 0.00 which is favorable for factor analysis.

Table 4.3.2 (Communalities for phone features)

	Initial	Extraction
Feature Phone or Smart Phone	1.000	0.916
Type of Operating system of Phone	1.000	0.902
Brand of Phone	1.000	0.497
Age of Phone	1.000	0.924
SIM Type (Single SIM or Double SIM)	1.000	0.861
Storage (Memory) Rating	1.000	0.635
Camera Rating	1.000	0.612
Display Size Rating	1.000	0.540
Battery (In hrs) Rating	1.000	0.601
SIM Type Rating	1.000	0.442
Extraction Method: Principal Component Analysis.		

Communality (Table 4.3.2) shows that type of phone viz. smart phone or feature phone, type of operating system of phone are important variables and should be considered for further analysis.

4.4 Hypothesis testing

• 4.4.1 Gender

H₀ There is no significant difference in male and female in their tendency toward Brand tribalism.

Table 4.4.1.1(Independent 2 tailed test)

			Levene's Test for Equality of Variances		t-test for Equality of Means						
			F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
										Lower	Upper
Degree of ? t with life style	Q1(a)	Equal variances assumed	.092	.762	-.270	258	.787	-0.036	0.133	-0.297	0.225
		Equal variances not assumed			-.266	143.625	.791	-0.036	0.135	-0.302	0.230
	Q1(b)	Equal variances assumed	.117	.733	-.091	258	.928	-0.010	0.113	-0.232	0.212
		Equal variances not assumed			-.088	139.410	.930	-0.010	0.116	-0.239	0.219
	Q1(c)	Equal variances assumed	.562	.454	.331	258	.741	0.037	0.112	-0.184	0.259
		Equal variances not assumed			.320	138.298	.749	0.037	0.116	-0.192	0.267
	Q1(d)	Equal variances assumed	.903	.343	-.337	258	.737	-0.054	0.160	-0.368	0.261
		Equal variances not assumed			-.326	138.178	.745	-0.054	0.165	-0.380	0.273
Passion in life	Q2(a)	Equal variances assumed	.592	.442	.632	258	.528	0.069	0.110	-0.146	0.285
		Equal variances not assumed			.622	143.283	.535	0.069	0.111	-0.151	0.289
	Q2(b)	Equal variances assumed	.287	.593	.575	258	.566	0.059	0.102	-0.143	0.261
		Equal variances not assumed			.569	145.115	.571	0.059	0.104	-0.146	0.264
	Q2(c)	Equal variances assumed	.197	.657	.390	258	.697	0.042	0.109	-0.171	0.256
		Equal variances not assumed			.385	144.533	.701	0.042	0.110	-0.175	0.259

Reference group acceptance	Q3(a)	Equal variances assumed	2.221	.137	-.902	258	.368	-0.156	0.173	-0.498	0.185
		Equal variances not assumed			-.935	162.055	.351	-0.156	0.167	-0.487	0.174
	Q3(b)	Equal variances assumed	2.606	.108	-.979	258	.328	-0.162	0.165	-0.488	0.164
		Equal variances not assumed			-1.020	163.914	.309	-0.162	0.159	-0.476	0.152
	Q3(c)	Equal variances assumed	2.752	.098	-.911	258	.363	-0.155	0.170	-0.489	0.180
		Equal variances not assumed			-.949	163.656	.344	-0.155	0.163	-0.477	0.167
	Q3(d)	Equal variances assumed	.051	.822	-.671	258	.503	-0.108	0.161	-0.426	0.209
		Equal variances not assumed			-.678	152.258	.499	-0.108	0.160	-0.423	0.207
	Q3(e)	Equal variances assumed	.194	.660	.442	258	.659	0.065	0.148	-0.225	0.356
		Equal variances not assumed			.442	148.593	.659	0.065	0.148	-0.226	0.357
Social visibility of brand	Q4(a)	Equal variances assumed	.000	.994	-.152	258	.879	-0.025	0.166	-0.352	0.302
		Equal variances not assumed			-.152	147.851	.880	-0.025	0.167	-0.354	0.304
	Q4(b)	Equal variances assumed	.245	.621	-.421	258	.674	-0.062	0.148	-0.354	0.229
		Equal variances not assumed			-.426	152.857	.670	-0.062	0.146	-0.352	0.227
	Q4(c)	Equal variances assumed	.310	.578	-.309	258	.758	-0.044	0.144	-0.328	0.239
		Equal variances not assumed			-.310	150.427	.757	-0.044	0.143	-0.328	0.239

Collective memory	Q5(a)	Between Groups	17.284	3	5.761	9.587	.000
		Within Groups	153.854	256	.601		
		Total	171.138	259			
	Q5(b)	Between Groups	9.538	3	3.179	5.995	.001
		Within Groups	135.766	256	.530		
		Total	145.304	259			
	Q5(c)	Between Groups	12.551	3	4.184	6.794	.000
		Within Groups	157.646	256	.616		
		Total	170.196	259			

In the two tailed t test, significance level for all the dimensions is greater than alpha value of 0.05 hence null hypothesis fail to reject i.e. Gender does not affects brand tribalism.

Following four factors of brand tribalism as shown in table 4.4.2 are highly significant as p value of each dimensions are nearer to one, this is summarized below (Table 4.4.1.2)

Table 4.4.1.2

Factor	Dimension	P value of 2- tailed t test	Remark
Degree of fit with life style	Using this brand does something good for me	0.928	This is strongest dimensions.
Passion in life	This brand is almost become part of my life.	0.697	This is also strongest dimensions amongst three.
Reference group acceptance	I often discuss with friends about this brand	0.659	This is also strongest dimensions amongst five.
Social visibly of brand	Wherever I go, this brand is present.	0.879	This is also strongest dimensions amongst three.
Collective memory	When my friends buy this product they consider this purchase	0.234	This is also strongest dimensions amongst three.

• 4.4.2 Family Income

H_0 Family income significantly does not affect Brand tribalism.

Table 4.4.2.1 ANOVA for brand tribalism and Family Income

	ANOVA						
			Sum of Squares	df	Mean Square	F	Sig.
Degree of ?t with lifestyle	Q1(a)	Between Groups	13.908	3	4.636	5.032	.002
		Within Groups	235.846	256	.921		
		Total	249.754	259			
	Q1(b)	Between Groups	12.433	3	4.144	6.331	.000
		Within Groups	167.582	256	.655		
		Total	180.015	259			
	Q1(c)	Between Groups	12.572	3	4.191	6.429	.000
		Within Groups	166.874	256	.652		
		Total	179.446	259			
	Q1(d)	Between Groups	15.585	3	5.195	3.833	.010
		Within Groups	346.950	256	1.355		
		Total	362.535	259			
Passion in life	Q2(a)	Between Groups	17.819	3	5.940	9.967	.000
		Within Groups	152.566	256	.596		
		Total	170.385	259			
	Q2(b)	Between Groups	11.816	3	3.939	7.339	.000
		Within Groups	137.399	256	.537		
		Total	149.215	259			
	Q2(c)	Between Groups	17.637	3	5.879	10.062	.000
		Within Groups	149.575	256	.584		
		Total	167.212	259			
Reference group acceptance	Q3(a)	Between Groups	37.697	3	12.566	8.238	.000
		Within Groups	390.499	256	1.525		
		Total	428.196	259			
	Q3(b)	Between Groups	36.608	3	12.203	8.845	.000
		Within Groups	353.176	256	1.380		
		Total	389.785	259			
	Q3(c)	Between Groups	32.140	3	10.713	7.240	.000
		Within Groups	378.798	256	1.480		
		Total	410.938	259			
	Q3(d)	Between Groups	27.764	3	9.255	6.938	.000
		Within Groups	341.482	256	1.334		
		Total	369.246	259			
	Q3(e)	Between Groups	36.848	3	12.283	11.548	.000
		Within Groups	272.291	256	1.064		
		Total	309.138	259			

Social visibility of brand	Q4(a)	Between Groups	12.182	3	4.061	2.739	.044
		Within Groups	379.583	256	1.483		
		Total	391.765	259			
	Q4(b)	Between Groups	27.448	3	9.149	8.235	.000
		Within Groups	284.440	256	1.111		
		Total	311.888	259			
	Q4(c)	Between Groups	28.768	3	9.589	9.247	.000
		Within Groups	265.478	256	1.037		
		Total	294.246	259			
Collective memory	Q5(a)	Between Groups	17.284	3	5.761	9.587	.000
		Within Groups	153.854	256	.601		
		Total	171.138	259			
	Q5(b)	Between Groups	9.538	3	3.179	5.995	.001
		Within Groups	135.766	256	.530		
		Total	145.304	259			
	Q5(c)	Between Groups	12.551	3	4.184	6.794	.000
		Within Groups	157.646	256	.616		
		Total	170.196	259			

Table 4.4.2.2(Multiple Comparisons (Post hock) for brand tribalism and Family Income)z

Dependent Variable			Mean Diff.	Std. Error	Sig.
Q1(a)	Rs. 5 lakh to 8 lakh	Less than Rs. 2 lakh	0.355	0.161	0.124
		Rs.2 lakh to 5 lakh	-0.283	0.146	0.212
		Rs. 8 lakh and above	0.031	0.207	0.999
	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.324	0.221	0.459
		Rs.2 lakh to 5 lakh	-0.314	0.210	0.441
		Rs. 5 lakh to 8 lakh	-0.031	0.207	0.999
Q1(b)	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.171	0.186	0.795
		Rs.2 lakh to 5 lakh	-0.402	0.177	0.108
		Rs. 5 lakh to 8 lakh	-0.242	0.175	0.509
Q1(c)	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.207	0.186	0.682
		Rs.2 lakh to 5 lakh	-0.378	0.177	0.144
		Rs. 5 lakh to 8 lakh	-0.207	0.174	0.637
Q1(d)	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.182	0.268	0.904
		Rs.2 lakh to 5 lakh	-0.409	0.255	0.377
		Rs. 5 lakh to 8 lakh	0.090	0.251	0.984
Q3(c)	Rs. 5 lakh to 8 lakh	Less than Rs. 2 lakh	0.494	0.204	0.075
		Rs.2 lakh to 5 lakh	-0.415	0.185	0.113
		Rs. 8 lakh and above	0.376	0.263	0.481
	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.118	0.280	0.975
		Rs.2 lakh to 5 lakh	-.791	0.266	0.017
		Rs. 5 lakh to 8 lakh	-0.376	0.263	0.481
Q3(d)	Rs. 8 lakh and above	Less than Rs. 2 lakh	0.224	0.266	0.834
		Rs.2 lakh to 5 lakh	-0.646	0.253	0.054
		Rs. 5 lakh to 8 lakh	-0.283	0.249	0.669
Q4(a)	Less than Rs. 2 lakh	Rs.2 lakh to 5 lakh	-0.440	0.209	0.153
		Rs. 5 lakh to 8 lakh	-0.216	0.204	0.715
		Rs. 8 lakh and above	0.228	0.280	0.848
	Rs.2 lakh to 5 lakh	Less than Rs. 2 lakh	0.440	0.209	0.153
		Rs. 5 lakh to 8 lakh	0.224	0.185	0.620
		Rs. 8 lakh and above	0.668	0.267	0.061
	Rs. 5 lakh to 8 lakh	Less than Rs. 2 lakh	0.216	0.204	0.715
		Rs.2 lakh to 5 lakh	-0.224	0.185	0.620
		Rs. 8 lakh and above	0.444	0.263	0.331
Q5(b)	Rs. 5 lakh to 8 lakh	Less than Rs. 2 lakh	0.145	0.122	0.633
		Rs.2 lakh to 5 lakh	-0.252	0.111	0.105
		Rs. 8 lakh and above	0.334	0.157	0.148
Q5(c)	Less than Rs. 2 lakh	Rs.2 lakh to 5 lakh	-0.270	0.135	0.190
		Rs. 5 lakh to 8 lakh	0.175	0.132	0.544
		Rs. 8 lakh and above	0.371	0.181	0.172

*. The mean difference is significant at the 0.05 level.

As per above table, p value for each dimension is less than alpha value i.e. 0.05 however as per table for post hock analysis, it is seen that 9 sub-dimensions out of 18 are having p value greater than 0.05 hence family income affects brand tribalism for those sub-dimensions and for selected income group hence this is the "Null Until Proven Alternative"

Discussions and Conclusions

Through this conceptual paper it is revealed that

- a. Gender does not affect brand tribalism in case of mobile phone users in Ahmedabad city. We can conclude that both male & female are equally emotionally attached to a particular brand, product or service.
- b. Hypothesis "Family income significantly does not affect Brand tribalism" is not proven hence it is "Null until Proven Alternative". P value for within the group for some income group is less than alpha value of 0.05 hence to some extent it is concluded that all income group significantly does not affect Brand tribalism. However the opinion of persons having family income '8 lakh & above' is significantly differ than those of person having family income of '2 lakh to 5 lakh' in the dimension of 'Reference group acceptance' and in sub-dimension of 'My friends buy this brand and I buy it too just because I want to be like them'.
- c. 'Family income' rather than 'Gender' is more important variable for strengthening brand tribalism in the use of mobile phone.

5. Limitations of study and future scope

The study has used samples from Ahmedabad city only and thus is not representative of entire population of India. Also only Gender & Family income have been considered but there are more other demographic variable. Limited field work and types of research methods adopted are also limitations as well. Mobile phone industries and its service provider industries are extremely volatile market concept hence result may vary due to passage of time.

Future research can be conducted beyond the above limitation.

References

1. Bagozzi Richard P. (2000), "On the concept of intentional social action in consumer behavior", *Journal of Consumer Research*, Vol-27, Issue 3, p388-96
2. Catalin & Andreea, (2014), "Brands as a Mean of Consumer Self-expression and Desired Personal Lifestyle", *Social and behaviour science*, Vol-109, p 103-107
3. Cova Bernard and Cova Veronique (2002), "Tribal marketing: The tribalisation of society and its impact on conduct of marketing, *European Journal of Marketing*, Vol. 36 Issue 5, p595 - 620
4. Cova Bernard and Salle Robert. (2008), "The industrial/consumer marketing dichotomy revisited", *Journal of Business & Industrial Marketing*, Vol-23, Issue- 1, p3-11.
5. Gronroos Christian (2006), "On defining marketing: Finding a new roadmap for marketing", *Sage journals*, Vol-6, Issue 4, p395-417
6. Kozinets Robert V. (1999), "E-tribalized marketing- The strategic implications of virtual communities of consumption", *European management journal*, Vol-17, Issue 3, p252-264
7. Nicholas Lane D. , Emiliano Miluzzo, Hong Lu, Daniel Peebles, Tanzeem Choudhury, and Andrew T. Campbell, (Sept 2010), *IEEE Communications Magazine*, p140-150
8. Moutinho L, Dionísio P, Leal C. Surftribal behaviour: a sports marketing application. *Mark Intell Plann* 2007;25(7):668-90.
9. Penaloza Lisa and Alladi Venkatesh (2006), "Further evolving the new dominant logic of marketing-From services to the social construction of markets" *Sage journal*, Vol-6, Issue 3, p299-316
10. Taute Harry A. and Jeremy Sierra (2014), "Brand tribalism: An anthropological perspective", *Journal of Product & Branding Management*, Vol-23, Issue 1, p2-15
11. Veloutsou Cleopatra and Luiz Moutinho (2009), "Brand relationship through brand relationship and brand tribalism", *Journal of business research*, Vol-62, Issue 3, p314-322

A Study on Identifying Work Related Musculoskeletal Injuries and Associated Ergonomic Risk Factors Among Different Workers: Systematic Literature Review

K S Prasad* and Akanxa J Dhamale**

Abstract

Objective

The purpose of this paper is to highlight and identify work-related musculoskeletal injuries and associated ergonomic risk factors among different workers.

Methodology/approach

Comprehensive literature search was done and subsequently publications identified were studied thoroughly. Available information has been segregated and narrated systematically for easy understanding by readers.

Findings

Musculoskeletal disorders injuries majorly damages the muscles, joints, tendons, ligaments, nerves, bones and localized blood circulation system in human body. This study found a high prevalence of musculoskeletal injuries in workers such as trigger finger, carpal tunnel syndrome, and muscle fatigue, restricted movement of limbs, strain / sprain and loss of muscles strength. There exist severe musculoskeletal pain in the body regions such as shoulder, elbow, wrist, upper back, lower back, arms, lower limbs, forearm, elbow, lumbar region, hips, thighs, knees, ankles, feet and hands. Musculoskeletal injuries occur due poor ergonomic design and ergonomic risk factors. This paper provide summarized information to readers about the associated ergonomic risk factors such as awkward postures ,force, repetition, static postures, vibration, improper workstation environment and extreme temperature.

Research limitations

Being a review paper, the present paper is purely academic in nature.

Originality/Value

This paper systematically reviews literature on the topic of ergonomic risk factors and its related musculoskeletal injuries prevailing among different workers. The paper concludes that with reducing ergonomic risk factors in the workplace can have positive impact on reducing musculoskeletal injuries in the workplace.

Key words: Musculoskeletal injuries, Ergonomics, Ergonomic risk factor, Pain, Symptom

Paper type : Literature review

Introduction

Ergonomics is the study of human abilities and characteristics which affect the design of equipment, systems and job and its aims to improve efficiency, safety and wellbeing. (Choobineh, Musculoskeletal problems in Iranian hand-woven carpet industry:Guidelines for workstation design, 2007). The formal definition of Ergonomics coined by United Kingdom in 1950, is study of human characteristics for appropriate design of the living and work environment (Forza, 2000)Now a days on one side ergonomics is not properly implemented at

the workplace and on other side there is high stress of work load which result in the prevalence of work related musculoskeletal injuries among workers in industrial sectors. Musculoskeletal disorders injuries majorly damages the muscles, joints, tendons, ligaments, nerves, bones and localized blood circulation system in human body. (Nunes, 2009) Musculoskeletal injuries occur due to ergonomics risk factors such as long hours of static work, awkward posture, repetitive movements, ill-designed workstation (Choobineh, Musculoskeletal problems in Iranian hand-woven carpet industry

* Associate Professor, G.H. Patel Postgraduate Institute of Business Management, Sardar Patel University, Vallabh Vidyanagar, Anand

** Research Scholar (Management), G.H. Patel Postgraduate Institute of Business Management Sardar Patel University, Vallabh Vidyanagar, Anand & Teaching assistant at K S School of Business management, Gujarat University, Ahmedabad

Guidelines for workstation design, 2007).

Objective of the paper

The purpose of this study is to identify work-related musculoskeletal injuries among different workers and ergonomics risk factors prevailing with their profession.

Research Methodology

Type of data	Secondary
Research Design	Descriptive
No of literature review	17
Paper type	Literature review
Source	EBSCO's databases

Literature review

This research paper summarizes more than 17 research paper on work-related musculoskeletal injuries and associated ergonomic risk factors among different workers.

(Aghilinejad, 2016) The study was conducted among assembly workers in semiconductor industry in Tehran province. The paper concluded that semi conductor assembly workers have to assemble electronic circuits which require high precision while in static postures for long duration. So they have to bent head and necks forward to provide optimum visual conditions. Due to awkward working posture the risk of musculoskeletal disorder increases in neck, back, shoulder and arms. The symptom of musculoskeletal disorder involves muscles feeling tired and achy and progress to a disease in which restricted movement of limbs or loss of muscles strength and power can be observed.

Research (Ramdass, 2013) revealed that sewing machine operator in apparel manufacturing experienced significant job related musculoskeletal pain specifically in upper backs, shoulders/wrists, and necks. Reason behind such illness was poor postures of sewing operator which was due to visual demands of the work, the improper workstation design, repetitive manual activity and inadequate seating. It has been observed that insufficient lighting of the work area required the operators to lean in towards their work area resulting in a hunched posture. The workstation design was such that the workers had to adapt to it rather than having the workstation designed

for the worker. Seating arrangements lacked adjustable backrests and improper height. Worktables did not allow enough surface area for workers to rest their upper limbs, and workstation height led to awkward postures. Besides this there were accident occurred in cutting room and sewing section.

(Choi, 2012) Construction workers mostly suffered common types of injury such as sprain/strain, back injury, fractures, burns, cuts, carpal Tunnel Syndrome, contusions and eye injuries. Options in the source of injury/illness section included overexertion, motion/position, slip/trip, tools/machinery, chemicals, manual handling of tools, equipment, materials, sharp edges and struck by. Other relevant issues included time spent on lifting/carrying per day, distances traveled while handling loads, weight of the loads carried, and method of carrying the common loads. Excessive hand and arm vibrations were another concern for the construction contractors. This is because there tends to be extensive usage of power tools on a daily basis. The workers ranked highest rate of injuries in the body parts such as back and hand/fingers followed by shoulders, knees, foot/ankle, head/neck, and eyes.

(Aghilinejad, 2015) The prevalence of neck and shoulder complaints was observed and assessed in the trial participants with questionnaire of Nordic Musculoskeletal among automobile workers of a factory.

(Akter, 2015) The study has identified a high prevalence of musculoskeletal symptoms in upper and lower back body regions among metal workers in Dhaka, Bangladesh. Since the risk factor present were such as lifting or pulling heavy loads, repetitive movement, awkward and twisting movements bending or extended reaching for objects reaching above shoulder level or maintaining the same postural position for an extended period of time more than one hour, presence of vibration, scattered tools in the working environment; insufficient light and ventilation.

(Nogueira, 2012) Aircraft maintenance workers has to perform manual material handling tasks which require the use of force to carry, lift or lower objects with the hands. The Nordic musculoskeletal Questionnaire data show that the complaints are mainly concentrated on lower back, neck, upper back and ankle/foot. On the other hand, the physical examination has shown clinical diagnosis of shoulder disorders.

(Nogueira, 2012) Aircraft maintenance workers has to perform manual material handling tasks which require the

use of force to carry, lift or lower objects with the hands. The Nordic musculoskeletal Questionnaire data show that the complaints were mainly concentrated on lower back, neck, upper back and ankle/foot. The physical examination has shown diagnosis of shoulder disorders on the other side.

(Motamedzade, 2011) Manual television and radio assembly workers in a TV manufacturing industry have signs and symptoms of the upper extremities present in shoulder, wrist, forearm and elbow.

(Purani, 2016) Salespersons in department stores are at an increased risk of developing musculoskeletal symptoms. Their jobs involve prolonged forward standing, twisting the body, manual handling tasks such as lifting, carrying, pushing, pulling and working in static posture for longer periods during work have been identified as risk factors for musculoskeletal symptoms of the lower back pain.

(Cristancho, 2012) Mostly female cashiers from a department store have a musculoskeletal injuries declaring pain mainly in the neck, lower back, right wrist and shoulders. Problems faced by cashiers were such as postural overload, repetitive work, manual load handling, mental fatigue, environmental discomfort, variable work schedules, extended working days and absence of breaks.

(Escalona, 2012) A transport company worker has musculoskeletal disorders in the upper extremities, shoulder and neck. The risk factors associated with the musculoskeletal disorders were as follows: the repetitive motion of flexion and extension of the wrist, shoulder elevation, lifting above height of the shoulders, and extension of elbow, neck flexion and stress due to the work requirements. The root cause was due to the organization long working hours, short rest, work overload, mental demand, and high responsibility and having to work under strict supervision by a video camera.

(Rodrigues, 2012) The boiler activities workers are faced with danger due to the great risk of explosions and damages in cases of failure during the operation in boilers. The study concluded that the activity causes pains in different parts of the body with pain/discomfort in the left shoulder, right elbow, wrists, neck, lower and upper back, hips, thighs, knees, ankles and feet due to excessive loading of weight and exposure to heat that cause muscle fatigue and cause diseases like cancer. The work of feeding the boiler requires a great physical effort because

it is necessary to lift logs of wood of different sizes and weights. It was observed that the operator carries out activities with improperly posture causing pain especially in the lumbar region.

(Sett, 2012) The hacklers working in jute mill have severe pain in the neck, shoulder, elbow, wrist and upper back and the intensity are much higher than the workers of other departments. The reason behind this is that they lift and carry heavy load, they perform repetitive task and they remain in awkward postures most of their working time. Apart from their work, they carry out the work in dusty environment of jute fibers and under poorly ventilated, ill illuminated factory sheds. In the summer seasons this environmental heat stress is even worse.

(Pullopdisakul, 2013) The prevalence of clinically diagnosed upper extremities musculoskeletal disorders found in electronic assembly workers was radial styloid tenosynovitis, trigger finger, carpal tunnel syndrome. The ergonomic factors associated with upper extremities musculoskeletal disorders included awkward posture, high force exertion and contact stress.

(Mukhopadhyay, 2015) Old bicycle repairing workers were in the high risk category such as the workers required good amount of physical effort to dismantle the parts, repetitive movements of the upper and forearm coupled with grip force in cleaning, static muscular load on the forearm and upper arm muscles in spray painting, forceful and repetitive activities of the upper arm and the forearm accompanied by deviated wrist postures in assembling the parts.

(Mukhopadhyay, 2010) Stone carving workers involved in the process of three different sections such as rough cut, fine cut and polishing. This whole process requires maximum effort and for this a hammer, different types of chisels as well as an electric cutter are used. The workers are exposed to stone dust which is continuous for eight hours of their normal working duration. The workers assume awkward postures with limbs deviated from neutral for long periods of time. Polishing is done manually with brush which involves repetitive movements of the hand in deviated postures. At the end of the day, neck, shoulder and lower back were the body parts maximum affected and it often prevented them from doing any household activities.

(Chooibneh, Musculoskeletal problems in Iranian hand woven carpet industry, Guidelines for workstation design, 2007) Carpet weaving workers has one of the most

tedious jobs especially in loom type requiring long hours of static work, awkward posture, repetitive movements and ill-designed weaving workstation. It is a high risk occupation for developing musculoskeletal disorders. In most of the cases that weavers sat on the ground or a piece of wood strip in cross-legged or folded knees position which showed awkward postures and resulted in neck and trunk deviated from neutral posture. The results of the study demonstrated that the most commonly affected regions among the weavers were shoulders, lower back, wrists/hands, upper back, neck and knees.

(Thinius, 2014) Female parlor operatives in dairy farms reported more musculoskeletal discomfort compared to the male parlor operatives workers. The work place analysis revealed that women regularly worked above shoulder level and had to tort and bend more often than men because of the gender specific anthropometrics and the workplace design. Most affected body region among females was the lower back followed by neck and shoulder region. A possible explanation for the high rate of low back pain might be the necessity to bend forward to place a hand centric beneath the udder.

Findings of literature review

The research paper presents a systematic literature review of prevalence work related musculoskeletal disorders among different workers.

Musculoskeletal injuries

There exists distribution of musculoskeletal disorder pain in different **organs of the body regions** such as neck, shoulder, elbow, wrist, upper back lower back, arm, lower limbs, forearm, lumbar region, hips, thigh, knee, ankles, feet and hands.

This study found a high prevalence of **musculoskeletal injuries** such as trigger finger, carpal Tunnel syndrome, Achy, restricted movement of limbs, strain /sprain, loss of muscles strength and muscle fatigue.

Ergonomic risk factors

Awkward postures refer to the positions of body that deviates from appropriate positions while doing the activity of the task in working area. Awkward postures includes prolonged forward standing, twisting the body, extended reaching for objects above shoulder level, poor postures, required the operators to lean in towards their work area resulting in a hunched posture, awkward posture with limbs deviated from neutral for long periods of time, extension of elbow and neck flexion

High force refers to excessive physical effort required to perform a task. (Pullopdisakul, 2013). So high force includes manual handling tasks such as lifting, carrying, pushing, and pulling heavy loads, high force exertion, time spent on lifting/carrying, distances traveled while handling loads, weight of the loads carried, the use of force to carry, lift or lower objects with the hands, maximum effort required for using hammer/ different types of chisels / electric cutter and physical effort to dismantle the parts.

Repetition refers perform the same motion repeatedly or frequently over duration of work time (Pullopdisakul, 2013). So repetition includes repetitive movements of the hand in deviated postures, repetitive movements of the upper and forearm coupled with grip force, forceful repetitive activities of the upper arm and the forearm accompanied by deviated wrist postures. Static postures includes static postures for long duration, maintaining the same postural position for an extended period of time, visual demands of the work, static muscular load on the forearm and upper arm muscles.

Vibration includes presence of vibration during the work activity.

Improper working environment all the aspects includes scattered tools in the working environment, insufficient light of the work area, improper ventilation, the improper workstation design, inadequate seating, environmental discomfort, variable work schedules, absence of breaks, mental fatigue, stress due to the work requirements, high responsibility and having to work under strict supervision, long working hours, short rest, work overload and overexertion.

Extreme Temperature includes exposure to heat faced by worker in working area.

Conclusion

Thus on the basis of above data it can be concluded that lot of research has been done on identifying musculoskeletal injuries and associated ergonomic risk factors prevailing among different workers. There is strong need for implementation of ergonomics at workplace so the ergonomic risk factors as well as work related musculoskeletal injuries can be reduced to great extent among the different workers. Providing proper suitable work environment as per the requirement of the workers will increase the productivity, efficiency and safety of the worker in workplace. There is scope for further research on identifying ergonomic risk factors among different

workers working in different sectors. If the ergonomic risk factors of work related musculoskeletal injuries are identified then accordingly ergonomic designed can be planned as per the requirement of workers.

Research limitations - Being a review paper, the present paper is purely academic in nature.

References

- Aghilinejad, M. A. (2016). An ergonomic intervention to reduce musculoskeletal discomfort among semiconductor assembly workers. *Works* , 54 (2), 445-450.
- Aghilinejad, M. K.-M.-A. (2015). The role of ergonomic training interventions on decreasing neck and shoulders pain among workers of an Iranian automobile factory: a randomized trial study. *Medical Journal of the Islamic Republic of Iran (MJIRI)* , 29, 190.
- Akter, S. M. (2015). Prevalence of musculoskeletal symptoms and associated factors: A cross-sectional study of metal workers in Bangladesh. 50 (3), 363-370.
- Choi, S. D. (2012). A study of trade-specific occupational ergonomics considerations in the U.S. construction industry. *Work* , 42 (2), 215-222.
- Choobineh, A. H. (2007). Musculoskeletal problems in Iranian hand woven carpet industry, Guidelines for workstation design. *Applied ergonomics*, 38 (5), 617-624.
- Choobineh, A. H. (2007). Musculoskeletal problems in Iranian hand-woven carpet industry Guidelines for workstation design. *Applied Ergonomics*, 38 (5), 617-624.
- Corlett, E. N. (1984). *Evaluation of human work A practical ergonomics methodology*. British Library.
- Cristancho, M. L. (2012). Participatory ergonomics among female cashiers from a department store. *Work* , 41, 2499-2505.
- Escalona, E. H. (2012). Ergonomic evaluation in a values transportation company in Venezuela . *works* , 41, 710-713.
- Forza, C. (2000). Time compression in production and distribution within the textile-apparel chain. Integrated manufacturing. *MCB University press*, 11 (2), 138-146.
- Motamedzade, M. M. (2011). Ergonomics intervention in an Iranian television manufacturing industry. *Work*, 38 (3), 257-263.
- Mukhopadhyay, P. &. (2010). Evaluating ergonomic risk factors in non-regulated stone carving units of Jaipur. *works* , 35 (1), 87-99.
- Mukhopadhyay, P. J. (2015). Ergonomic risk factors in bicycle repairing units at Jabalpur. *works* , 51 (2), 245-254.
- Nogueira, H. C. (2012). Musculoskeletal disorders and psychosocial risk factors among workers of the aircraft maintenance industry. *Work* , 41, 4801-4807.
- Nunes, I. L. (2009). FAST ERGO_X-a tool for ergonomic auditing and work-related musculoskeletal disorders prevention. *Work* , 34 (2), 133-148.
- Pullopdisakul, S. E. (2013). Upper extremities musculoskeletal disorders: Prevalence and associated ergonomic factors in an electronic assembly factory. *International Journal of Occupational Medicine and Environmental Health* , 26 (5), 751-761.
- Purani, R. S. (2016). Prevalence of low back pain in salespersons and its association with ergonomic risk factors in Ahmedabad, Gujarat: A cross-sectional survey. *Medical Journal Of Dr. D.Y. Patil University*, 9 (3), 331-335.
- Ramdass, K. (2013). The Implementation of Ergonomics as a Sustainable Competitive Advantage. *Proceedings of PICMET '13: Technology Management for Emerging Technologies.*, (p. 1669).
- Rodrigues, V. A. (2012). Assessment of physical workload in boiler operations. *Works* , 41, 406-413.
- Sett, M. &. (2012). Study on work load and work-related musculoskeletal disorders amongst male jute mill workers of West Bengal, India. *work* , 42 (2), 289-297.
- Thinius, M. &. (2014). Ergonomic workplace evaluation and epidemiology of musculoskeletal discomfort on German dairy farms. *Work* , 49 (1), 25-32.

Effect of Social Networking Sites on Life of Engineering Students in Gujarat

Divyang Purohit* and Mitesh Jayswal**

Abstract

Purpose: The purpose of this paper is to understand the effect of social networking sites on Life of engineering students in Gujarat.

Design/methodology/approach: Data collected from 479 undergraduate engineering students from Chandubhai S. Patel Institute of Technology (CSPIT), Changa, Gujarat using 14 point structured close ended questionnaire. The link of the questionnaire was sent through the form created on Google drive with the aid of electronic mail to the respondents. Bar charts and tabulation method using spreadsheet were performed for data analysis.

Findings: Results indicate that 99.8 per cent students had smartphone out of which 94.2 per cent had internet facility and 96.45 per cent used social networking sites in which 87.3 per cent spent more than an hour on SNS. 44.23 per cent males and 50 per cent females agreed that SNS were important for them. 47.17 males and 47.22 per cent females believed that SNS had somewhat effect on face to face communication.

Research limitations/implications: Findings of this paper cannot be generalized as it involves students from only one engineering college of Gujarat. A survey involving students from different strata across Gujarat would enable scholars to capture more insight into the effects of social networking sites on life of engineering students.

Practical implications: Study reveals that even though most of the engineers had smartphones having internet connection still there were students who did not have any social media account. Most of the engineers believed that SNSs is important. Most of the engineers believed that SNSs had affected their social life. Most of the engineers used SNSs to keep in touch with their family and friends during study and to find new information for their study.

Originality/value: Many studies have been conducted to identify the effect of SNS on students of different discipline excluding engineering. This study tries to find the effect of SNS on engineering students.

Keywords: Effect of Social sites, Engineering students, Internet, Social Networking sites, SNS.

Paper type: Research paper

I. Introduction

Social media is basically the interplay and verbal exchange between humans for sharing and receiving information. It is a web based tool. Man being a human animal, there is constantly a need for socializing and networking. The world has been modified swiftly with the aid of the evolution of technology; this has resulted in the use of technological know-how as the first-class medium to explore the broad location of knowledge. The evolution of internet science has led to its use as the satisfactory medium for communication. Whereby, two-thirds of the world's internet population visit social networking or running a blog site, hence serving as a verbal exchange and connection tool. Social networking sites (SNSs) are online communities of internet users who prefer to speak with different users about areas of mutual interest, whether or not from a personal, business or tutorial standpoint

(Helou et al., 2012). Young guys and girls now exchange ideas, feelings, personal information, images and videos at a simply superb speed on social networking sites. However, every day many college students are spending infinite hours immersed in social media, such as WhatsApp, Facebook, LinkedIn, Twitter. At first look, this can also appear like a waste of time; on the other hand, it also helps students to increase essential know-how and social skills, and be lively citizens who create and share content (Jha et al., 2016). At present, whether social media is favorable or unfavorable, many college students make use of these websites on a daily basis.

II. Literature Review

Social media cannot be understood except first defining 'Web 2.0': a term that describes a new way in which end users use the World Wide Web, a place where content is

* Training and Placement Officer, Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat

** Professor, G. H. Patel PG Institute of Business Management, Vallabh Vidyanagar, Gujarat

continuously altered by all operators in a sharing and collaborative way (Anindita, 2016).

Nemetz et al.(2012) stated conclusively that college students use social networking sites frequently and extensively. The first recognizable social network site launched in 1997, 'Six Degrees.com' allowed users to create profiles, listing their buddies and surf the buddies lists (Hendricks, 2013). Facebook, which was invented via Mark Zuckerberg launched a website referred to as 'The Facebook' on February 2004 (Asare et al., 2016). By 2006, Facebook and Twitter both grew to be available to users throughout the world. These websites nevertheless continue to be the most famous social network on the Internet. After the success of these Social Media Sites, different websites like Orkut, WhatsApp, LinkedIn, and Flickr started out performing to fill unique social network niches. Given the records of social media, there are nonetheless many social media websites acting on the internet.

Social media has come to be a large phase of all people. Nowadays, nearly all people have social media accounts. Social media sites had been used in nearly all areas from commercial enterprise markets to academics. Students have used social media websites as equipment to help them add lecture notes to groups and relay messages from teachers to their classmates. Social Media Sites especially, 'Facebook' enable human beings to interact with each other. Since it helps with almost everything from messaging to video calls, social media site is not as everyday as they had been in the '90s.

III. The Problem Statement

Junco et al. (2011) examined by way of online mailing questionnaires to respondents that the person having smartphones are the most established users of social networking websites and have convenient access to these sites. Shambare et al. (2012) suggests that social medias

most frequently used with the aid of Youngers and Facebook is most broadly using through a massive number of communities and have a couple of results on student's life.

College students in these days are continually very busy with their handset and laptops. Most college students get admission to the Internet, and they will spend tremendous time on chatting, checking their email, their Facebook profile, updating their Twitter debts and their LinkedIn account. It has been seen that youngsters are devoting their more time with their friends and family through SNSs against face to face communications like older days. This paper investigates the effect of social networking site on the life of engineering students in Gujarat.

IV. Methodology

The instrument used for data collection for this study was the questionnaire method. This used to be because of the nature of data required and the form of evaluation to be conducted. A fourteen questions structured questionnaire link was sent of the form created on Google drive with the aid of electronic mail to engineering students of Chandubhai S. Patel Institute of Technology, Changa, Gujarat. Multi-choice questions had been asked. 479 respondents have filled google form out of 2717 students. After submitting the form the data used to be saved in a spreadsheet template. The fundamental objective of the research was to find out how social networking site has effect on the life of engineering students in Gujarat.

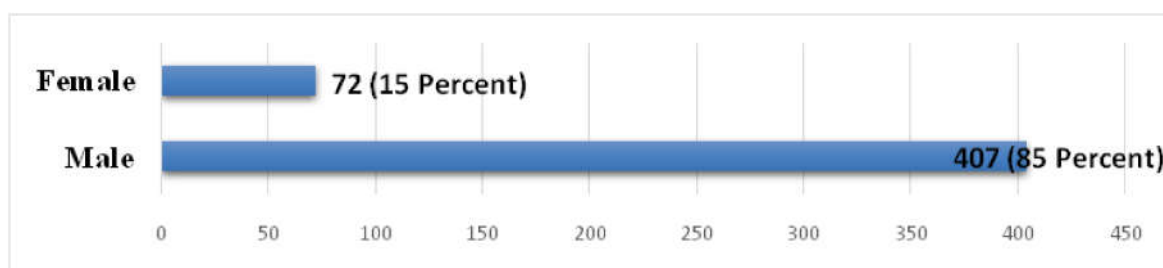
V. Result

Questionnaires along with Charts and analysis:

i. Select your gender

Out of 479 respondents, 407 (85 per cent) were male, and 72 (15 per cent) were female. Chart one below further displays the graphical distribution of the same.

Chart 1: Gender of Respondents

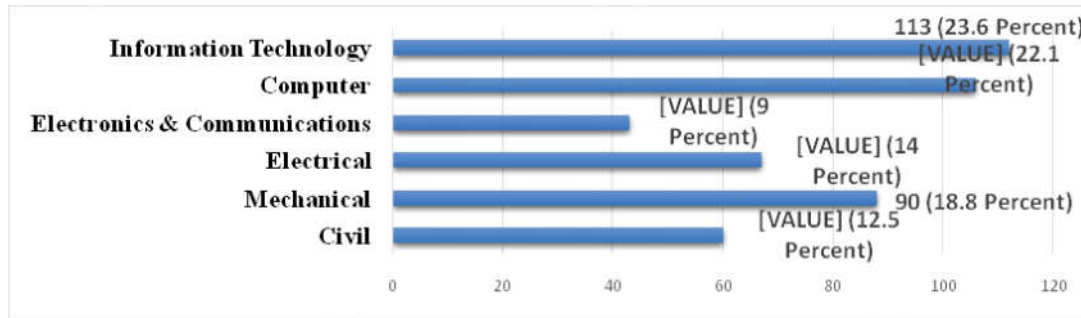


ii. What is your branch?

Out of total respondents, most of the students were from circuit branch with 54.70 per cent like Information Technology (23.6 per cent), Computer engineering (22.1 per cent) and Electronics & Communication (9 per cent)

who used to be technology adaptive. Core branch students were 45.30 per cent including Civil engineering (12.5 per cent), Mechanical engineering (18.8 per cent) and Electrical engineering (14 per cent). Chart two displays the graphical distribution of the same.

Chart 2: Branch wise Respondents



iii. Are you have Smartphone?

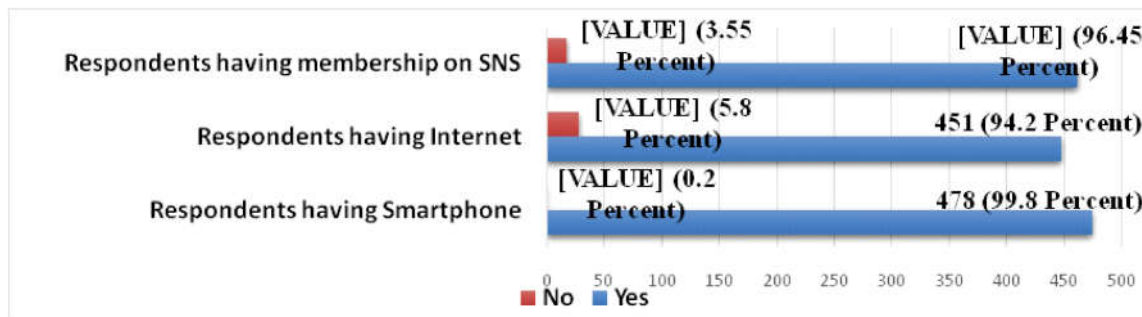
iv. Do you have internet facility on your mobile?

v. Are you a member of Social Networking Site?

Mostly all the students (99.8 per cent) who were perusing engineering use Smart phones. 94.2 per cent students

had Internet facility on their smartphone. 96.45 per cent had a membership with social networking sites. This shows that there were engineers who were not using the internet in their smartphones and did not have a social account. Chart three displays the graphical distribution of the same.

Chart 3: Respondents having Smartphone, Internet Facility and membership on SNSs

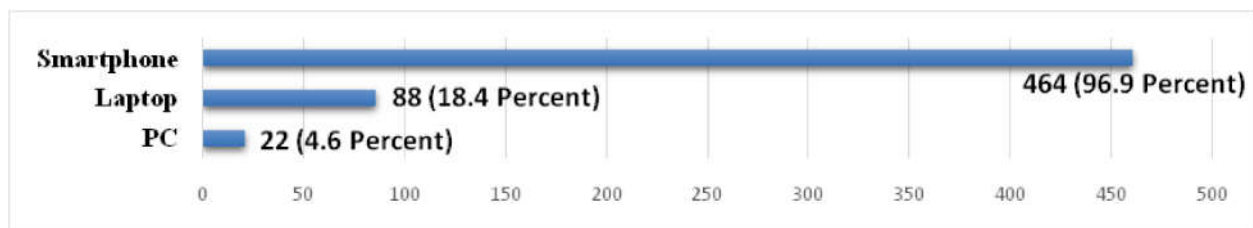


vi. How do you access your social network account?

The smartphone was seen to be amost useful device to access SNSs by students with 96.85 per cent against

Laptop (18.07 per cent) and Personal Computer (PC - 4.41 per cent). Chart four displays the graphical distribution of the same.

Chart 4: Devices that Respondents use to access SNSs

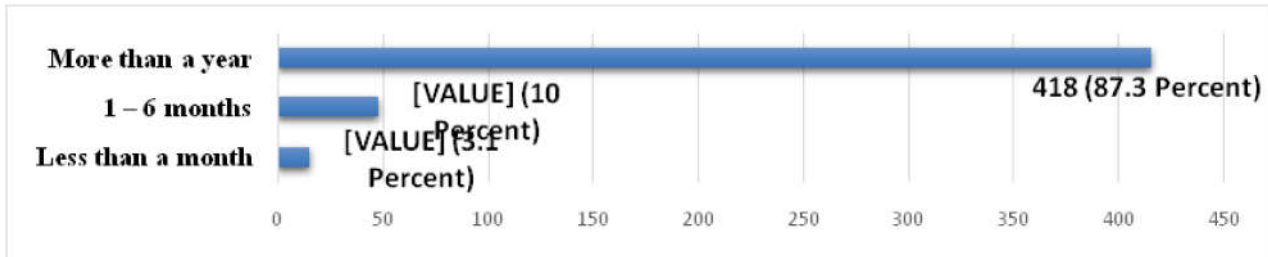


vii. How long have you been using social networking sites?

We want to find that how long students had been using SNSs. It was found that only 3.15 per cent students were

using SNSs since last one month. 10.08 per cent students were using it for 1 to 6 month. 87.18 per cent were using it for more than a year. Chart five below further displays the graphical distribution of the same.

Chart 5: Uses of SNSs by Students

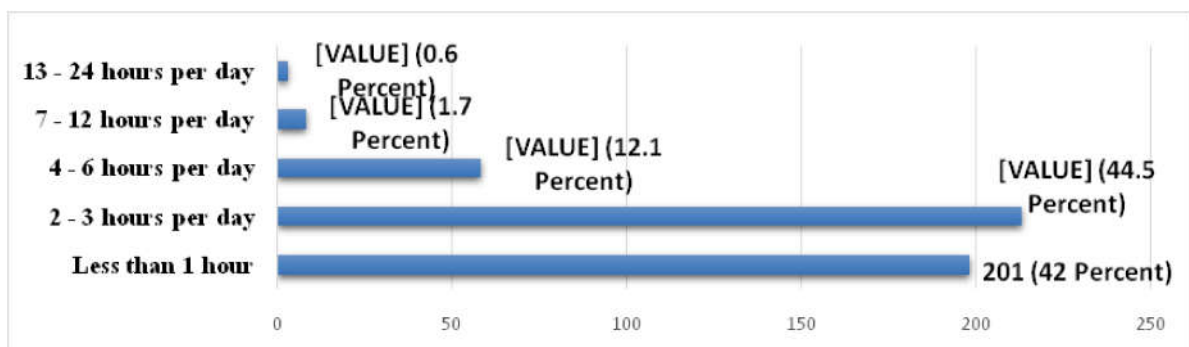


viii. On average, how much time do you spend daily on social networking sites?

We want to find that what time students were spending on SNSs in a single day. 44.5 per cent of the total sample were using SNSs for two to three hours in the single day.

42 per cent were using it for less than an hour in a day. 12.1 per cent were using it for 4 to 6 hours a day. 1.7 per cent were using it for 7 to 12 hours in a day, and 0.6 per cent use 13 to 24 hours in a day. This suggests that students know what time they should spend on SNSs. Chart six displays the graphical distribution of the same.

Chart 6: Daily use of SNSs by Students

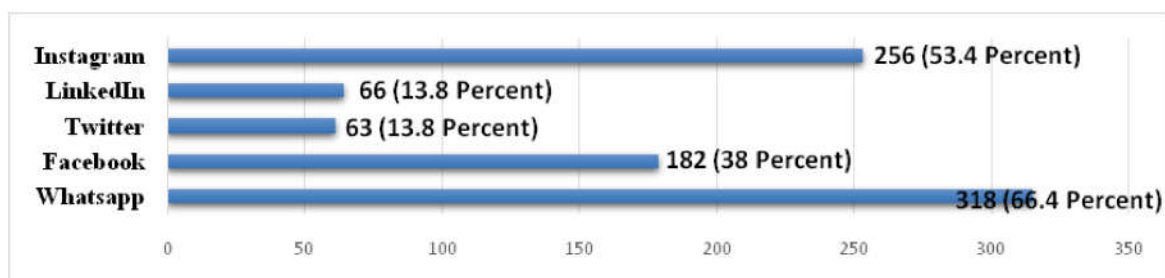


ix. Which social network site are you using?

Out of the five social networking sites used by students, WhatsApp was seen to be mostly used by students with

66.4 per cent followed by Instagram 53.4 per cent, Facebook 38 per cent, LinkedIn 13.8 per cent, and Twitter 13.8 per cent. Chart seven displays the graphical distribution of the same.

Chart 7: Distribution of SNSs used by Students

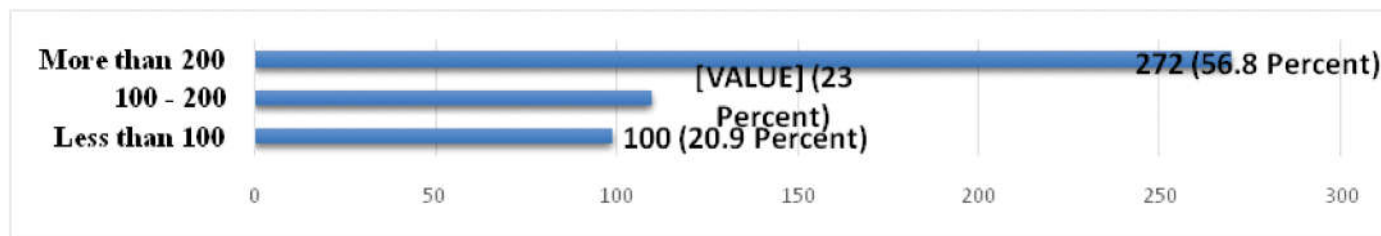


x. How many contacts/friends do you have on the social networking sites?

Out of total respondents, 56.8 per cent had more than 200 contacts/friends on SNSs which indicates they were

very active in making new contacts/friends. 23 per cent had 100 to 200 contacts/friends, and 20.90 per cent had less than 100 contacts/friends on SNSs. Chart eight displays the graphical distribution of the same.

Chart 8: No. of contacts/friends respondents have on SNSs

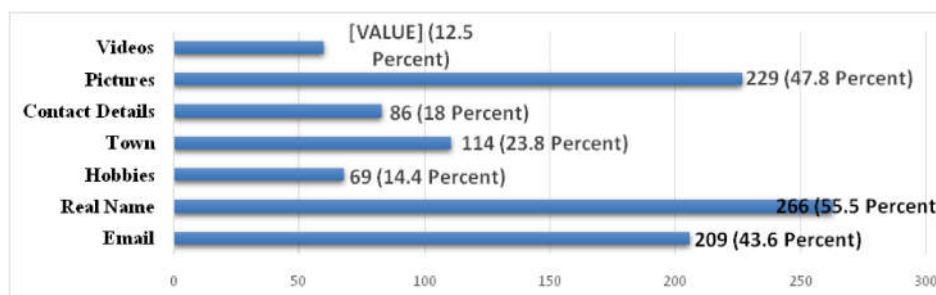


xi. What information do you include in your social network profile? (You can choose more than one)

In this question, students were asked to choose one or more than one option. Here we tried to find out what information students had provided on SNSs. Most of

the students had provided their Real Name (55.5 per cent), Pictures (47.8 per cent) and Email Id (43.6 per cent) on SNSs. Few have provided their Town (23.8 per cent), Contact Details (18 per cent), Hobbies (14.4 per cent) and Videos (12.5 per cent). Chart nine displays the graphical distribution of the same.

Chart 9: Information provided by Respondents on SNSs

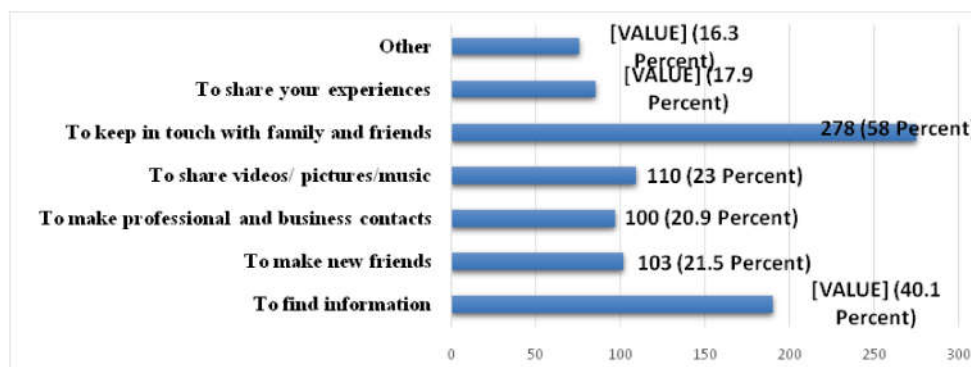


xii. Why do you use an online social network?

In this question, students were asked to choose one or more than one option. 58 per cent students had used SNSs to keep in touch with family and friends, 40.1 per cent to find information, 23 per cent to share videos/

pictures/music, and 21.5 per cent to make new friends, 20.9 per cent to make professional and business contacts, 17.9 per cent to share their experience and 16.3 per cent for another purpose. Chart ten displays the graphical distribution of the same.

Chart 10: Purpose of using SNSs

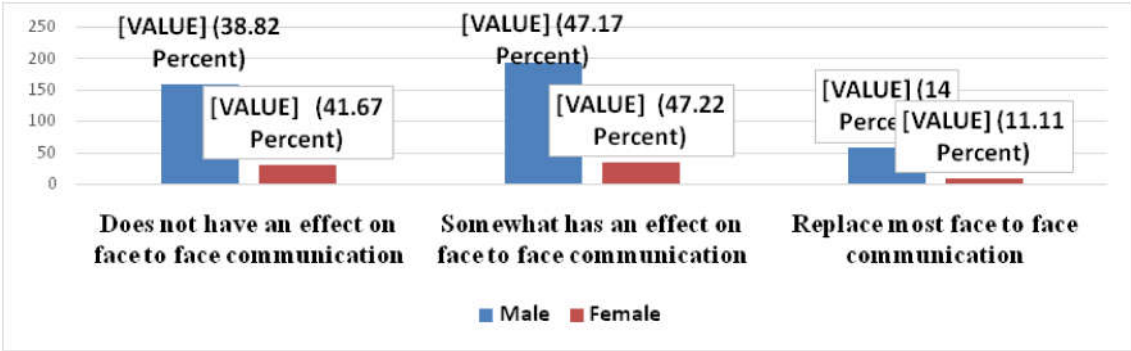


xiii. How does online networking affect your social life?

In this question, we tried to find out the effect of SNSs on the social life of respondents. 47.17 per cent male and 41.67 per cent female thinks that SNSs had somewhat effect on face to face communication. 38.82

per cent male and 41.67 per cent females believed that SNSs did not effect on face to face communication. Whereas only 14 per cent male and 11.11 per cent female believed that SNSs has replaced face to face communication. Chart eleven displays the graphical distribution of the same.

Chart 11: Effect of SNSs on Social Life of Respondents

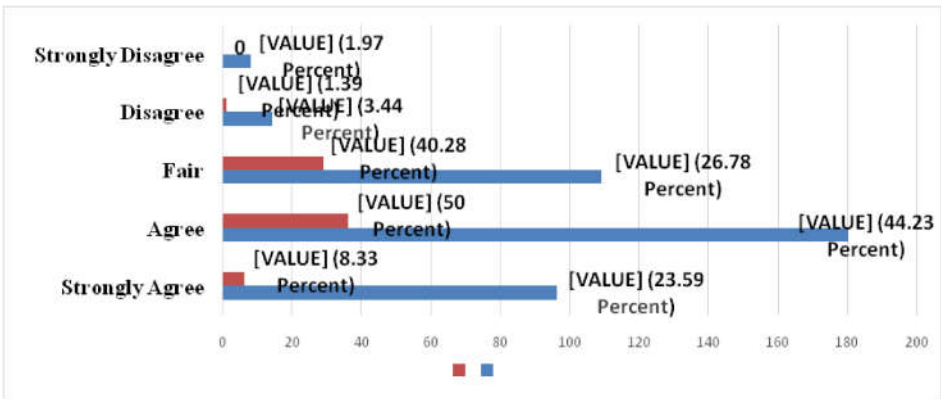


xix. Do you think social networks are important?

23.59 per cent male and 8.33 per cent female respondents strongly agreed that SNSs was important. 44.23 per cent male and 50 per cent female agree that SNSs was important where as 26.78 per cent male and 40.28 per

cent female believes that it is fair. Very few students (3.44 per cent male and 1.39 per cent female) disagreed for importance of SNSs. Only 1.97 per cent male out of total respondents strongly disagreed with the fact that SNSs was important. Chart twelve displays the graphical distribution of the same.

Chart 12: Importance of SNSs



VI. Conclusion

The research done has revealed that even though most of the engineering students have smartphones with internet connection still there are students who do not have any social account. It can be concluded that most of the engineering students believes that social networking sites are important. Most of them believe that SNSs has affected their social life. Social media is attractive as it provides engineering students a chance to keep in touch with family and friends during their study and also provides help to find new information for their study.

VII. Limitation and Future Scope

Due to time constraint, this study has considered engineering students of one institute only. Results may vary, if we include more institutes. Future studies required to research on students of other higher education institutes of Gujarat. Future studies may also consider the relative effect of all social networking sites on students' life, academic performance, etc.

References

- Anindita, B. (2016, June). SOCIAL MEDIA AND EDUCATION SECTOR: ENRICHING RELATIONSHIP. *Global Media Journal - Indian Edition*, 7(1).
- Asare, S., & Frimpong, K. O. (2016). The effects of social networks on the academic performance of the Ghanaian student. *International Journal of Research in IT and Management*, 6(6), 55-68.
- Chafkin, M. (2007). How to kill a great idea. *Inc. Magazine*.
- Helou, A. M., Rahim, Z. Z., & D, O. (2012, July). Students' Perceptions on Social Networking Sites Influence on Academic Performance. *International Journal of Social Networking and Virtual*
- Hendricks, D. (2013). The Complete History of Social Media: Then And Now. Retrieved April 11, 2017.
- Jha, J., Jaipuria, N., Jha, S., & Sinha, P. (2016). The Effects of Social Media on Students. *International Conference on Advances in Information Technology and Management ICAIM - 2016* (pp. (0975 - 8887)). *International Journal of Computer Applications*.
- Junco, R., Heiberger, G., & Loken, E. (2011). The impact of social media and social networks on education and students of Pakistan. *IJCSI International Journal of Computer Science*, 9(1), 407-410.
- Nemetz, P., Aiken, K. D., Cooney, V., & Pascal, V. (2012). Should faculty use social networks to engage with students? *Journal for Advancement of marketing Education*, 20(1).
- Shambare, R., Rugimbana, R., & Sithole, N. (2012). Social networking habits among students. *African Journal of Business Management*, 6(2), 578-786.

Study on Perception Towards Fast Food Consumption

Gautam Parmar* and Raju M Rathod**

Abstract

Background: Food is basic need for life but now it has gone beyond fuelling bodies and satisfying taste buds. India's food market size which is at around Rs 23 trillion in 2014 is set to reach around Rs 42 trillion by 2020. India is in a phase of rapid economic and demographic transition. With increase in income, changing lifestyle, urbanization and changes in the demographic profile, the transformation in the food consumption pattern also found in India. The fast food considered as served ready to eat. Foods sold in a restaurant or store which are rapidly prepared and quickly served Indian foods like in a packaged form for take away. Increase in fast food players, marketing strategies, urbanization, nuclear families, woman working, long working hours, youth leads to increase in fast food consumption.

Purpose: The present study aims to understand the consumers' perception towards fast food consumption.

Research/Design/Methodology: The convenience sampling technique was used for the present study. To achieve objectives, 120 respondents were surveyed. The exploratory factor analysis was also carried out to know the factors affecting perception towards fast food consumption.

Findings: Majority of respondents preferred to eat fast food anytime and from nearby place. The exploratory factor analysis yielded four factors namely "Concern for Value", "Concern for Taste and Health", "Concern for Review & Reference" and "Concern Convenience" influencing fast food consumption.

Implications: The study will be helpful to fast food players in designing the marketing strategies.

Keywords: Fast Food, Health, Perception towards fast food.

Paper Type: Research Paper

Introduction

Food is an important for life. Indian households spend two-third of what they earn on food. The Indian food and grocery market is the world's sixth largest, with retail contributing 70 per cent of the sales. India has a substantial food-loving consumer base leading to a significant market size for F&B sales. Food and grocery retail constitute 60-65 per cent of the total retail market in India - 15-20 per cent of organised retail and about 70 per cent of unorganised retail industry. (KPMG, 2015)

Fast food is convenience foods obtained in self-service or take-away eateries with minimal waiting and are usually characterized as energy dense, low in micronutrients and fibre, high in simple sugars and salt, generally larger in portion size than conventional home cooked or restaurant foods and highly palatable (Lewis. et al., 2005). Rising number of nuclear families, exposure to western cuisine and global media, growing number of working women - have had a substantial impact on the eating out trends

and growth of the fast food industry. (M.Mondurailingam, 2015). Fast food refers to food that can be served ready to eat. Foods sold in a restaurant or store which are rapidly prepared and quickly served Indian foods like in a packaged form for take away (Kaushik, Narang, & Parakh, 2011). Fast foods are taking popularity by nuclear families because working parents have less time for meal preparation by themselves (Das, 2015). Fast food is the world's fastest growing food type and it is quick, reasonably priced and readily available alternatives to home cooked food. (Goyal and Singh, 2007). Fast food is a food prepared and served quickly at a fast food restaurant or a shop. Fast foods are characterized as quick, easily accessible and cheap alternatives to home-cooked meals, according to the National Institutes of Health (NIH). Fast food is a mass-produced food that is prepared and served very quickly. The food is typically less nutritionally valuable compared to other foods and dishes. Perceived factors contributing to the growing popularity of fast food includes urbanization, long working

* Assistant Professor, ASPEE Agribusiness Management Institute, Navsari Agriculture University, Navsari

** Professor, G.H. Patel P.G. Institute of Business Management, VallabhVidyanagar, Anand

hours, growing interest in exotic food, advertising, availability of commercial buildings and rise in income. (Horsu et.al, 2015)

Need of the study

The India is growing rapidly in various sectors that result into increase in income, changing lifestyle, urbanization and changes in the demographic profile, the transformation in the food consumption pattern also found in India. The fast food is the category of food which is rapidly accepted by the Indians especially youth. The various national and multinational companies are investing in food sector. The perception and behaviour towards these developing areas is need of hour for the fast food market players, the present study try to investigate the perception towards fast food consumption. The study will give valuable insights to market players in designing the marketing strategies.

Methodology

The present research aims to study the perception towards fast food consumption. To achieve the objective structured questionnaire was used which contains demographic details of respondents and research questions. The questionnaire was containing 14 statements designed to investigate perception towards fast food consumption. The perception of respondents was measure on a five-point Likert-type rating scale (strongly agree to strongly disagree). The researcher have develop the scale by reviewing literature on fast food consumption. To assess for internal consistency, Cronbach's alpha reliability coefficient was calculated for the 14 statements. A cronbach's Alpha value obtained was 0.711, which indicating the response scale had a good and acceptable internal consistency. The sampling frame are the fast food consuming respondents of Gujarat state. The sampling unit for the study is an individual consuming fast food. The convenience sampling method was employed for the present study. The online survey platform was used to collect data for the present study, the questionnaire was build up online and sent to the various respondents in Gujarat state. Total 120 respondents' data were obtained with the help of online survey. The descriptive statistics and exploratory factor analysis are used to analyze the collected data.

Data Analysis

The table 1 depicts the demographic profile of respondents. Total 120 respondents were surveyed and out of that 69.2 percent were male where as 30.8 percent

were female. The average age of respondents were found 22.72 years. The majority of respondents (63.3 percent) studied up to post graduate level where as 35 percent studied up to graduation level. Majority of respondents were students followed by service class. The 93.3 percent respondents were unmarried.

The researchers have classified fast food into four broad categories namely dry snacks including chocolate, fast food meals, fried foods and soft drinks. The table 2 shows responses (in percentage) for frequencies of consumption of fast food. It is observed that in case of dry snacks 50 percent respondents consume either every day or twice a week. The 33.40 percent respondents prefer to have fast food meal once in a week, while 26.70 percent respondents prefer to have fast food meal twice in a week, in case of fried foods same scenario observed. The 29.20 percent respondents prefer to have soft drink rarely followed by 27.50 percent twice in a week.

The respondents were asked to give response on preferred timing for fast food, the results are depicts in table 3. As shown in table 49.2 percent responses like to eat it at any time a day. In case of preferred place for fast food eating the 54.2 percent respondents like to eat at nearby place followed by quick service restaurants.

Full-service restaurants and Quick Service Restaurants (QSRs) together account for a majority of 73 per cent of India's food service industry. (KPMG, 2016). Quick Service Restaurants (QSR) and casual dining are the two most popular formats that form 45% and 32% of the overall market respectively. The overall market for QSR is estimated to be around INR 92,000Crore and is estimated to grow at an annual rate of 16%, FICCI report, 2015.

Reliability test Alpha

The respondents were asked to respond on 5 point Likert scale for 14 statements for the perception towards fast food consumption. To check reliability of the scale, as shown in table no 4 cronbach's Alpha was calculated and it was found 0.711 for 14 items. The reliability test Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. (Tavakol et al. 2011). As a rule of thumb the value greater than 0.7 is good and acceptable. For the present study Cronbach's Alpha Based on Standardized Items obtained 0.711. So the data are reliable for further analysis.

Factor Analysis

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Factor analysis is one of the multivariate analytical techniques. Factor analysis is a generic name denoting a class of procedures primarily used for data reduction and summarization. This factor conveys all essential information about the original variables.

To do the factor analysis there are about 6 to 7 methods available, out of which, two methods are generally used: (1) Principal Component Analysis, and (2) Common Factor Analysis. An appropriate method is to be selected for the analysis. From these two methods, 'Principal Component Analysis method' is selected to carry out Factor Analysis, as is usually done by different analysts.

Factor Analysis needs to be appropriate for the data. To check that two tests have been conducted. (1) Bartlett's test of sphericity and (2) Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy. Bartlett's test of sphericity is used to test the null hypothesis that variables are uncorrelated in the population. The second is an index to examine the appropriateness of factor analysis. Generally, the values of 'KMO measure of sampling adequacy', falls in-between 0.5 to 1.0, which indicate factor analysis is appropriate. Values below 0.5 indicate inappropriateness of the analysis. The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy test is accepted greater than 0.6. (Malhotra, 2007) For the present study the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value obtained is 0.674. (Table 5)

Factor analysis was carried out on all the responses to 14 attributes for fast food perception using 'Principal Components Analysis' method. The results showed the approximate Chi-Square value of 247.017 at 91 degree of freedom under the Bartlett's Test of Sphericity, which is significant at the 0.05 levels. The null hypothesis (that the variables are uncorrelated in the population, or the correlation matrix is an identity matrix) is, therefore, rejected. The alternate hypothesis that the variables in the population are correlated is accepted. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.674, which is sufficiently large. Thus, factor analysis may be considered appropriate for analyzing the data.

Further analysis, therefore was carried out. In the final results (as shown in table 6), total four factors out of 14 have eigen values more than 1.00. As per the approach based on Eigen values, only factors with eigen values greater than 1.00 are to be retained. Hence, total four factors are to be considered in this data. The results also show that these four factors account for 51.528 percent of the total variance.

An important output from factor analysis is the factor matrix, also called the factor pattern matrix. The factor matrix contains the coefficients used to express the standardized variables in terms of the factors. These coefficients, factor loadings, represent the correlation between the factors and the variables. A coefficient with a large absolute value indicates that the factor and the variable are closely related. Hence, to facilitate interpretation of factors, it is necessary to identify the variables that have large loadings on the same factor. It was decided to consider factor loading of 0.350 as a cut off point for a statement to be associated with a factor. When 'factor matrix' of the above four factors was referred to, and a cut off value of loading of 0.3 was considered; four attributes were associated with factor '1', five attributes with factor 2, three attributes with factor 3 and two attributes with factor 4.

Although, the initial or un-rotated factor matrix indicates the relationship between the factors and individual variables, it seldom results in factors that can be interpreted; because the factors are correlated with many variables. The factor matrix, therefore, is transformed into a simpler one through rotation. It is easier to interpret this rotated factor matrix. Again, many methods are available for rotation. Most commonly used method for rotation is the 'varimax' procedure. Other three popular methods are 'direct oblimin' and 'quartimax' and 'Promax'. Here 'varimax' used to get the factor matrix and factor loadings. (Table 7)

Factor Number 1:

The first factor can be named as concern for value due to high loading factors to the statements associated to the benefits and convenience which explained 14.369% of total variance having factor loading for the statements are ranging from 0.741 to 0.532.

These statements are extracted from the Questionnaire and reproduced below:

A. Fast food are value for money

- B. Fast food are cheaper food source
- C. Fast food is today's trend
- D. Fast food suits to me

The four attributes stated above reflect "concern for value" for perception towards fast food consumption.

Factor Number 2:

The second factor can be named as Concern for Taste and Health due to high loading factors to the statements associated to the benefits and convenience which explained 13.734% of total variance having factor loading for the statements are ranging from 0.713 to 0.342.

These statements are extracted from the Questionnaire and reproduced below:

- E. Fast food are delicious
- F. Fast food gives me good feeling
- G. My friends prefer to have Fast foods
- H. Fast food have adverse impact on health
- I. Fast food saves the time

The four attributes stated above reflect "Concern for Taste and Health" for perception towards fast food consumption.

Factor Number 3:

The third factor can be named as Concern for Review & Reference due to high loading factors to the statements associated to the benefits and convenience which explained 12.339% of total variance having factor loading for the statements are ranging from 0.784 to 0.493.

These statements are extracted from the Questionnaire and reproduced below:

- J. Fast food always found at my home
- K. I usually choose fast food by TV ads.
- L. I usually choose fast food by neighbours.

The three attributes stated above reflect "Concern for Review & Reference" for perception towards fast food consumption.

Factor Number 4 :

The fourth factor can be named as Concern Convenience due to high loading factors to the statements associated to the benefits and convenience which explained 11.085% of total variance having factor loading for the statements are ranging from 0.779 to 0.739.

These statements are extracted from the Questionnaire and reproduced below:

- M. Fast foods are easily available
- N. Fast foods help when I have short time.

The two attributes stated above reflect "Concern Convenience" for perception towards fast food consumption.

Result and Discussion

The factor analysis yielded four factors which explain 51.528 % of total variance. This depicts in the table 8. The results of study in line with the findings of (Horsu et.al, 2015) "consumers, who currently patronize fast food, do so for the reasons that they perceive them to be convenient, time saving, delicious, good for a change and fun as well as preference of the environment" and also in line with findings of (Aloia et.al, 2013) "that participant from both low-income and high-income neighbourhoods visited fast food restaurants for the same reasons as convenience, price, social enjoyment and quality meals". The study also supports findings of (Ismail, 2016) "the main reason for fast food consumption among university girls in study was found to be convenience" and also the findings of (Onurluba? & Yilmaz, 2013) "the Fast food consumption reasons are "Product-Quality-Price relation", "Correctitude of Location", Product and Service", and "Scarcity of Time". The finding of (Bipasha & Goon, 2014) "the important factors for the preference of fast food include good taste, easy accessibility, increased convenience, and pocket friendly in nature", also support the findings of present study. The finding of the study also in line with findings of (Narayan & Prabhu, 2015) "Time, taste, cleanliness, hygiene and money are the main factors which have influenced students to opt for having fast food items. Quick services and a convenient location are also amongst the reasons for the preference for fast food amongst the students".

Conclusion and Implication

The fast food is becoming popular nowadays. The present study was carried out to understand consumers' perception toward fast food consumption. To achieve this objectives the exploratory factor analysis was carried out on primary data which ultimately help to explore four dimensions of consumers' perception towards fast food namely "Concern for Value", "Concern for Taste and Health", "Concern for Review & Reference" and "Concern Convenience" influencing fast food consumption.

The study also found that consumers would like to consume fast food in their daily diet. The outcomes of the study help the market players to formulate right marketing strategy pertaining to targeting and positioning of their products. The study may also help to design the promotional strategies based on the factors found.

Future Research

The future research can be carried out on consumer behaviour towards fast food consumption. The study can also be done on college students especially staying in hostel. Impact of socio-demographic profile on fast food consumption can also be studied to understand the insights of behaviour towards fast food consumption.

References

1. Aloia, C. R., Gasevic, D., Yusuf, S., Teo, K., Chockalingam, A., Patro, B. K., Lear, S. A. (2013). Differences in perceptions and fast food eating behaviours between Indians living in high- and low-income neighbourhoods of Chandigarh, India. *Nutrition Journal*, 12(1). doi:10.1186/1475-2891-12-4
2. Bipasha, M. S., & Goon, S. (2014). Fast food preferences and food habits among students of private universities in Bangladesh. *South East Asia Journal of Public Health*, 3(1):61-64. doi:10.3329/seajph.v3i1.17713
3. Das, J. C. (2015). Fast Food Consumption in Children: A Review. *Medical & Clinical Reviews*, Vol. 1 No. 1: 1 pp.1-4.
4. FICCI, G. T. (2015). Unlocking the potential in the food and beverage services sector. New Delhi: Grant Thornton India LLP.
5. Goyal, A., & Singh, N. (2007). Consumer perception about fast food in India: An exploratory study. *British Food Journal*, 109(2), 182-195. doi:10.1108/00070700710725536
6. Horsu E N, Y. S. (2015). Consumer Perception and Preference of Fast Food: A Study of Tertiary Students in Ghana. *Science Journal of Business and Management*, Vol 3(1): pp. 43-49. doi: 10.11648/j.sjbm.20150301.13
7. Ismail, I. (2016). Trend of Fast Food Consumption among University Girls in Karachi, Pakistan. *International Journal Of Endorsing Health Science Research (Ijehsr)*, 4(1), 32-38. doi:10.29052/ijehsr.v4.i1.2016.32-38
8. Kaushik, J. S., Narang, M., & Parakh, A. (2011). Fast food consumption in children. *Indian Pediatrics*, 48(2), 97-101. doi:10.1007/s13312-011-0035-8
9. KPMG. (2016). India's food service industry: Growth recipe. KPMG.
10. Lewis, L. B., Sloane, D. C., Nascimento, L. M., Diamant, A. L., Guinyard, J. J., Yancey, A. K., & Flynn, G. (2005). African Americans' Access to Healthy Food Options in South Los Angeles Restaurants. *American Journal of Public Health*, 95(4), 668-673. doi:10.2105/ajph.2004.050260
11. Mohsen Tavakol, R. D. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2 pp. 53-55.
12. Mondurailingam, M., J. V. (2015). Comparative Study On Customer Satisfaction Towards KFC and McDonalds, Chennai. *ZENITH International Journal of Multidisciplinary Research*, Vol.5 (6), pp-50-62.
13. Narayan, B., & Prabhu, M. (2015). Examining fast - food consumption behaviour of students in Manipal University, India. *African Journal of Hospitality, Tourism and Leisure*, 4(2), 1-10.
14. Onurluba, E., & Yilmaz, N. (2013). Fast food consumption habits of university students. *Journal of Food Agriculture and Environment*, 11(3), 12-14.
<https://www.livestrong.com/article/49366-definition-fast-foods/> - retrieved on 12 October, 2017
https://en.wikipedia.org/wiki/Fast_food - retrieved on 12 October, 2017
http://economictimes.indiatimes.com/articleshow/45890613.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst - retrieved on 12 October, 2017

Table 1: Demographic profile of respondents

Gender of Respondents		
	Frequency	Percent
Male	83	69.2
Female	37	30.8
Total	120	100.0
Average Age of Respondents (In Years)		22.72
Education of Respondents		
	Frequency	Percent
SSC and Below	0	0
HSC	2	1.7
Under Graduate	42	35.0
Post Graduate	76	63.3
Total	120	100.0
Occupation of Respondents		
	Frequency	Percent
Student	85	70.8
Job	33	27.5
Business	2	1.7
Total	120	100.0
Marital Status of Respondents		
	Frequency	Percent
Unmarried	112	93.3
Married	8	6.7
Total	120	100.0

Table 2- Fast food consumption frequency

Parameter	Everyday	Twice in a week	Once in a Week	Fortnightly	Rarely	Never
Dry Snacks Including Chocolate	25.00	25.00	27.50	10.00	9.20	3.30
Fast food Meals	8.30	26.70	33.40	15.80	15.00	0.80
Fried Foods	13.30	30.00	25.00	14.20	15.00	2.50
Soft drinks	9.20	27.50	19.20	10.00	29.20	5.00

Table 3 : Time and location preference for fast food.

Preferred Timing For Fast food		
	Frequency	Percent
Breakfast	15	12.5
Lunch	10	8.3
Dinner	36	30.0
Anytime	59	49.2
Total	120	100.0
Preferred Place for Fast Food		
	Frequency	Percent
Nearby place	65	54.2
Quick Service Restaurants	34	28.3
Street Vendor	16	13.3
Other	5	4.2
Total	120	100.0

Table 4: Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.711	14

Table 5: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.674
Bartlett's Test of Sphericity	Approx. Chi-Square	247.017
	Df	91
	Sig.	.000

Table 6: Total Variance Explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.085	22.036	22.036	3.085	22.036	22.036	2.012	14.369	14.369
2	1.709	12.206	34.242	1.709	12.206	34.242	1.923	13.734	28.104
3	1.272	9.087	43.329	1.272	9.087	43.329	1.727	12.339	40.443
4	1.148	8.199	51.528	1.148	8.199	51.528	1.552	11.085	51.528
5	.962	6.875	58.403						
6	.892	6.369	64.772						
7	.870	6.212	70.984						
8	.748	5.344	76.328						
9	.693	4.953	81.282						
10	.687	4.905	86.186						
11	.642	4.588	90.774						
12	.502	3.585	94.360						
13	.455	3.252	97.611						
14	.334	2.389	100.000						
Extraction Method: Principal Component Analysis.									

Table 7: Factors affecting towards fast food consumption

Rotated Component Matrix^a				
	Component			
	1	2	3	4
Fast food are value for money	.741		.401	
Fast food are cheaper food source	.700			
Fast food is today's trend	.553			.442
Fast food suits to me	.532	.351		
Fast food are delicious		.713		
Fast food gives me good feeling		.702		
My friends prefer to have Fast foods		.540		
Fast food have adverse impact on health		.399	.301	
Fast food saves the time		.342		.314
Fast food always found at my home			.784	
I usually choose fast food by TV ads.			.628	
I usually choose fast food by neighbours.	.443		.493	
Fast foods are easily available				.779
Fast foods help when I have short time.				.739
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 6 iterations.				

Table 8 Factors and associated names for fast food consumption

Sr. No.	Factor	Factor Name on The Basis of Inference
1	Factor 1	"Concern for Value"
2	Factor 2	"Concern for Taste and Health"
3	Factor 3	"Concern for Review & Reference"
4	Factor 4	"Concern Convenience"

Job Related Factors Affecting Achievement Motivation of Employees in Information Technology, Hospitality and Telecom Sectors in Gujarat

Vilas Kulkarni*

Abstract

Purpose - The purpose of this paper is to understand the impact of job related factors on achievement motivation of employees in service sector.

Design/methodology/approach -574 employees were interviewed personally or through internet or both using a structured questionnaire. The data collection was done for six months between April-September, 2017 from the respondents working in information technology, hospitality and telecom sectors in cities like Ahmedabad, Vadodara, Rajkot and Surat.

Findings - It concludes that respondents above 50 years of age were more affected by the factors of job like recognition, interesting work, leaves etc. For the employees having more than 10 years of work experience 'job factors' and 'accepting responsibility' were more important. In all the parameters the mean score of respondents working in hospitality industry was high. Thus it can be said that the job related factors affecting achievement motivation change according to the demographic factors and the industry. At the end managerial implications are discussed.

Originality/value - The originality of this research lies in identifying the perception of employees regarding job related factors affecting achievement.

Keywords: Achievement motivation, job related behavior, demographic factors, hospitality

Paper type: Research paper

Introduction

Motivation and its importance

It is a well known fact that today managers face the challenge of keeping their employees motivated. Golembiewski (1973) describes motivation as the level of willingness of an organization to follow some selected goal and involves the grit of the nature inducing the degree of readiness. Motivation as a concept has many dimensions like extrinsic and intrinsic. According to McGarvey (1997), when employees are motivated managers may see improved performance. He considered additional compensation, gift certificates or material rewards as extrinsic rewards to motivate employees. Researchers like (Mullins, 2005) focused on intrinsic motivating and termed psychological rewards as motivating factors. Deci (1975) believed that intrinsically motivated behaviours are seen when there is no other apparent reward except the activity itself. Igalens and Roussel (1999) stated that workers may be satisfied by the compensation of their job but may not be motivated to continue doing what they would do. Intrinsic motivation also consist of employers value creative, flexible and

spontaneous workers ((Deci & Ryan, 1985). Kamiol and Ross (1977) concluded that rewards increase intrinsic motivation.

Achievement motivation

Achievement motivation can be defined as the desire to excel or an innate force in which an individual wants to succeed (Woolfolk, 1998). Achievement stresses the importance of accomplishment and attainment with effort involved (Mandel & Marcus, 1988). The study of achievement motivation is important because it has been correlated with learning and performance goals (Hsieh, Sullivan, & Guerra, 2007), personality traits (Mandel & Marcus, 1988) etc.

The Achievement Motivation Profile (AMP; Friedland, Mandel, & Marcus, 1996) is a standardized assessment scale that is used to examine achievement motivation. It assumes that achievement motivation is influenced by many different variables like internal resources, work habits, and personality traits (Ligon, 2006). Literature talks about factors like job itself, compensation etc. as factors affecting achievement motivation. Lawler (1969)

* Associate Professor, G. H. Patel Postgraduate Institute of Business Management, Sardar Patel University, Vallabh Vidyanagar

argued that job design has an important role to play in employee's behaviour.

Research methodology:

The study had following objectives:

- To understand the job related factors affecting achievement motivation.

- To understand the impact of demographic factors on job related factors of achievement motivation.
- To develop and test the model of job related factors of achievement motivation

Table 1: Description of sample

Item	Description
Sample size	574
Target	Employees
Tool for data collection	Structured questionnaire
Cities	Ahmedabad, Vadodara, Rajkot and Surat
Sectors	Information Technology, Hospitality and Telecom

The sample was distributed as under:

Table 2: Age of respondents

Age (years)	Frequency	Percent
25-30	181	31.5
31-35	242	42.2
36-40	97	16.9
More than 40	54	9.4
Total	574	100

Age of respondents: 31.5 percent of the respondents were between the age of 25-30 years, 42.2 percent between 31-35, 16.9 percent between 36-40 while 9.4 percent were more than 40 years of age.

Table 3: Educational Qualifications

Qualification	Frequency	Percent
Under-Graduate	33	5.7
Graduate	181	31.5
Post-Graduate	359	62.5
Ph.D.	1	.2
Total	574	100.0

Education Qualification: The respondents were spread between Under-graduate and Ph.D. degrees. 5.7 percent of the respondents held under graduate degrees (less than Bachelors), 31.5 percent of the respondents were graduates (Bachelors) while 62.5 percent were post graduates (Masters).

Table 4: Industry Experience

Experience (years)	Frequency	Percent
Less than one year	3	.5
1-3	155	27.0
4-6	210	36.6
7-9	88	15.3
More than 9	118	20.6
Total	574	100.0

Industry Experience: Respondents also varied with respect to the experience in the industry from less than one year to more than nine years. Majority of them had experience between 4-6 years.

Table 5: Current Industry

	Frequency	Percent
Information Technology	209	36.4
Hospitality	170	29.6
Telecom	195	34.0
Total	574	100.0

Current Industry: For the study respondents working in information technology, hospitality and telecom sectors were targeted. The sample was distributed among industries as Information Technology (36.4%), Hospitality (29.6%) while Telecom (34%).

The above distribution shows that the sample was well distributed and homogenous.

Achievement motivation is affected by factors like personal, organizational, job related etc.. Factors namely job related factors; accepting responsibility and learning on the job were identified as significant from the literature.

Job Related Behavior: Factors

The dimension job related behavior of achievement

motivation is represented by job related factors, accepting responsibility, and learning on the job. The descriptive statistics of job related factors is given below.

Table 6: Job related factors

Factors	Mean	Std. Deviation
Meaningful, interesting work	4.27	.992
Job status	4.27	.791
Company image	4.16	.904
Benefits, vacations, sick leave, pensions, insurance, etc.	4.10	.959
Recognition for doing a good job	4.10	.968
Job security; permanent job	4.06	1.041
Convenient hours of work	4.05	1.009
Supervisor, a fair and considerate boss	3.73	1.082

The table above shows the descriptive statistics of job related factors affecting achievement motivation. The statements "Meaningful, interesting work" and 'Job status' were given highest agreement.

Inference: The above results show that for employees today, apart from other factors the 'work itself' is a great source of achievement followed by the job status. This can be correlated with the type of industry. The respondents were from hospitality, telecom and information technology, all of which were growing sectors. Moreover, these sectors employed comparatively

younger and qualified employees. Younger generation today is clear about the type of work they want to do and the focus of their career. Therefore, meaningful and interesting work, and job status may be motivating them the most. Although many theories of motivation mention 'fair supervision' as one of the important factors of motivation this factor was ranked lowest. Technological advancement, enhanced educational profile of employees and the need for independent working by the employee would have affected the ranking of this factor.

Accepting Responsibility

Table 7: Accepting Responsibility

Accepting Responsibility	Mean	Std. Deviation
I always accept responsibilities given to me to perform job.	4.31	.862
I am not afraid of accepting any kind of work given to me.	4.13	1.042

The statement "I always accept responsibilities given to me to perform job" was given higher agreement.

Inference: Both the statements received almost same

mean. This means that the respondents were ready to take responsibility given to them and also experiment with new things.

Learning on the job

Table 8: Learning on the Job

Learning on the job	Mean	Std. Deviation
Work conditions; comfortable and cleanliness are important for job performance.	4.13	.946
I hope to gain a broader and deeper knowledge of the job	4.09	.871
Job interest; to do work which is interesting to you	4.02	.890

Inference

The statement "work conditions; comfortable and cleanliness are important for job performance" was given the highest agreement. It may mean that respondents gave more importance to working conditions. Conducive working conditions are one of the prerequisites for

learning. In organizations with more politics employees do not take risk and are averse to learning.

Job Related Behaviour: Test of Normality

Before conducting any parametric test, it would be appropriate to test the assumptions of parametric test. One of the major assumptions of parametric test is that

the test variables are normally distributed. Hence normality testing was performed. The result is shown below.

The summated scale of dimensions of 'Job related behaviour' is tested for normality. The result is shown below.

Hypothesis

H_0 : The Distribution is normally distributed.

Table 9: Job related behaviour: Test of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Job Factors	.114	574	.000	.971	574	.000
Accepting Responsibility	.134	574	.000	.972	574	.000
Learning On the Job	.130	574	.000	.951	574	.000
a. Lilliefors Significance Correction						

Table above shows the result of tests of normality. Both the tests were having significance two tailed value less than 0.05. Hence H_0 was rejected at 5 percent level of significance. All five factors are not found normally distributed at 5 per cent level of significance. Hence it was decided to perform non-parametric test on these dimension.

Kruskal- Wallis Test: The significance difference in level of agreement between age group and job related behaviour

H_0 : There is no significance difference in the mean rank of job related behaviour between different ages of respondents.

Table 10: The significance difference in level of agreement between age group and job related behaviour

	Age (years)	N	Mean Rank	Chi-Square	df	Asymp. Sig.
Job Factors	25-30	181	284.70	24.205	5	.000
	31-35	242	280.55			
	36-40	97	280.73			
	41 - 45	44	309.86			
	46 – 50	2	143.00			
	Above 50	8	556.50			
	Total	574				
Accepting Responsibility	25-30	181	247.97	37.723	5	.000
	31-35	242	310.74			
	36-40	97	317.10			
	41 - 45	44	224.07			
	46 – 50	2	242.75			
	Above 50	8	480.00			
	Total	574				
Learning on the Job	25-30	181	262.99	12.507	5	.028
	31-35	242	287.95			
	36-40	97	328.43			
	41 - 45	44	309.93			
	46 – 50	2	240.75			
	Above 50	8	220.50			
	Total	574				

The above table shows that when it comes to 'job factors' and 'accepting responsibility' respondents above 50 years of age gave highest mean rank. However when it came to 'learning on the job' they rated this factor as lowest. It can be inferred from the above table that such employees had more responsibility and were affected by the factors

of job like recognition, interesting work, leaves etc. One the other hand they were averse to new learning which may be due to the lack of willingness to take challenges and the age factor.

It can be observed that for all three dimensions the significance two tailed p value is less than 0.05. Hence

Ho can be rejected at 5 percent level of significance. Hence it can be concluded that there is a significance

difference in the mean rank of all three dimensions between the ages of respondents.

Table 11: The significance difference in level of agreement between educational qualifications and job related behaviour

	Educational qualification	N	Mean Rank
Job Factors	Under-Graduate	33	444.15
	Graduate	181	232.68
	Post-Graduate	359	301.52
	Ph.d.	1	9.50
	Total	574	
Accepting Responsibility	Under-Graduate	33	251.12
	Graduate	181	251.55
	Post-Graduate	359	309.71
	Ph.d.	1	21.50
	Total	574	
Learning on the job	Under-Graduate	33	397.58
	Graduate	181	247.65
	Post-Graduate	359	298.07
	Ph.d.	1	73.00
	Total	574	

Respondents in the under graduate category gave highest mean rank to job factors and learning on the job. They were more concerned with factors of job like security, leaves, convenient hours of work, supervisor, a fair and

considerate boss etc. and hence their quest for learning is also high. However, they were averse to accepting responsibility may be due to their nature of job which may be of lower level.

Table 12: The significance difference in level of agreement between education level and job related behaviour

Chi-Square	Job Factors	Accepting Responsibility	Learning on the job
df	55.052	20.309	28.984
Asymp. Sig.	3	3	3
Chi-Square	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Education

It can be observed that for all three dimensions the significance two tailed p value is less than 0.05. Hence Ho was rejected at 5 percent level of significance. Hence it can be concluded that there is a significance difference in the mean rank of all three dimensions between different levels of education qualifications of respondents.

Kruskal- Wallis Test: The significance difference in level of agreement between total work experience and job related behaviour

H₀: There is no significance difference in the mean rank of job related behaviour between different categories of total work experience of respondents.

Table 13: The significance difference in level of agreement between total work experience and job related behaviour

	Total Work Experience (In years)	N	Mean Rank	Chi-Square	df	Asym p. Sig.
Job Factors	< 1	22	227.95	9.252	3	.026
	1-5	184	267.31			
	5-10	251	294.92			
	>10	117	314.53			
	Total					
Accepting Responsibility	< 1	22	210.52	17.776	3	.000
	1-5	184	263.66			
	5-10	251	291.46			
	>10	117	330.97			
	Total					
Learning on the Job	< 1	22	189.00	9.309	3	.025
	1-5	184	292.15			
	5-10	251	285.29			
	>10	117	303.44			
	Total					

When the level of agreement between total work experience and job related behaviour was checked, it was seen that in all the parameters respondents with more than 10 years of experience ranked them high. It can be inferred here that employees at this stage are generally in the middle level of management. Therefore they needed to accept greater responsibility of execution of the orders.

It was be observed that for all three dimensions the significance two tailed p value is less than 0.05. Hence H_0 was rejected at 5 percent level of significance. It was

concluded that there is a significance difference in the mean rank of all three dimensions between different categories of total work experience of respondents.

Kruskal- Wallis Test: The significance difference in level of agreement between industry type and job related behaviour

H_0 : There is no significance difference in the mean rank of job related behaviour between different types of industry of respondents.

Table 14: The significance difference in level of agreement between industry type and job related behaviour: Ranks

	Current Industry	N	Mean Rank	Chi-Square	df	Asymp. Sig.
Job Factors	IT	209	217.81	85.348	2	.000
	Hos	170	375.36			
	Tel)	195	285.60			
	Total	574				
Accepting Responsibility	IT	209	274.98	17.445	2	.000
	Hos	170	330.12			
	Tel	195	263.76			
	Total	574				
Learning on the Job	IT	209	254.11	39.257	2	.000
	Hos	170	352.88			
	Tel	195	266.29			
	Total	574				

In all the parameters the mean score of respondents working in hospitality industry was high. Employees in hospitality industry needed to be in constant touch with their customers and the issues/problems needed to be

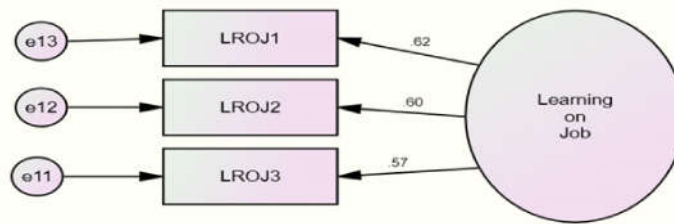
solved at the earliest. Therefore accepting responsibility and learning on the job had to be faster.

It can be observed that for all three dimensions the significance two tailed p value is less than 0.05. Hence

Ho can be rejected at 5 percent level of significance. Hence it can be concluded that there is a significance

difference in the mean rank of all three dimensions between different types of industry of respondents.

Figure 1: Factors affecting job related behaviour

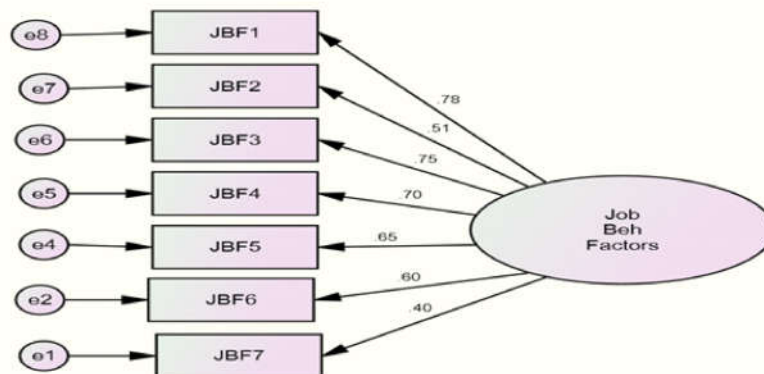


In this construct, majority of path estimates were found nearer to 0.70, hence model modification was not carried out and it was decided to retain all the items.

The convergent validity of the construct was tested using Variance Extracted (VE), Path estimates and Reliability test. The entire path estimates more than 0.5 shows sufficient convergent validity. All the path estimates for construct is more than 0.5. The VE for the construct is

0.35 (the value of VE nearer 0.5 or more can be accepted). Similarly the reliability of the construct was measured in the form of construct reliability (CR). The CR for this construct was 0.71 and which was well above the acceptable range (acceptable range for CR is 0.7). Considering all the measures, the constructs shows significant convergent validity. The final measurement model for the construct is shown in figure below.

Figure 2: Job Related Behaviour Factor



In this construct, the three items were submitted to a measurement model analysis to check validity and Reliability. Majority of path estimates were found nearer to 0.70, hence model modification was not carried out and it was decided to retain all the items. The convergent validity of the construct was tested using Variance Extracted (VE), Path estimates and Reliability test. The entire path estimates more than 0.5 shows sufficient convergent validity. The entire path estimates for construct was more than 0.5. The VE for the construct was 0.40 (the value of VE nearer 0.5 or more can be accepted). Similarly the reliability of the construct was

measured in the form of construct reliability (CR). The CR for this construct was 0.92 and was well above the acceptable range (acceptable range for CR is 0.7). Considering all the measures, the constructs showed significant convergent validity. The final measurement model for the construct is shown in figure above.

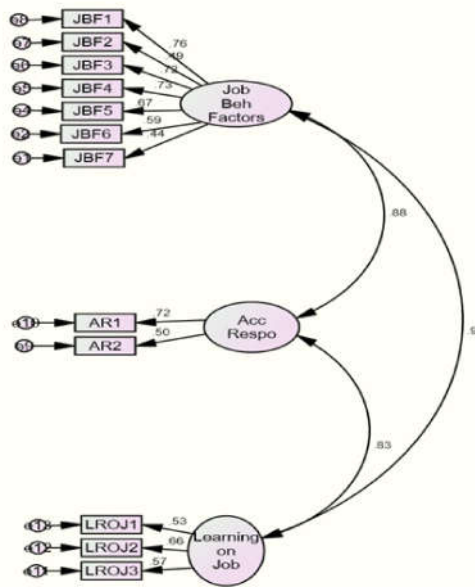
Confirmatory Factor Analysis: Job Related Behavior

The Model under Study:

- The model of the Performance Measurement Factors has 3 factors, as indicated by the ellipses.

- There are 11 observed variables, as indicated by the 11 rectangles.
- The observed variables load on the factors in the given pattern:
- Each observed variable loads on one and only one factor.
- Errors of measurement associated with each observed variable are also shown in the figure.

Figure 3: Estimated Model



Model Fit Summary

Table 15: Absolute Fit Measures

Absolute Fit Measures		
Test	Recommended Value	Model Under Study
χ^2	$p > 0.05$	$p = 0.000$
CMIN/DF	< 5	3.21
RMSEA	< 0.10	0.08

Table 16: Relative Fit Measures

Relative Fit Measures		
Test	Recommended Value	Model Under Study
CFI	> 0.90	0.92
NFI	> 0.90	0.91
RFI	> 0.90	0.90
IFI	> 0.90	0.90

Table 17: Parsimonious fit measures

Parsimonious Fit Measures		
Test	Recommended Value	Model Under Study
PCFI	> 0.50	0.72
PNFI	> 0.50	0.71

On the basis of all three types' of-fit results, it can be concluded that the hypothesized model fits the sample data extremely well.

Findings and Conclusions: This paper tried to understand the job related factors that influence achievement motivation. It concludes that perception of respondents differed between age, educational qualifications, level in the organization, experience and the type of industry they worked for.

Respondents above 50 years of age ranked the 'job related factors' high while they gave lowest rank to 'learning on the job'. It can be concluded that such employees had more responsibility and were more affected by the factors of job like recognition, interesting work, leaves etc. Respondents in the under graduate category gave highest mean rank to job factors and learning on the job.

For the employees having more than 10 years of work experience 'job factors' and 'accepting responsibility' was more important. It can be inferred here that such employees handled more number of activities and had larger responsibility.

The findings suggest that for employees today, apart from any other factor the 'work itself' is a great source of achievement followed by the job status. The respondents were from growing sectors which employed comparatively younger and qualified employees. Younger generation is clear about the type of work they want to do and their career. Therefore, 'meaningful and interesting work' and 'job status' may be motivating.

In all the parameters the mean score of respondents working in hospitality industry was high. Due to the nature of the industry employees in hospitality industry needed to be in constant touch with their customers. The preferences and demands of the customers in this industry are also changing dynamically. Therefore accepting responsibility and learning on the job had to be faster.

Managerial implications

The respondents in this study were from growing sectors. These sectors employed younger and qualified employees. Therefore, meaningful and interesting work and job status may be motivating them. If organizations are able to create or identify such jobs which these employees feel interesting and meaningful the employees would be motivated.

Respondents were ready to take responsibility and do any kind of job given to them. Organizations can look for creating a culture which promotes inter departmental coordination, allows innovations and forgive mistakes while doing something new.

Respondents gave high ranking to 'conducive working conditions' for learning on the job. This shows that employees were ready to learn. Managers can understand the profile of their employees and try to design training programmes which foster maximum learning in minimum time.

Employees above 50 years of age ranked factors like recognition, interesting work, leaves high and low to 'learning on the job'. Organizations should for designing programmes which recognize long term service, provide easy leaves, flexible working hours etc. The low score given to 'learning on the job' has to be looked seriously. Since majority of the employees above 50 would be involved in strategy formulation it is necessary that they keep learning. Organizations can create climate or provide incentives for new learnings.

The job related factors differed according to the industry. Hospitality industry is quite dynamic and is more likely to be affected by external factors like economy, preferences of customers, etc. It is important for the managers in hospitality industry to consider all the job factors while making policies.

Scale: Job Related Behavior

No.	Particular	1 (Strongly agree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)
	Factors					
1	Recognition for doing a good job –JBF1					
2	Job security; permanent job –JBF2					
3	Job status –JBF3					
4	Meaningful, interesting work –JBF4					
5	Bene?ts, vacations, sick leave, pensions, insurance, etc. –JBF5					
6	Convenient hours of work –JBF6					
7	Company image –JBF7					
8	Supervisor, a fair and considerate boss –JBF8					
	Accepting responsibility					
9	I always accept responsibilities given to me to perform job. –AR1					
10	I am not afraid of accepting any kind of work given to me. –AR2					
	Learning on the job					
11	I hope to gain a broader and deeper knowledge of the job –LROJ1					
12	Job interest; to do work which is interesting to you – LROJ2					
13	Work conditions; comfortable and cleanliness are important for job performance. –LROJ3					

References

- Chakraborty Subhayan (2016); India's Services Sector grew 10% a year in 2015-16: CII Report;
http://www.business-standard.com/article/economy-policy/india-s-services-sector-grew-10-a-year-in-2015-16-cii-report-116042001082_1.html
 (Accessed on 17.2.2017).
- Deci, E. L. (1975). Intrinsic motivation. New York, NY, US.
- Deci, E., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Springer Science & Business Media.
- Golembiewski, R. T. (1973). Motivation. In Carl Heyel (Ed.), the Encyclopedia of Management 2nd. New York: Van Nostrand Reinhold.
- Igalens, J., and Roussel, P. (1999). A study of the Relationships between Compensation Package, Work Motivation and Job Satisfaction. Journal of Organizational Behaviour, 20 (7), 1003-1025.
- Lawler, E. E. (2003). Treat people right!: How organizations and individuals can propel each other into a virtuous spiral of success. San Francisco, CA: Jossey-Bass.
- Ligon, N. Y. (2006). Assessing the achievement motivation across grades and gender. Dissertation Abstracts International Section A: Humanities and Social Sciences, 67(6-A), p.2052.
- Mandel, H. P., & Marcus, S. I. (1988). The psychology of underachievement: Differential diagnosis and differential treatment (Vol. 127). John Wiley & Sons.
- Mandel, H. P., Friedland, J. G., & Marcus, S. I. (1996). Achievement Motivation Profile. Los Angeles: Western Psychological Services, Journal of Psychoeducational Assessment, Vol 17, Issue 1, pp. 90 - 94.
- Mcgarvey, R. (1997). Inspiration points: unmotivated employees could cost you your business. Entrepreneur Magazine.
- Mullins LJ (2005). Management and Organizational Behavior. Prentice hall. UK 7th Ed. 88(431):1052-1058.
- Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. Journal of Advanced Academics, 18(3), 454-476.
- Woolfolk, A. E. (1998). Educational Psychology. Needham Heights, MA: Allyn & Bacon

A Study of Customers' Perception toward Apparels in Online Shopping

Frince Thomas Chemmanoor*

Abstract

Purpose: To study on-line shopping experience from customers.

Design/methodology/approach: The paper is constructed on the basis of descriptive research. A sample size was 90 respondents who filled the questionnaire. The sampling approach used was convenience sampling.

Findings: The study found that customers are attracted by discounts, good offers & low priced products. Customers preferred CoD (cash on delivery) because they faced difficulties in on-line payment. As a result, some effective measures need to take for improving payment related issues. Customers should be given with some additional discount for making immediate on-line payment.

Research Limitation and Implication: The present study is restricted to population of Gujarat. The study is limited to few shopping websites.

Originality and Value: A study is of primary and secondary approach. This study is confined only to online users. This study is conducted to analyse the current trends of online shopping in apparel segment. Further, it investigates experiences and preferences of the respondents in online shopping

Keywords/Paper type: Online shopping, Apparels and Customer Perception

Type of Paper: Research paper

Introduction

Online fashion is emerging as the fastest growing category in India's booming e-commerce market, backed by strong technology as well as marketing dexterity. It is growing at such a fast rate that experts believe by 2020, India is expected to generate \$100 billion online retail revenue out of which \$35 billion will come from fashion e-commerce. In other words, online apparel sales are set to grow four times in the next 5 years to contribute significantly to the burgeoning e-commerce growth.

Experts believe, while apparel has always been one of the most popular segments in retail, there was much scepticism about the growth of online clothing, as Indian shopaholics who love the touch, feel and fits of their favourite piece of garment, may dissuade from buying. However, miraculously Indian Online apparel sites have managed to break this barrier.

By 2018, India is set to witness 500 million internet users whereas 280 million Smartphone users could be the key drivers for e-commerce portals, as a recent Forester Consumer Research observes that there will be 26-30 percent increase in apparel, footwear, baby-care and skincare products in the coming months.

A survey conducted by Baggout also revealed that clothes and footwear are the two most popular categories in Fashion and apparel is one of the three most sold online product category today.

Digital marketing is yet another area these fashion sites are investing in to lure customers. From retailing giant Amazon to domestic players such as Snapdeal, Jabong and Myntra, every player in this category is spending generously on print and social media and other forms of digital marketing as part of their sales strategies.

Needless to say, with better brands, deals and discounts, price category and return policy, the future looks bright for online clothing, especially, the rise in Indian women shoppers coupled by the huge demand for trendy clothes will continue to fuel this segment.

- Online shopping is commonly known as internet shopping or e-shopping. Online shopping is done when the consumers purchase products on-line. Through online shopping, consumers shop for required products without physically visiting the store. Nowadays, the consumers have become more shopping conscious and surf the internet on a daily basis and buy products even across the globe. Development in technology and an increase in the

* Assistant Professor, Center for Management Studies, Dharmsinh Desai University, Nadiad

usage of internet in recent times have led to a drastic, increase in the practice of online shopping. The greater the accessibility of internet to the general population, higher is the number of people shopping online.

- At present, online shopping is becoming a well-accepted way to purchase a wide range of products and services. Internet shopping is becoming extremely popular because online shoppers have an option of shopping at any time of the day sitting at their home or offices. Consumers buy products from various apparel websites and depict a specific kind of behaviour which is related to various demographic factors, such as, age, gender, income group, marital status, occupation, etc. It is believed that shopping online is superior and more intelligent way of spending money. It offers a huge collection of products and allows consumers to get the products as per their needs. Shopping online offers lower prices as compared to the traditional shopping method. Shopping websites provide various kinds of discounts on the original price of the product. It offers gift coupons, vouchers and promotional offers which attracts the consumer to buy products in discounted price.
- There are many benefits of online shopping websites which includes; description of the products, information related to sizes and colour of the garments, price of the products and various other details like customer reviews and ratings. The greatest feature of online shopping is that the websites are open 24 hours a day and consumers are free to shop at their convenience. Most of the items available for online shopping are on huge discount and low prices along with free shipping on the maximum range of products. The online shopping websites and number of consumers shopping online have increased exponentially in the past few years. It is important to study consumers' behaviour towards online shopping as it clearly reflects their intentions. It helps in developing better marketing strategies to convert off-line buyers into online shoppers. It gives an idea about the kind of products that a consumer is interested in buying and the circumstances under which they prefer buying online.

General Factors that influence online shopping behaviour:

Though there are several factors that influence consumers to shop online, some of these factors have been discussed below:

- **Convenience:** Online shopping is very convenient when compared to offline shopping. Instead of going out to a physical store away from the house and looking for the Introduction required products, online shopping can be done just sitting at home. There are a variety of products available for a particular category and the products can be compared from different brands before making the final buying decision. There is a convenience in terms of the payment methods as a variety of payment options are available including cash on delivery, net banking and online wallets etc. During festive seasons the stores are heavily crowded which makes it very difficult to make the right choice. The consumers can instead look for the products online without any hassle.
- **Previous online experience:** Previous online shopping experiences play a major role in the consumer behaviour towards online shopping. Both good and bad experiences of shopping have an effect on consumers' behaviour.
- **Pricing policy:** Online retailers have an advantage of not having to pay for store bills, electricity and other physical resources which gives them an advantage to place their products at a lower price than physical stores. Consumers generally prefer lower prices for products with good quality and are satisfied spending lesser amount for buying any product. Hence, purchasing and sales of a product are equally affected by the price of product. The consumers are attracted towards online shopping due to lower prices offered by online stores as compared to offline stores.
- **Online trust:** Trust on an online website related to its products and services generally depends on consumers' perception which therefore is directly related to frequency in shopping online. More the trust a consumer has on website better is the frequency of Introduction shopping from that website. Consumer's trust on a website is amplified when the delivered product is the same or is better than as displayed on the website and vice versa.

- **Variety:** The variety of products that a website offer to the consumers while online shopping is hard to match by offline stores. Offline shoppers usually have to visit different stores for searching the products whereas online shopping provides a wide variety on a single website.
- **Discreet shopping:** Shopping online is discreet and the products delivered are well packed to avoid uncomfortable scenarios. Female consumers do not feel comfortable while purchasing some products like lingerie from offline stores. Thus, online shopping gives an option to purchase their items without feeling embarrassed or uncomfortable.
- **Special offers:** There are various discount coupons, special offers, coupon codes, free shipping and gift cards provided by online websites from time to time which can help reduce the original cart value of the products. These offers and deals encourage the consumers to get a better deal and influences the consumer behaviour as the consumers are drawn to shop more on lower prices.
- **Website design/Features:** The way a website is displayed affects the behaviour of consumer majorly as the first impression of an online website is related to how the website looks. The theme of the website including layout and options available for navigation are included in website design. The easier it is to locate information related to a product; more are chances that the consumers will buy from that website. Shergill & Chen (2005) stated that "Website design, website reliability/fulfilment, website customer service and website security/privacy are the most attractive features that influence the perception of the consumer of online buying".
- **Payment options:** Various types of payment options are available for the consumers like cash on delivery, net banking, online wallets, payment via easy equated monthly instalment (EMI), credit cards and debit cards etc. Some of these features are not available with online stores, which give the customer another advantage to get attracted towards online shopping.
- **Wish list:** Online shopping websites provide the consumers with an option of wish list in which the consumers can save the products they like for later. Using this feature the consumer does not have to look for the products they like again and again and can easily navigate to the saved products with a single click.
- **Send gifts:** Online shopping offers the alternative of getting the product delivered at any place or delivery address and gives the option to gift wrap the product at a very less additional cost. The consumers can get the product gift wrapped and delivered at a special occasion to a specific address without any hassle. Also, changing the delivery address for a particular order does not have any additional cost attached to it.
- **Comparison of prices:** It is relatively easier for the consumers to compare the prices from different brands and websites before making the final buying decision. The consumers do not have to visit different physical stores to check the range of products available rather they can view the product and its features on the same website. They also have an option to compare prices for the same product on different websites and can buy the product they desire at a better price.

Literature review

According to Lee, Jung, Park and Kun (2005), explores the dynamics of online service personalization in the online apparel retailing context, with regard to customers' actual online shopping activities, this study empirically present the dynamics of online service personalization in the context of online apparel retailing. Also, the results show that customer online shopping experiences may impact on their online service personalization attitudes. Jones, Christie and Kim (2009) stated that the study examines the influence of retail brand trust, off-line patronage, clothing involvement, and website quality on online apparel shopping intention for young female US consumers. Retail brand trust, off-line patronage, clothing involvement and two factors of website quality were found to significantly influence online apparel shopping intention. According to Agrawal, Sandhir, Gupta, and Gaurav (2010) underline that online shopping is most common these days in the developed world especially in the USA. Though rapidly rising, online shopping in the developing countries particularly in India is yet to become strong and diversified. The theme hasn't been researched strongly either. Authors claimed that men and women differ in fashion conscious shopping but, they do not differ in the impulsive, quality, brand or price aspects related to online shopping

(Workman and Cho, 2012). Openness to online shopping was noticed among students with more positive attributes by Xu and Paulins (2005). According to Goldsmith and Fynn (2004) that adventurous buyer and regular catalogue buyers were more inclined towards online apparel purchase. Brand familiarity and previous experience with online shopping was found to be an important factor for clothing purchase done online. The author states that the perceived attributes of online shopping consisted of four factors: transaction/cost, incentive, site design and interactivity influenced shopping behavior greatly. Existing studies point out that there are several factors influencing the online purchase intention like trust, risk, and internet experience, shopping orientation, online shopping experience, shopping motivation, cultural values and social influence (Kim, 2004). According to Sarkar (2011), a successful online marketing must focus on increasing the hedonic value of the sites and offer stricter security to the individuals using their card for payment. Customer purchase intentions increased with web design, reliability/security, responsiveness and overall service quality of the online portals. Shoppers feel greater risk for buying apparel products online due to inability to fully examine the product online and the substantial variation in the characteristics of apparel delivered.

Study Objective:

To study On-line shopping experience from Customers.

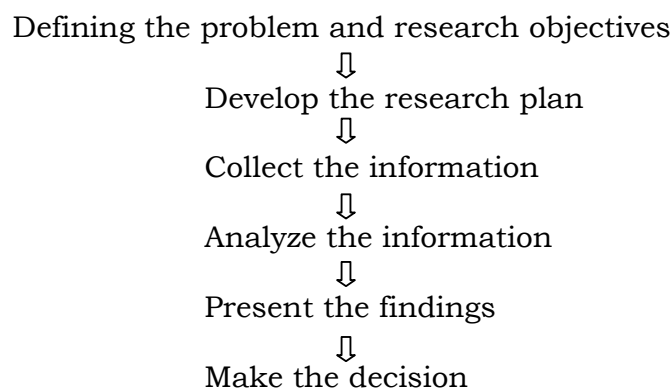
Methodology:

Marketing Research is the process of collecting and analyzing and ultimately arrives at certain conclusion. Research comprises of defining and redefining problems, formulating hypothesis, or suggesting solutions, collecting, organizing, and evaluating data, making deductions and reaching conclusions.

The main aim of the research is to find out the truth which is hidden and which has not been discovered as yet. Market analysis has become an integral tool of business policies these days. Research, thus replaces intuitive business decisions by more logical and scientific decisions.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it I study various steps that are adopted by a researcher in studying research problem along with the logic behind them. The researcher should not only know how to develop certain indices or tests, how to calculate chi-square etc.

Research Process:



Research Design:

In fact, a major difference between exploratory and descriptive research is that descriptive research is characterized by the prior formulation of specific hypotheses. The paper is constructed on the basis of Descriptive research. Thus, the information needed is clearly defined. As a result, descriptive research is preplanned and structured. It is typically based on large representative samples. A formal research design specifies the methods for selecting the sources of information and for collecting data from those sources. A descriptive design requires a clear specification of the who, what, when, where, why and way (the six Ws) of the research.

Sample size:

A sample size was of 90 respondents.

Sampling approach:

The sampling approach used was convenience sampling. The questionnaire was constructed and filled through on-line and off-line. According to Patton (2003), "Strategically select as case that is pertinent to the object of the study and that will allow the subject to be investigated fully". Sampling strategies like information rich, convenience and criterion are usually applied in the selection of case.

Data collection:

The data has collected in the form of Primary Source (structured Questionnaire) and from Secondary Sources. Secondary sources via through different websites, newspapers, magazines, journals.

Scope of the Study:

This study is confined only to online users. This study has been conducted to analyze the current trends of online shopping in apparel segment. Further, it investigates

experiences and preferences of the respondents in online shopping.

Relationship between dependent variable and Independent variables:

➤ **Dependent Variable:**

- ✓ Online Shopping Behaviour of Customers

➤ **Independent Variables:**

- ✓ Price
- ✓ Brand
- ✓ Offer/Discount
- ✓ Colour/Style
- ✓ Delivery
- ✓ Return Policy
- ✓ Payment Procedure
- ✓ Trust

Analysis and Findings:

- ✓ 90% of the respondents rated that Price is very important parameter in on-line shopping.
- ✓ 70% of the respondents rated the Delivery is very important parameter in on-line shopping.
- ✓ 80% of the respondents rated the Return policy is very important parameter in on-line shopping.
- ✓ 90% of the respondents rated the Payment procedure is very important parameter in on-line shopping.
- ✓ 100% of the respondents rated the Trust is very important parameter in on-line shopping.
- ✓ 50% of the respondents rated the Discount/Offer is very important parameter in on-line shopping.
- ✓ 80% of the respondents rated the Style/Color is very important parameter in on-line shopping especially for Clothes.
- ✓ 40% of the respondents rated the Brand is very important parameter in on-line shopping.

Conclusions:

- From the secondary data and in-depth study reveals that there is good scope of selling apparels through online mode provided it comes with better services like return policy.
- The study found that customers are attracted by discounts, good offers and low priced products.

- Customers preferred CoD (cash on delivery) because they have faced difficulties in on-line payment. As a result, some effective measures need to take for improving payment related issues. Customers should give with some additional discount for making immediate on-line payment.

Limitations of the study:

Following are some limitation of the study:

1. The present study is restricted to population of Gujarat.
2. The study is limited to few shopping websites.

References

- Lee, E. J., & Park, J. K. (2009). Online service personalization for apparel shopping. *Journal of Retailing and Consumer Services*, 16(2), 83-91.
- Jones, C., & Kim, S. (2010). Influences of retail brand trust, off?line patronage, clothing involvement and website quality on online apparel shopping intention. *International Journal of Consumer Studies*, 34(6), 627-637.
- Agrawal, Sandhir M, Gupta V and Gaurav (2017). "Emerging Profile of Online Apparel Shoppers in India", *Journal of IJRCM*, 7(04).
- Workman, J. E., & Cho, S. (2012). Gender, fashion consumer groups, and shopping orientation. *Family and Consumer Sciences Research Journal*, 40(3), 267-283.
- Young Kim, E., & Kim, Y. K. (2004). Predicting online purchase intentions for clothing products. *European journal of Marketing*, 38(7), 883-897.
- Ling Z. Md. J. G. H (2012) "Factors influencing consumer's attitudes towards e-commerce purchase through online shopping", *International Journal of Humanities and Social Science*, 2 (4): 223.
- Goldsmith, R. E., & Goldsmith, E. B. (2002). Buying apparel over the Internet. *Journal of Product & Brand Management*, 11(2), 89-102.
- Goldsmith, R. E., & Flynn, L. R. (2004). Psychological and behavioral drivers of online clothing purchase. *Journal of Fashion Marketing and Management: An International Journal*, 8(1), 84-95.
- Cowart, K. O., & Goldsmith, R. E. (2007). The influence of consumer decision?making styles on online apparel consumption by college students.

- International Journal of Consumer Studies, 31(6), 639-647.
- C R Kothari (1996) "Research Methodology", New Delhi, WishawaPrakaashan
 - Sarkar, A. (2011). Impact of utilitarian and hedonic shopping values on individual's perceived benefits and risks in online shopping. International management review, 7(1), 58-65.
 - Aaker, D.A. (1996), Building Strong Brands, Free Press, New York.
 - Biplab S Bose (1998) Handbook of Marketing Management, Himalaya publishing House
 - Carl, W. J. (2006). What's all the buzz about? Everyday communication and the relational basis of word-of-mouth and buzz marketing practices. Management Communication Quarterly, 19(4), 601-634.
 - David J Luck and Ronald S Rubin (1997) Marketing Research, Prentice-Hall of India Private Limited, New Delhi.
 - Monippally MM and Pawar BS (2010) Academic Writing, New Delhi, Sage Publication
 - Naresh K Malhotra (2004) Marketing Research An Applied Orientation, New Delhi Pearson Education.
 - Philip Kotler (2005) Marketing Management, New Delhi, Pearson Education.
 - Porter, M. E., & Strategy, C. (1980). Techniques for analyzing industries and competitors. Competitive Strategy. New York: Free.
 - RajendraNargundkar and Tapan K Panda (2005) Marketing strategies for emerging markets, Excel books.
 - Scherf, K. (2006). Digital lifestyles: 2006 outlook. Dallas, Texas: Parks Associates.
 - Schiffman, L. G., & Kanuk, L. L. (2000). Consumer behavior, 7th. NY: Prentice Hall, 15-36.
 - Sekaran U (2010) Research Methods for Business, New Delhi, Wiley India Edition.
 - Zeithaml, V., BERRY, L., PARASURAMAN, A., PARASURAMAN, A., & BERRY, L. (1996). BITNER. MJ Services Marketing.
 - A Study on Changing Trends in Online Shopping of Indian... www.allresearchjournal.com/archives/2015/vol1issue9/PartD/1-9-4.pdf. Retrieved April 04, 2017.
 - <http://www.magscholar.com/joomla/images/docs/ajbr/ajbrv1n2/Online%20Shopper%20Behavior%20Influences.pdf>. Retrieved February 07, 2017

Brand Identity: An Important Element of Branding

Ruta Shringarpure*

Abstract

Purpose: Branding is a very important concept. Brand Identity has become an important element in the brand equity. The purpose of this research paper is that associating the product with a strong brand identity is a key factor in competitive advantage and leads to great financial rewards.

Design/ Methodology/ Approach: The research paper is totally based on literature review of secondary data from various sources such as books, journals, magazines and newspapers in addition to visiting various websites. The earlier researchers' study in the area of branding has led to the conceptualization of this research paper.

Findings: This research paper draws attention on brand, brand identity, influence and importance of brand identity in branding. Aaker's brand identity model has been chosen to form the framework of this paper because it provides tools and theories to guide the process of creating a comprehensive and versatile brand identity.

Originality/Value: The paper uses the literature of secondary data to illustrate the importance of a strong brand identity which helps the audience differentiate you from the competitors and can positively influence their purchasing decisions, directly impacting your profitability. A common buzzword heard throughout the industry today is branding. It is generally known that the decisional process regarding to choose or not to choose a brand is determined by anecdotal evidence. Having a great product without a strong identification is not enough. If a potential customer can relate to previous experience with the identity of a brand, he surely developed a brand image and is more likely to prefer that specific brand.

Key Words: Brand, Brand Identity, Branding and Brand Equity.

Paper Type: Literature Review

1. Introduction

The American Marketing Association defines a brand as follows: "A brand is a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors." In essence, a brand identifies a seller or maker. A brand is essentially a seller's promise to deliver a specific set of features, benefits and services consistently to the buyers. The best convey the warranty of quality. But a brand is even more complex symbol. It can convey up to six levels of meaning such as attributes, benefits, values, culture, personality and user. A strong brand should have a rich, clear brand identity—a set of association the brand's strategist seeks to create or maintain. A brand identity is aspirational and may imply that the image needs to be changed or augmented." (Aaker, 2000).

2. Review of Literature

Dissanayake and Amarasuriya (2015) studied that Brand Identity plays a very important role in developing brands. The authors studied that Apple I-phone and Samsung

Smart phones have created global brands as an identity in the market. Brand Identity can be also created through its unique design, features. Apple has created its own self image. Moreover, smart phones are doing the role of computers. There is a need to create branding strategies regarding the products. Strong and favorite unique brand associations have to be created in the market. Galaxy in Samsung phone has created a unique edge. It has raised its value through brand personality.

Shabir (2014) had studied Brand Awareness in Rural Area: A case study of Fast Moving Goods in Pulwana District of Jammu and Kashmir State. The purpose of the study was to examine the brand awareness in rural areas and to study the interest of consumers in branded products of fast moving consumer goods (FMCG). The objective of the study was to understand the buying perception of the rural consumer towards FMCG Products. For this, the objectives of the research work were to study the perception of the rural consumer towards FMCG products. To examine the brand preference and awareness of rural consumer towards FMCG products and to study the impact of media on

* Faculty Member, The Maharaja Sayajirao University of Baroda

Brand Awareness and Preferences. The methodology of the study was based on the primary as well as secondary data. The study depended mainly on the primary data collected through a well-framed and structured questionnaire to elicit the well-considered opinions of the respondents. In all 100 respondents were considered as sample size from different age groups who were classified on the basis of literacy with the help of structured and unstructured interviews and discussions. The findings from the study were that there was an increasing trend among the people of rural areas about the awareness of various brands of the daily consumption goods. People of rural areas are becoming more conscious about their health and other aspects of life. This change in the attitude to spend more on the highly priced branded products among high income groups in rural areas clearly suggests that there is an ample scope for such products to capture the markets in these areas by increasing the supply of these products.

Das, Prakash, Khatri (2012) reviewed that brand personality can be created when brand identity has been developed. In this research paper Coca-Cola, Pepsi and Thumbs Up were taken for the study. Jennifer Brand Personality Scale was taken into consideration. Consumers look at the brand personality more. Consumers make a differentiation between brand personalities of certain brand so that the brand image can be created.

Ghodeswar (2008) reviewed the concept of brand identity in competitive markets. The author has specifically taken three products archies, boroline and daburvatika to study the brand attributes. In the hair oil market, Dabur Vatika was taken as one of the component of pure coconut hair oil. Later with the growing needs of consumer, it also introduced anti-dandruff shampoo. The paper focuses on PCDL model i.e positioning the brand, communicating the brand message, delivering the brand performance and leveraging brand equity. Boroline was one of the most famous anti-septic cream in India. The three products have created brand identity and thus brand equity.

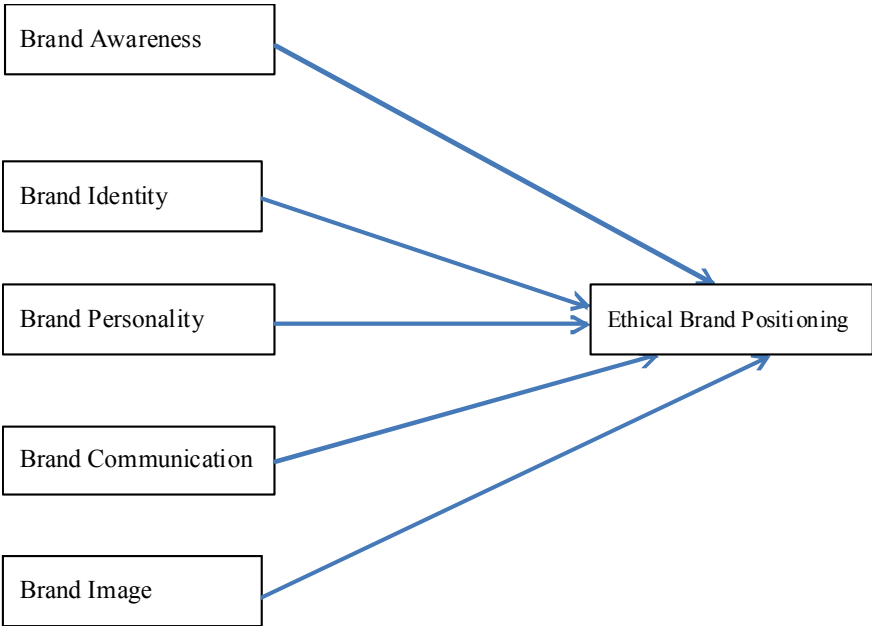
3. Objectives of the Research Study

- To understand the concept of brand.
- To know the concept of brand identity .
- To study the relationship of brand identity and brand equity .
- To understand the importance of brand identity.

4. Methodology of the Study:

The research paper is totally based on literature review of secondary data from various sources such as books, journals, magazines and newspapers in addition to visit various websites. The earlier researchers study in the area of branding has led to the conceptualization of this research paper.

5. Conceptual Framework of Brand identity



Source: Conceptual Framework of Ethical Brand Positioning Framework(Agrawal et al 2006) Society of Interdisciplinary Business Research

Brand identity is often understood only as a set of colors and shapes, but it is obvious that the term is much broader, because brand identity also makes the image of the corporation and forms an image of the regular consumer of its production. Brand identity is closely connected with advertising, because the designers advertise the brand, its logo and present a certain image of a lifestyle which is suitable for the consumer of the production made by the brand. There are many types of brand identity, and as everybody knows the process of the development of brand identity is very long. Years ago designers preferred creating detailed colorful theme identities, which reminded small pictures, but today the preferences are completely different, because everybody strives to minimalism in the design.

Brand identity is based on a thorough understanding of the firm's customers, competitors, and business environment. The brand identity needs to reflect the business strategy and the firm's willingness to invest in the programs needed for the brand to live up to its promise to customers (Aaker and Joachimsthaler, 2000). Strong brands enjoy customer loyalty, the potential to charge premium prices, and considerable brand power to support new product and service launches. Companies need to have thorough understanding of customer beliefs, behaviors, product or service attributes, and competitors.

Benefits of Brand Identity

1. Personality: A brand identity is the visual representation of the values and "personality" of your brand. Identity design essentially sets the tone of your brand, and it can be used to evoke specific feelings in your audience. Your brand identity should be designed to communicate your company's overall message and promote your business goals.

2. Consistency: Developing a brand identity allows you to create a consistent message across all marketing materials. Each piece should have the same basic styles and design elements, creating a cohesive branding package.

3. Differentiation: A brand identity helps you to differentiate your business from the competition and appropriately position your brand. Developing a professional, creative identity design can help you to stand out to potential customers in your market.

4. Awareness: Creating a brand identity package ensures that your brand is at the forefront of all your marketing

materials, which helps to increase brand awareness. The more places your brand is featured, the more contact it will make with consumers, and the more memorable it will be.

5. Loyalty: An effective brand identity can help to build customer loyalty and trust in a brand, since it allows customers to make a connection between a product and the company.

7. Conclusion

Developing a strong brand identity for your business is an extremely important factor in its success. Effective branding can help build your reputation, make you stand out from your competition and project your values to attract your ideal client. Your brand is your business identity-the image you wish to portray to the world-and is one of your company's most valuable assets. Your brand communicates your business personality and shapes your client's perceptions of who you are. Your brand should project the expectations and promises you extend to your customer's in terms of quality service, reliability and trustworthiness and create trust and loyalty from those who do business with you.

A strong brand identity helps the audience differentiate you from your competitors and can positively influence their purchasing decisions, directly impacting your profitability.

References

- Dissanayake, D. R., & Amarasuriya, T. (2015). Role of brand identity in developing global brands: A literature based review on case comparison between Apple iPhone vs Samsung smartphone brands.
- Majeed, S. (2014). Brand Awareness in Rural Area: A Case Study of Fast Moving Consumer Goods in Pulwama District of J&K State. *Age*, 50(50), 50.
- Das, J. K., Prakash, O., & Khattri, V. (2012). Brand personality mapping: A study on colas. *Asian Journal of Management Research*, 3(1), 193-200.
- Ghodeswar, B. M. (2008). Building brand identity in competitive markets: a conceptual model. *Journal of product & brand management*, 17(1), 4-12.
- Keller, K.L and Kotler, P (2006), *Marketing Management*, 12th edition, New Delhi : Prentice Hall of India Private Ltd
- Retrieved on 21st Feb 2018, <https://masterful-marketing.com/benefits-of-a-strong-brand-identity>.

- Retrieved on 21st Feb 2018, <https://blog.tbhcreative.com/2011/10/brand-identity-why-its-important.html>
- Retrieved on 21st Feb 2018, <https://usefulresearchpapers.com/research-proposal-on-brand-identity>
- Retrieved on 21st Feb 2018, <https://www.india-trade.com>

Idea to Implementation: Adoption of Solar Roof Top Plant (SRTP) Offered by Gujarat Energy Development Agency (GEDA) by Owners of Apartment Houses: A Case of "Satyam Apartment" in Surat.

Mahendrakumar Vrajlal Soni*

Abstract

Purpose: This case study aims to explore (1) how the residents of Satyam Apartment, Surat; arrived at consensus to adopt SRTP; (2) documentation necessary for SRTP installation; (3) problems faced during and after installation of SRTP and (4) performance of SRTP.

Research Methodology/Approach :

Type of research: Exploratory.

Information/data collection method: Personally contacting "Channel Partners" authorised by GEDA; personally visiting Satyam Apartment; and interviewing key decision makers [Kiritbhai Shah, the secretary and Kamalleshbhai Patel, a flat holder (Engineer)] for documents related to meetings, resolutions, electricity bills, SMC bills etc.

Findings

Continuous efforts by key-decision-makers- Secretary, President and active members - are necessary to get information of SRTP, scheme of GEDA to install SRTP, to convene the meetings to make members aware, to discuss the benefits and pass resolution for installation.

Documentation and application procedure are simple.

Major problems: Delays in installation, inspection and net metering by contractors and GEDA/DGVCL authorities; and inverter setting (occasionally).

Power generation: Daily average 3.2 to 5 (annually 1450) units per KW installed capacity

Research Limitations/Implications

Other apartments may not adopt SRTP due to lack of awareness, efforts & active support of decision makers & members.

Originality/Value

This paper sets an example how apartments (accommodating 30% of urban population) can utilise their rooftop space to generate solar power and contribute to achieve Government of India's target of 100,000 MW grid connected solar power by 2022.

Key Words: Renewable Energy Sources, Awareness, SRTP

Paper type: Case Study

INTRODUCTION

Renewable energy resources are those which can be replenished after their use or which are unlimited in their availability i.e. inexhaustible in nature within reasonably long period. e.g. Sun (solar energy), Water (hydro electric energy), Air (wind energy), Biomass (alternative fuels), Hydrogen, Inner earth layers (geothermal energy) etc.

Awareness refers to public or common knowledge or understanding about a social, scientific, or political issue.

Energy is basic input for all economic activities and sustainable development. Population growth and rising levels of industrialisation & urbanisation have created need for energy at exponential rate. However, the energy supply has not increased at the same rate, resulting in demand-supply gap.

Traditional sources of energy such as fossil fuels have three drawbacks: exhaustible nature; pollution causing adverse effects on health & environment and insufficient distribution network to all regions of nation.

* Assistant Prof. in Management, Prof. V. B. Shah Institute of Management, Amroli, Surat

Therefore, energy conservation by avoiding wastage, by improved technology and use of renewable energy sources like solar energy can offer good solutions to ease energy crisis. So, Governments of most of the world countries are involved in developing renewable energy sources. Government of India and State Governments have taken extensive steps to develop renewable energy sources including solar energy.

Grid connected photovoltaic Solar Roof Top Plant (SRTP) to produce electricity provides best synergy to produce electricity for household/institutional/industrial consumption.

Renewable Energy Benefits

Renewable energy sources offer viable option to address the energy security concerns of a country in the following ways.

- Renewable energy is almost inexhaustible and can last for many future generations.
- Renewable energy technologies are ideally suited to distributed applications, and they have substantial potential to provide a reliable and secure energy supply as an alternative to grid extension or as a supplement to grid-provided power.
- Grid connected solar rooftop system has following additional technical benefits.
 - * Utilization of available vacant roof space;
 - * Low gestation period;
 - * Lower transmission and distribution losses;
 - * Improvement in the tail-end grid voltages and reduction of system congestion;
 - * Loss mitigation by utilization of distribution network as a source of storage through net metering;
 - * Long term energy and ecological security by reduction in carbon emission;
 - * Abatement of about 60 million tonnes of CO₂ per year over its life cycle;
 - * Better Management of daytime peak loads by DISCOM/ utility;
 - * Meeting of the renewable purchase obligations (RPOs) of obligated entities which are targeted at 8% of electricity consumption;
 - * Minimal technical losses as power consumption and generation are co located.

- Renewable energy technologies are clean sources of energy that have a much lower environmental impact than conventional energy technologies.
- Moreover; manufacturing, supply and distribution of renewable energy products, plants & systems results in growth of economy, employment generation, savings in foreign exchange reserve etc.
- Thus, greater reliance on renewable energy sources offers enormous economic, social, & environmental benefits.

Solar energy is the energy obtained from sun rays. It can be used for direct heating with help of solar water heaters, solar cookers or solar reactors. Heat is produced by converging sun rays with the help of concave reflectors or convex lenses.

Indirectly it is used to produce electricity with the help of solar panels (photovoltaic panels) which are made up of semiconductor materials like silicon-boron chips and which capture photons & convert them into electrical energy (D.C.). With development of new photosensitive materials, generation can be increased and the cost of solar plant is reduced. Governments of many countries of world adopt solar power generation and provide subsidies for the same. Modern technology can be used to promote a wide range of applications to support green environment.

Government of India, State Governments and Local Governments like Municipal Corporations have taken intensive steps to develop solar electricity. Ministry of New and Renewable Energy (MNRE), Jawaharlal Nehru National Solar Mission (JNNSM), Renewable Energy Corporation of India (RECI), State Nodal Agencies (e.g. Gujarat Energy Development Agency - GEDA) have taken measures as following.

Government Initiatives to develop Solar Energy

- Provision of renewable purchase obligation (RPO) for solar power in the National Tariff Policy.
- Grant of subsidy on off-grid applications and GBI facility for bundled power and Viability Gap Funding (VGF) for grid-connected solar power projects through various interventions announced from time to time.
- Financial subsidy of 30% of project / bench mark cost for rooftop solar projects (RTS) in residential/ institutional/social sectors.

- Incentives-cum-Awards for RTS in Government/ PSU sector.
- Pursuing notification of Gross/Net metering policies in all states / UT.
- Development of Online Portal for RTS development programmes.
- Development of Online Portals for registration of partners, approval of proposals and project monitoring.
- Empanelment of agencies / channel partners for installation of RTS systems.
- Training of 50,000 Surya Mitra and staffs of Discoms/State Nodal Agencies.
- Nationwide program for training of officials of Utilities, Nodal Agencies, Regulatory Commissions and Banks as also entrepreneurs.
- Provision of concessional credit to project developers through multilateral support. Setting up ultra-mega solar power projects and solar parks, 1 MW solar parks on the banks of canals, and solar power driven agricultural pump sets for energizing 1 lakh pumps
- Concessional import duty/excise duty exemption for setting up of solar power plants, accelerated depreciation and tax holiday etc.

Surat as a "Solar City"

- Surat city has been declared as a "Solar City" vide MNRE's approval letter no. 5/47/2010?11/ST, Dated: 13/04/2011.
- 100 KW SPV based Grid connected Power Plant was established at Science Centre on January 18, 2013. It has average 1304 units of electricity generation per KW per year.
- Aggregate 750 kWp SPV based Grid connected Power Plants were established at SMC Main Office Building, Katargam Water Works and other 12 sites on March 26, 2014. It has average 1360 units of electricity generation per KW per year.

SRTP

The Solar Roof Top Plant offered by GEDA is the excellent system of generation of DC electricity through solar photovoltaic panels, converting it into AC power by Invertors and supplying to the point of use through

grid lines so that unused power goes to the grid and recorded as "Export" of power. In absence of solar power, the power is extracted from supply grid. This eliminates the need to store power in batteries. Thus, initial installation cost reduces and further maintenance cost is almost nil. Government of Gujarat also provides subsidy of Rs. 10000/- per KW capacity (maximum Rs. 20000/-) in addition to Government of India subsidy of 30% of total price, which is fixed at Rs. 69000/- per KW (Revised price as per revised scheme on 25/09/2018 is Rs. 48300/- per KW. The net payment for first 2 KW capacity is Rs. 23810/- per KW and then Rs. 33810/- per KW. It is quite attractive offer as about 4 units of electricity is generated per day per KW installed capacity. The investment is recovered in about 30 months.

NEED FOR RESEARCH

The target of Government of India is to install & produce 100,000 MW electricity through grid connected solar generation by the year 2022. GEDA, the Nodal Agency of Government of Gujarat, has launched the scheme of SRTP since April 1, 2016; to install the plant in 100,000 houses up to March 31, 2017. However, the total installations were less than 4000 only during this period. Then the scheme was extended till 31/03/2018. The total installations during two years from 01/04/2016 to 31/03/2018 were about 37000 only. Thus, it requires intensive efforts to find out the reasons of poor response and the ways to come out of them.

REVIEW OF LITERATURE

Some selected literature review articles are briefly included here, due to limitations of space, as following.

Sweeney et al. (2013) of University of Western Australia, Australia; in their article "Energy saving behaviours: Development of a practice-based model" obtained the views of consumers & identified energy saving motivators, barriers & supports and developed a Practice Based Energy-Cultures Framework (PBECF).

Mancha et al. (2015) of Technology, Operations and Information Management Division, Babson College, USA and Carol Y. Yoder of department of Psychology, Trinity University, USA (2015) studied the cultural antecedents of green behavioural intent by using an environmental theory of planned behaviour in their research paper "Cultural antecedents of green behavioural intent: an environmental theory of planned behaviour".

Kenzie & Mohr (2000) presented Community Based Social Marketing to promote sustainable behaviour.

The authors suggest making psychological knowledge relevant and accessible to the designers of programs and a process for developing & delivering environmental programs based on psychological expertise. They note that most of programs are information intensive i.e. by media advertising and distribution of printed materials.

The program designers assume that (1) by enhancing the knowledge of an issue like global warming and encouraging to develop the supportive attitude, the behaviour will change and (2) The behaviour is strongly influenced by economic motives and public is rational & will act by economic self interest. So the programs highlight the economic advantages of engaging in specific activities.

However, such programs have been failures, as observed by the authors in researches by others i.e. awareness increases, attitude becomes positive, but the behaviour does not change because it is affected by many psychological and social factors.

Johe and Bhullar (2016) of University of New England, Australia examined the roles of self identity, attitudes, perceived behavioural control and norms in organic consumerism in their article "To buy or not to buy: The roles of self-identity, attitudes, perceived behavioural control and norms in organic consumerism".

George et. al (1995) have devised "ECOSCALE: A scale for the measurement of environmentally responsible consumers" and defined Consumer Environmental Responsibility" as "a state in which a person expresses an intention to take action directed toward remediation of environmental problems, acting not as an individual consumer with his/her own economic interests, but through a citizen consumer concept of societal-environmental well being. Further, this action will be characterized by awareness of environmental problems, knowledge of remedial alternatives best suited for alleviation of the problem, skill in pursuing his/her own chosen action, and possession of a genuine desire to act after having weighed his/her own locus of control and determining that these actions can be meaningful in alleviation of the problem".

Shu Yang of Energy Research Institute, State Grid, China and **Dingtao Zao** of School of Management, University of Science and Technology of China, China explored the effects of subsidy incentives and family incomes on purchase attitudes and intentions of individuals towards

the purchase of EERE (Energy-Efficient and Renewable Energy) equipments in their article "Do subsidies work better in low-income than in high-income families? Survey on domestic energy-efficient and renewable energy equipment purchase in China".

Justin Paul & Ashwin Modi of Graduate School of Business Administration, University of Puerto Rico, USA and **Jayesh Patel** of V. M. Patel Institute of Management, Ganpat University, Kherva, Gujarat, India (2016) used Theory of Planned Behaviour (TPB), extended form of TPB and theory of Reasoned Action (TRA) to predict Indian consumers' green product purchase intention in their article "Predicting green product consumption using theory of planned behaviour and reasoned action".

The New Ecological Paradigm Scale is a survey based measurement tool devised by the US environmental sociologist **Dunlap** et al. (2000) and colleagues. It measures environmental concern of groups of people by using a survey instrument constructed of fifteen statements. Respondents are asked to indicate their agreement or disagreement with each statement. Then, responses to all statements are used to construct various statistical measures of environmental concern. The scale is considered as a measure of environmental world view / paradigm i.e. framework of thought.

The paper by **Wright** (2007), "Reconsidering public attitudes and public acceptance of renewable energy technologies: a critical review" summarises existing social research on public understanding of, and attitudes towards renewable energy technologies, and provides a novel classification of personal, psychological and contextual factors explaining public acceptance.

Munjur et. al., (2013) of Department of Energy Technology, Aalto University, Finland UNESCO Commission, Finland measured the social acceptance renewable energy technologies (RETs) in their research paper "Researching social acceptability of renewable energy technologies in Finland".

Nada (2014) of Institute of Urban & regional planning for post graduate studies, Baghdad University, Iraq describes various types of renewable energy in her paper "Renewable Energy Types" along with drawbacks of non renewable sources, need for renewable energy sources and benefits of renewable energy sources.

Schreier and Wilhelm (2008) of Vienna University of Economics and Business Administration (WU), Australia

searched for antecedents and consequences of being a lead user and described and differentiated lead users from ordinary users in their article "Extending **lead user theory**: Antecedents and consequences of consumers' lead userness".

Lead users are defined as those who are ahead of an important market trend and who experience high benefits from innovations.

OBJECTIVES OF STUDY

1. To find out how the residents arrived at consensus to adopt SRTP.
2. To find out the documents involved for installation of SRTP.
3. To find out the problems faced during the process.
4. To find the performance of SRTP after installation.

RESEARCH METHODOLOGY

Information regarding above objectives was collected by personally contacting and interviewing the key decision makers - the secretary and a flat holder of Styam Apartment, Opposite Navayug College, Rander Road, Surat.

The source of information used by the respondents was their file records related to SRTP.

Information / Data in Chronological Order

The information about an apartment where SRTP has been installed was obtained from the authorised channel partner of GEDA, who had installed SRTP in my college. Then I contacted the secretary of the apartment by introducing myself as a teacher in college, pursuing PhD research from the Department of Business and Industrial Management, Veer Narmad South Gujarat University, Surat. It is summarised as following.

Origin

The idea to install SRTP was origin of Mr. Kamalleshbhai Patel who is a flat holder of Satyam Apartment. He is Civil Engineer and serving in a private construction company. Then he talked to Mr. Kiritbhai J. Shah, Secretary of the Apartment.

Steps

- Both Kamalleshbhai and Kiritbhai gathered the information about the SRTP, scheme of GEDA, the authorised contractors i.e. channel partners, details of subsidy etc.

- Two meetings were conducted in the month of December, 2016; to make the flat holders aware of SRTP.
- On 20/01/2017, a resolution was passed in the meeting to install SRTP (6KW capacity) and apply through Surat Municipal Corporation website registration. It was also resolved that in addition of available fund with the society, Rs. 6000/- per member will be collected and it was agreed by members on the same day.
- Online application was filed on 16/03/2017 with SMC.
- As the application was put on GEDA website by SMC, offers from various contractors started coming. So, they negotiated and verified the price and terms and conditions. One of the channel partner agreed to install at the prescribed price by GEDA. He also agreed to mount solar panels on elevated structured frame work. By the end of April, 2017, all these activities were completed.
- Meanwhile, it was noticed that GEDA allowed to install unlimited capacity of SRTP since 01/04/2017. So, it was thought to apply for 10 KW capacity so as to reduce electricity bill to almost nil. (earlier, it was about 10000/- per month.)
- A meeting of members was held on 09/05/2017 and it was resolved to apply for 10.5 KW capacity and collect Rs. 12000/- per member instead of 6000/- month.
- Application to GEDA was filed through the channel partner on 18/05/2017.
- Then the contractor completed installation, inspection and net meter connection by DGVCL. The connection was accomplished by 19/11/2017 i.e. after 6 months.

Documents needed in installation

- Copies of "House Tax bill" paid to SMC, Electricity bill last paid to DGVCL and the Copy of resolution made at meetings of apartment members are required at the time of application to GEDA.
- Inspection report after installation of SRTP to be submitted to DGVCL for net meter connection. It is arranged by channel partner by following the DGVCL authorities.

Problems faced by the decision makers

- Lack of complete information at a time
- Frequent follow up with channel partner

- Delay in registration of application with GEDA, installation by channel partner, inspection by DVCL authorities and net meter connection.
- Frequent changes in government policy decisions.

Performance of SRTP

Table 1: Performance of Solar Roof Top Plant at Satyam Apartment, Surat

Installation date / Bill date	Billing period (days)	Import units	Export units	Billing units = Import - Export	Solar generation units till bill date	Solar generation units per KW per day	Bill amount Rs.	Bill amount per unit
19/11/2017	0	0	0	0	0	0	0	
18/01/2018	60	2114	1429	+685	2222	3.527	4627	6.75
20/02/2018	33	1079	876	+203	1399	4.038	1399	6.89
17/03/2018	25	653	663	-10	0960	3.265	0067.60	-6.76
18/04/2018	32	1037	1144	-107	1656	4.929	-276	-2.58
18/05/2018	30	826	916	-90	1293	4.105	-221	-2.46
20/06/2018	33	936	1023	-87	1461	4.216	-216	-2.48
19/07/2018	29	909	518	391	0803	2.637	2567	6.57
21/08/2018	33	1057	582	475	0873	2.519	2631	5.54
25/09/2018	35	1396	151	1245	0216	0.588	9432	7.58
19/11/2018	55				1638	2.836	Awaited	
Total	365				12521	3.267		

- First bill was received on 18/01/2018 after 2 months of net meter connection. Solar power generated was 2222 units in 60 days for 10.5 KW capacity. The average generation is 3.5 units per KW per day. It is less than 4 units per day because of short winter days, power failure / shut down by DGVCL and clouds reducing the intensity of sun rays.
- Second bill dated 20/02/2018 was received on 26/02/2018 after 33 days of first bill. Solar power generated was 1399 units in 33 days for 10.5 KW capacity. The average generation was $[1399 / (10.5 \times 33)]$ i.e. 4.038 units per KW per day. It is improved result from 3.5 units to 4.038 units because of improved climatic conditions and longer winter days after Makarsankranti. Further improvement was expected day by day in summer.
- When Shree Kiritbhai Shah - Satyam Apartment, was visited on 19/11/2018; the details of further bills, as given in Table 1 Performance of Solar Roof Top Plant at Satyam Apartment, Surat; were available. As we can notice, there is continuous improvement in solar generation in further bills up to 20/06/2018. Then, it declined in next two bills up to 21/08/2018 because of monsoon season. The bill

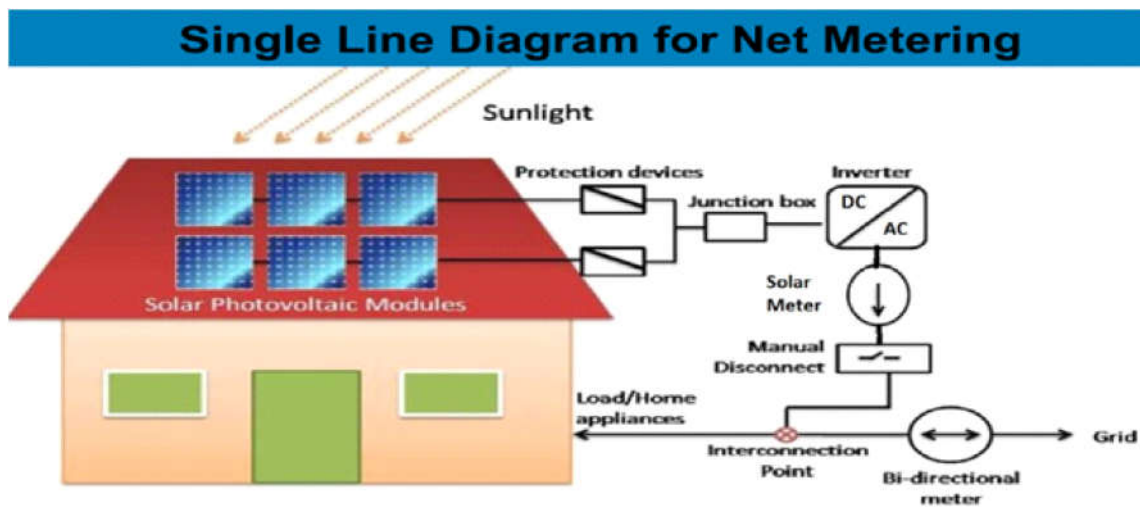
for the period from 21/08/2018 to 25/09/2018 was unexpectedly high and it was noticed only when it was received. Then they called channel partner and found that the inverter had stopped functioning for the last one and a half month. However, they have saved RS. $(12521 \times 6.50 =)$ 81387 in one year. But for the malfunctioning of the inverter, they could have saved RS. $365 \times 4.00 \times 10.5 \times 6.50$ i.e. RS. 99645 in one year, as claimed by GEDA. It can also be noticed that for the positive billing units, average net rate charged is RS. 6.50 per unit. But, when export > import i.e. when billing units are negative, average rebate is RS. 2.50 per unit. Now, I have advised to note and record solar generation meter reading and net meter readings daily, so that any problem with SRTP system can be noticed immediately.

CONCLUSION

- Preparing the members in the apartment requires continuous efforts from the decision makers.
- Government, channel partners and others should increase the efforts to make people aware of SRTP.
- To maintain the surface of solar panels clean, washing with water in about a week should be done.

Finally, we can conclude that with the integrated efforts from all, India will achieve the target of 100,000 MW solar plant capacity by the year 2022.

Figure 1 Single Line Diagram for Net Metering



References

- Doug Mc Kenzie & Mohr (2000), "Promoting Sustainable Behaviour: An Introduction to Community Based Social Marketing", *Journal of Social Issues*, Vol. 56, No. 3, 2000, pp 543-554.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New trends in measuring environmental attitudes: measuring endorsement of the new ecological paradigm: a revised NEP scale. *Journal of social issues*, 56(3), 425-442.
- Sweeney, J. C., Kresling, J., Webb, D., Soutar, G. N., & Mazzarol, T. (2013). Energy saving behaviours: Development of a practice-based model. *Energy Policy*, 61, 371-381.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.
- Martin Schreier and Wilhelm (2008) "Extending lead user theory: Antecedents and consequences of consumers' lead user-ness" *Journal of Product Innovation Management*, 25 (4), pp.331-346.
- Johe, M. H., & Bhullar, N. (2016). To buy or not to buy: The roles of self-identity, attitudes, perceived behavioral control and norms in organic consumerism. *Ecological Economics*, 128, 99-105.
- Munjur E. Moula et al. (2013), "Researching social acceptability of renewable energy technologies in Finland", *International Journal of Sustainable Built Environment* (2013) 2 89-98.
- Nada (2014), "Renewable Energy Types", *Journal of Clean Energy Technologies*, Vol. 2, No. 1, January 2014, pp. 61-64.
- Devine-Wright, P. (2007), "Reconsidering public attitudes and public acceptance of renewable energy technologies: a critical review", http://geography.exeter.ac.uk/beyond_nimbyism/deliverables/bn_wp1_4.pdf and http://www.sed.manchester.ac.uk/research/beyond_nimbyism/retrieved on 29-10-2016
- Mancha, R. M., & Yoder, C. Y. (2015). Cultural antecedents of green behavioral intent: An environmental theory of planned behavior. *Journal of Environmental Psychology*, 43, 145-154.
- Yang, S., & Zhao, D. (2015). Do subsidies work better in low-income than in high-income families? Survey on domestic energy-efficient and renewable energy equipment purchase in China. *Journal of Cleaner Production*, 108, 841-851.
- Stone, G., Barnes, J. H., & Montgomery, C. (1995). Ecoscale: a scale for the measurement of environmentally responsible consumers. *Psychology & Marketing*, 12(7), 595-612.

Challenges of Digital Revolution in Indian Banking Sector

Mukesh Pal* and Brijesh M. Patel**

Abstract

Purpose

The purpose of this paper is to highlight the latest technology innovation ecosystem developed that changed the traditional way of banking in India in order to facilitate banking services to outreach the end users in a cost effective manner. Business Analytics and Artificial Intelligence (AI) has a potential to bring a paradigm shift in Indian banking sector. Robotics, enabled by AI, is expected to be the future game changer in the banking industries. Many private banks have already deployed Robots for customer service, investment advisory and credit-approval process to improve the services and be cost effective in the long run. Digital Banking will be the most preferred form of banking in the coming years and how it will change the competitive edge dynamics among the Banks in India. The paper also highlights the changes taking place in banking competition dynamics due to technological innovation and the role of banks either to compete with FinTech companies or to collaborate with them and enhance their efficiency in near future. It also show case the benefits of using technology platforms in banking to reduce the marginal cost of transaction resulting into improved profitability of banks.

Design/methodology/approach

Latest technological products and services offered by banks and digital revolution started since 90's in Indian banking sector has been compiled with the help of secondary data from various government, non government reports, journals, magazines, newspapers, websites and other publications.

Findings

Innovative technological platforms have played a significant role to transform the way of doing banking in India. It also articulate the future dimensions for banks to remain cost effective and enable to offer specialized services to the customers based on their likes/dislikes and preferences. The banking sector has undergone for major transformation and role of technology plays vital role in routine banking transaction and will replace the human manpower.

Research limitations/implications

As an introductory paper, this lays the foundation for further study on the role of technology in banking sector and its implications for banks as well as Indian economy.

Originality/value

This paper showcases all the technological innovation platforms used by Indian banks putting together and the challenges faced by them in order to remain competitive in coming years. This special issue gives valuable insight on change in competitive dynamics and transformed the way of doing banking in modern era.

Keywords: Indian Banking Sector, Banking Technology, Digital Banking, Financial Inclusion

Paper Type: Conceptual

Introduction

In order to improve the customer service experience, book keeping and speedy delivery of services, need for computerization has been felt in banking sector. In 1988, Reserve Bank of India has set up a committee headed by former RBI governor Dr. Raghuram Rajan on computerization in banks. Banks have started using

computerization initially by with standalone PCs and later divert to Local Area Network (LAN) connectivity. As technologies evolved, there were new IT eco system has been developed. Core banking system (CBS) is considered to be important milestone for banks as it has changed the dimension of traditional banking and empower the banks to offer enhance products and

* Research Scholar, Sardar Patel University, Vallabh Vidyanagar.

** Research Associate, Sardar Patel University, Vallabh Vidyanagar

services at customer convenience through anywhere and anytime banking. Finacle by Infosys, FLEXCUBE by i-flex and BaNCS by TCS are some of the core banking platforms popular among the banking sector. The entry of Private and foreign banks in India has also played a vital role and change the parameter of competition among the banks in 1991-1992 and gradually, all commercial banks has started to adopt digital platforms to remain competitive in the market.

There are plenty of benefits to adopt newer technologies to the Banks. E-Banking has helped the bank to serve the customer at lower cost compared to bricks and mortar system. As per the estimation by Indian Bank Association, the cost of branch banking transaction cost estimated to be in a range of Rs. 70 to Rs. 75, while it is around Rs. 15 to Rs. 18 on ATM and Rs. 2 or less on Online and Mobile Banking platforms. The customer base has also enhanced drastically with the help of anywhere banking, which provides ease of comfort and convenience to access banking services. Digitalization has helped to reduce human intervention which leads to accurate functioning of banking. RBI has also played a critical role to promote technology advancement in banking sector. MICR based Cheque processing, Electronic fund transfer with the help of RTGS, NEFT and IMPS payment gateway, implementation of ATM etc. are strong initiatives from RBI to strengthening the payment and settlement systems in India.

Review Literature:

Gupta & Shukla (2002) revealed that CRM (Customer relationship Management) is gradually picking up and is considered as viable proposition by banks in improving services to their customers. It was found that high level of commitment is expected among those who implement CRM. Resistance to change is one of the major challenges while implementing CRM.

Mukherjee & Nath (2003) concerns how trust is developed and sustained over different levels of customer relationship in online banking. In the study, it was found that online trust issues affect customers' relationship commitment to banks and willingness to engage in online transactions. The future commitment of the customers to online banking depends on perceived trust. Perceived privacy and security concerns hinder customers from engaging in commercial transactions on the Web. Perceptions of opportunistic behaviour of online banks

and lack of proper communication also affect the overall level of trust towards the online banks and their systems.

Agarwal, Agarwal, Sharma & Sherry (2003) discuss the avenues where e-banking can play significant role in e-democracy. According to the authors, online bill payment, online brokerage, online account management, anywhere banking, smart card solutions etc are the potential areas where E-Banking can be used for successful E-Governance such as FSC (Farmer Service Centre), GST system nourished by Government of India and eSeva, an online community bill payment system initiated by the Andhra Pradesh Government.

Gaur, Waheed, Kuzhimattathil & Mahajan (2003) discusses the general IT adoption characteristics in Indian Banking, Financial Services and Insurance (BFSI) such as different kinds of IT delivery channels usage, operating systems, databases usage, networking status and security systems usage based on a survey. It highlights the perceived benefits and hindrances/inhibitors of IT adoption and levels of satisfaction in IT enabled business processes in Indian BFSI.

Singh & Malhotra (2004) evaluated the shift towards a timelier, readily accessible, interactive web based financial reporting by banks in India. The findings show that Indian private banks are more advanced in using Internet for financial reporting than government-owned banks.

Perumal & Bala (2004) in their study evaluates whether Internet banking is a boon or bane. It throws light on the fact that even though there are enormous opportunities and virtual banks are on the rise 'brick and mortar' banks and transactions should not be neglected. This is because there are numerous aspects of banking which cannot be currently accomplished by electronic impulses.

Perumal (2006) discussed about different security measures that are to be considered in Virtual banking system, to share the fundamental concept behind the security technology and to understand the relative advantages and limitations of different approaches. It is observed that the success of a biometric authentication system will depend on the method used to combine the individual decisions or matching scores. For better security, multifactor authentication is suggested as the best option. So that biometric system makes the virtual banking with higher security in forth coming years. However, it needs to be recognised that such high cost technological initiatives need to be undertaken only after the viability

and feasibility of the technology and its associated applications have been thoroughly examined.

Kesharwani & Bisht (2012) conducted research to extend the Technology Acceptance Model (TAM) in the context of internet banking adoption in India under security and privacy threat. The paper reveals that perceived risk has a negative impact on behavioural intention of internet banking adoption and trust has a negative impact on perceived risk. A well-designed web site was also found to be helpful in facilitating easier use and also minimizing perceived risk concerns regarding internet Banking usage.

Thakur & Srivastava (2013) conducted the study was to investigate the factors influencing the adoption intention of mobile commerce. In this study, Perceived Usefulness, perceived ease of use and social influence are found to be significant dimensions of technology adoption readiness to use mobile commerce. The results indicate that security and privacy concerns are important in deterring customers from using mobile commerce.

Wambuaa & Datche (2013) in their research attempts to analyze the innovative financial channel and attitude of users towards it with special focus on various parameters like easy to use innovative delivery channel, level of trust and confidence on innovative channels and perceived risk on using innovate channels by users in Mombasa County. The study revealed that innovative channel of distribution are less utilize such as E-Banking, M-Banking and Agency Banking etc. People still considered bricks and mortar system more convenient and reliable for their banking

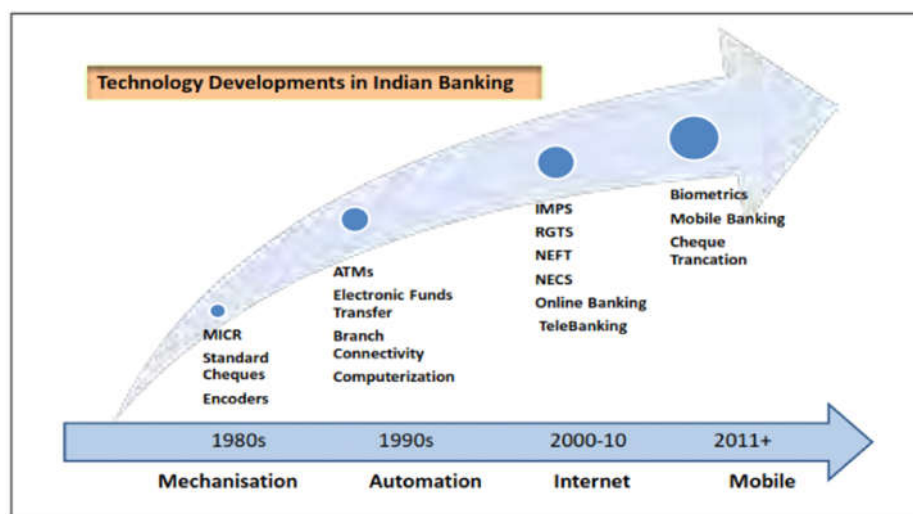
transactions.

Chopra et al., (2015) has made attempted to study the significance of technology in promoting financial inclusion in India. The author in opined that urban population found accessibility of finance with ease with variety of options available to them, on the other hand, vulnerable people left with o choice to approached informal and risky sources of financial needs. The difference of demand and supply between urban population and vulnerable, created an imbalance in the economy. The author recommended adopting the information technology by banks to spread the outreach of banking services to vast sections of the society. It was found very cost effective for banks and customers. With the help of automation in transaction, risk and cost will be rationalized.

Gasevic et al., (2016) studied the level of client's satisfaction towards usage of electronic banking services. Ease of use, responsibility to access banking services and security were the key elements, had a significant impact on client's satisfaction. On the other hand, factors like empathy on financial services, website information and reliability has no significance relevance on client's satisfaction with e-banking usage. Author recommended that their result showcased the upcoming challenges for banks to enhance level of satisfaction by increase trustworthiness, impart training to employees, risk associate with e-banking and upgrade website content.

Overview of Technology Developments in the Indian Banking Sector:

In 1980s, introduction of encoders, MICR and standard



Source: ICAI, Jan 2017.

cheque processing in banking system eliminated manual way of processing cheques and bank drafts etc. During the period of 1990s, massive efforts put towards computerization of Indian banking sector. All branches were computerized which resulted in high productivity and enhance bank's capability to expand their product and services to customers. Due to computerization, connectivity among the branches of the bank facilitated cross branch transactions, which considered to be the first step towards anywhere banking, Core banking solutions enabled the banks to process seamless transactions of various product and services of bank within the various departments. That helps to robust the overall efficiency of banking operations and productivity of bank staffs. This decade also witnessed the implementation of ATM (Automated Teller Machine) facility in Indian Banking sector that has changed the way of doing banking. Now customer able to access cash transactions and other non-financial services 24x7 with the help of ATM. The entrant of new private sector banks played a significant role in induction of new technology in banking sector. These banks came with advanced technology of the time to attract the customers from old banks into their side. This compelled the existing banks to focus towards adopting new technology to be competitive. The birth of internet has changed all facets of banking sector in year 2000s. Banks had adapted the internet to give all new banking experience to customers.

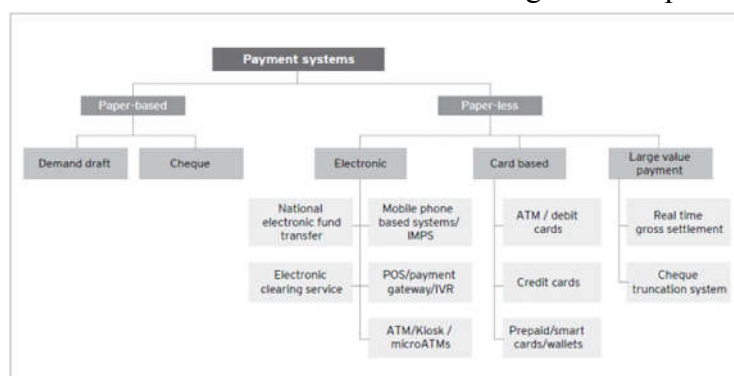
Customers were no more compulsory to visit the branches for many transactions; they can do the same at their convenient with the help of Internet based banking platforms. Introduction of RTGS (Real Time Gross Settlement), NEFT (National Electronic Fund Transfer) and ECS (Electronic Fund Transfer) facilitated speedy fund transfer irrespective of the branch, bank and location. Cross location funds transfer who took days to transfer the fund earlier, was transformed to be completed in minutes. In last few years, seen a tremendous development of technology on mobile platforms. Mobile banking is a new banking platform that gives access to bank services on mobile device. It adds a feeling of wow to the customer banking experience just by touch of their smart phones.

Current Status in the Digital Space

The Government of India's endeavor to promote digital transactions and move towards cashless economy. The introduction of Unified Payment Interfaces (UPI), Bharat Interface of Money (BHIM) by National Payments Corporation of India (NPCI) are important steps for innovative payment system domain in India. UPI is enable to make the instant payment across the different bank's accounts without sharing bank account details with the help of virtual address.

Payment Systems in India

According to RBI report in 2016-17, there are nearly



Source: Banking on Technology, Perspectives on the Indian banking Industry

2.23 Lakh ATMs and 25 Lakh Point of Sales machine in India. The usage of prepaid payment instruments (PPIs) such as mobile prepaid instruments, gift cards, forex travel card and mobile wallet have jumped drastically from Rs. 105 billion and Rs.82 billion respectively in 2014-15 to Rs.277 billion and Rs. 532 billion respectively in 2016-17.

Future of Banking in Dynamic World

The convergence of telecommunication, media and computing will change the way of doing banking. In the era of digital world, everything is being connected, information is flowing through networks with greater intensity. Markets are disappearing and are being substituted by networks of information with the customer at the heart. Digital revolution acting as a secular shift in

technology, mobility, social computing and analytics that enable the bank to use the networks and information around their customers, products and services to provide a highly personalized customer experience.

Financial Technology firms also called as FinTech firms that develop new technology by keeping in mind the future needs of financial products and services. That disrupt the current functioning of banks and result into the snatch away the customers from banks. Hence banks and FinTech companies around the globe are working towards innovating newer technology to remain competitive in the market. Technology will focus on eliminating manual efforts in executing transactions and move towards automatic methods. Biometrics, speech recognition, gesture recognition, robotics, kiosk, smart interactive devices and interface will take the place of Banking staff and representative in future.



Source: ICMAI, Jan 2017

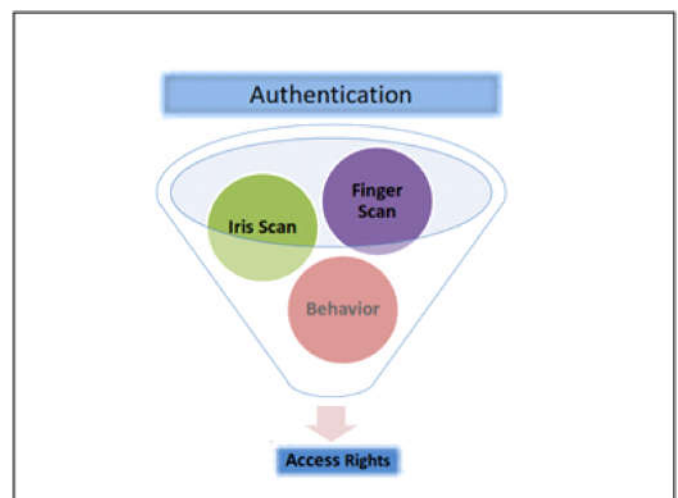
Mobile Wallets

The users of mobile phone has increased at a phenomenal speed in India and with the help of Mobile wallet one can make and receive payments through Mobile phones. Mobile wallets are changing the way cash transactions, credit card and other payments take place around the world. PayTM, PayZapp, Chillr, Mobikwik and ICIC Pocket are some of the known name of mobile wallets in India.

Next generation Authentication

Authentication is the process to identify the customer by Bank e.g. / User ID and password for Net banking, PIN in case of ATM, TPIN for Tele banking and similarly MPIN for mobile banking. These methods of

authentication will be replaced by Biometrics like finger prints and iris scan, behavioral biometrics, gesture, facial expression and speech recognition etc. Biometric ATMs will be a game changer in financial sector, which allow user to access their bank accounts based on finger scan and iris scan based. Country like India, where literacy level is very low among the population, it allows users to operate financial services without memorizing their pin or password with high security and financial privacy. Since the ATM software is available at regional language, it helps in overcome the language barriers in accessing financial services.



Source: ICMAI, Jan 2017

Smart watches/Car

With the help of Smart watch like apple watch and android smart watches used to carry our banking transactions and interact with bankers. HDFC Bank in India has already provide watch banking access on Apple watch device in India. We will also see the technology being developed where customer will able to enter a bank by scanning their smart watch. Similarly, Technology has developed to perform banking functions while driving a car. Mobile banking Apps interact with software in car to recognize voice and transaction can be performed by speaking with the system.

Smart Branches

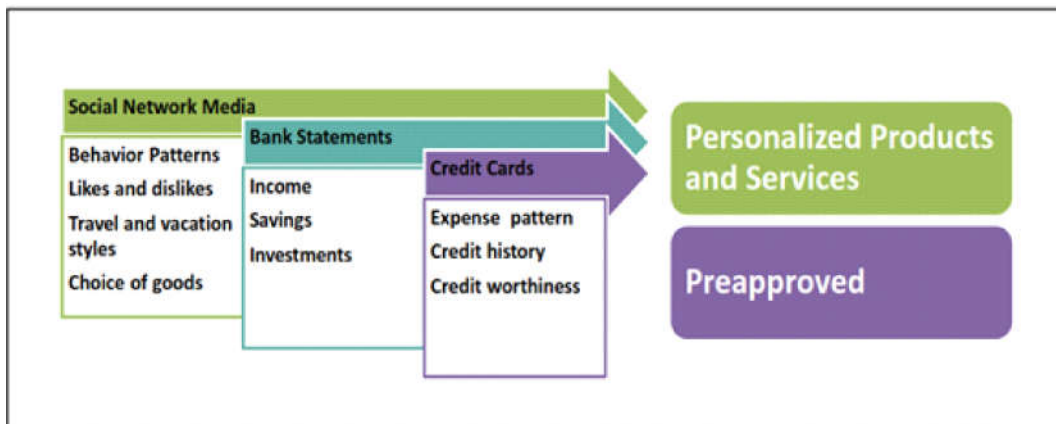
Smart branches will be unmanned and are well equipped with smart interactive kiosk through which customer can interact to perform their banking transactions. Smart branch will be very small compared to existing brick and mortar branches thus reducing the cost of operating a branch. ICICI Bank has launched smart branch in India.

Robotics

Robotics will replace the bank staffs in the branch. Robots will act using speech and facial expression recognition technology. Though the cost to the deploy robot at branch is very high compared to advance countries. It may still take some time to have robots at branch. HDFC Bank has launched robot called IRA under his digital initiative

in India for general banking purpose. The robotics provides the platform to do a host of financial and non-financial banking transactions. With the help of Artificial Intelligence enabled banking robot, it's equipped to answer a host of bank products and services related queries by 24*7 on the go available.

Intelligent Banking



Source: ICMAT, Jan 2017

With advancement of technology and artificial intelligence, bank will use behavior patterns of customer to understand their desires/needs and offer products and services according to their behavior patterns. Data will be captured from multiple sources like their social network media, income and expenses patterns from credit cards and bank accounts, Travel patterns etc. Said data will be compiled using data analytics to understand the need of customers and based on the outcome, bank will offer personalized product and preapproved offer to the customers.

Video Banking/Virtual Reality

Technology developed to enable the customer virtually enter bank through a virtual reality stimulation headset and interact with bank employees and also perform their banking transactions. IndusInd bank in India has come out with video branch, which facilitate customers to have face to face banking without going to bank.

Challenges posed by banks

Security Risks - External threats such as hacking, sniffing and spoofing expose banks to security risks. Banks are also exposed to internal risks especially frauds by employees / employees in collusion with customers.

Financial Literacy / Customer Awareness - Lack of knowledge is one of the biggest constraints amongst people to use e-banking facilities in India.

Fear factor - One of the biggest hurdles in online banking is fear of losing money in the online transaction especially in older generation and mostly people from the rural areas.

Training - Lack of adequate knowledge and skills is a major shortcoming for employees to deal with the innovative and changing technologies in banks. Training on the changing trends in IT is the need of the hour for the banks.

Conclusion:

Business Analytics and Artificial Intelligence (AI) has a potential to bring a major changes in Indian banking sector. Robotics, enabled by AI, is expected to be the future game changer in the banking industries. Many private banks are planning to deploy Robots for customer service, investment advisory and credit-approval process to improve the services and be cost effective in the long run. Digital Banking will be the most preferred form of banking in the coming years. Bank will either compete with FinTech or collaborate with them and enhance their efficiency. As the banks moving towards digital platforms, the marginal cost of transaction will reduce result into improve the profitability of banks.

References

Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology

- acceptance model. *International Journal of Bank Marketing*, 30(4), 303-322.
- Perumal, S. A. (2006). Effective Method of Security Measures in Virtual Banking. *Journal of Internet Banking & Commerce*, 11(1).
- Mukherjee, A., & Nath, P. (2003). A model of trust in online relationship banking. *International journal of bank marketing*, 21(1), 5-15.
- Singh, B., & Malhotra, P. (1970). Adoption of Internet banking: An empirical investigation of Indian banking Sector. *The Journal of Internet Banking and Commerce*, 9(2).
- Bhattacharyya, Bijoy. and Pradhan, Swati. (2013). L. N. Welingkar Institute of Management Development and Research (WeSchool), Mumbai.
- Chopra, S. A. M. Sherry. and R. Dwivedi (2015). Role of Technology Options for Financial Inclusion: Case Study in India, *Technological Solutions for Sustainable Business Practice in Asia*, IGI Global, p. 1, Spain.
- Gasevic Dragana, Marija Vranjes and Dragana Drinic (2016). Identification of key determinants of satisfaction of users of Electronic banking services, *Economic Themes*.
- Gupta, M. P., & Shukla, S. (2002). Learnings from Customer Relationship Management (CRM) implementation in a bank. *Global Business Review*, 3(1), 99-122.
- Agarwal, N., Agarwal, R., Sharma, P., & Sherry, A. M. (1970). Ebanking for comprehensive EDemocracy: An Indian Discernment. *The Journal of Internet Banking and Commerce*, 8(1).
- Thakur, R., & Srivastava, M. (2013). Customer usage intention of mobile commerce in India: an empirical study. *Journal of Indian Business Research*, 5(1), 52-72.
- Gaur, S. S., Waheed, K. A., Kuzhimattathil, A. J., & Mahajan, A. (2003). Perceived Benefits and Inhibitors of IT Adoption and Resulting Satisfaction: A Study in Indian BFSI Context. *The IUP Journal of Bank Management*, 2(2), 83-94.
- Sumeet, Gupta. (2008). A Study of Customers' Perception Towards E-Banking With Special Reference To Jaipur City. *Professional Banker*. Vol. VIII. Issue 7. P. 66-74.
- Venkatesvaran, P. (2017). Technology Trends in Indian Banking Sector. *The Management Accountant Journal*, 52(1), 21-25.
- Article retrieved from <http://www.forbesindia.com/article/weschool/digital-revolution-in-the-indian-banking-sector/47811/1>
- www.rbi.org.in
- www.ibef.org

A Study on Contemporary Issues and Challenges in Front of Transforming India Initiative

Ashish Joshi* and Nilang Vayeda**

Abstract

Purpose

India's sustainable economic growth is an outcome of persistent economic reforms taking place in the country over the last two decades. During last three years India has seen major Socio-Economic reforms in form of Make in India, Start up India, Skill India, Swatch Bharat Abhiyan, Digital India, Smart Cities, Demonetisation, Goods and Services Tax (GST) etc. These reforms aim at generating high levels of economic growth, and new developmental opportunities. As a part of transforming India initiative there are several issues and challenges in achieving the goal of sustainable socio-economic progress in the country. The present study aims to assess the issues and challenges which are likely to hinder the process of Transforming India Initiatives.

Design/Methodology/Approach

The major question raised in the paper is: Whether Transforming India Initiatives can convert issues and challenges into opportunities? The research methodology used in the paper depends on the secondary data collection referring to various newspaper articles, reports, Government & Non Government websites etc.

Findings

This paper will help to develop an insight about the key issues and challenges faced in Transforming India initiatives. Therefore it is a way forward for the modern India to reduce the excessive pressure of unemployment in the country by creating new job opportunities for the Indian Youth. New initiatives in form of economic reforms can strengthen our economy. Ease of doing business may create new opportunities (India jumped to 77th position from 142nd position in ease of doing business) for MNCs to look forward towards India as an ocean of opportunities and to explore newer business opportunities. This can lead to generate new employment prospects for the growing Indian youth.

Originality/value

The study is focused on various initiatives taken by Central Government to transform and keep India on a sustainable development path which can provide ample employment opportunities to its rapidly growing young population (around 906 Million working age population) and provide them quality life. It mainly focuses on the issues and challenges that hinder the process of transforming India initiatives.

Keywords: Transforming India Initiatives, Make in India, Poverty, Unemployment, Population, Education, Corruption & Black Money, Socio-Economic Reforms

Paper Type: Conceptual

1. INTRODUCTION

India is considered as one of the fast growing economies of the world and has shown signs of growth in many sectors. However, there are major challenges in front of country like unemployment, poverty, Population Growth, Pollution, Education, Sanitation, Health etc. To translate the economic growth into broad based sustainable development it is necessary to take into consideration these challenges and to develop long term strategies to counter them. Union Government's ambitious move of

Transforming India Initiatives led by Make in India, Start up India, Skill India, Swatch Bharat Abhiyan, Digital India, Smart Cities, Demonetisation, Goods and Services Tax (GST) etc. aims at creating New India Incorporation. However the success of these initiatives will be seen in the long run.

2. OBJECTIVE

The objective of this paper is to analyze the issues and challenges before Transforming India Initiatives in the

* Associate Professor, SLS, PDPU, Gandhinagar

** Research Scholar of Ph.D. Program, Indus University, Ahmedabad

rapidly changing Economic Environment, Innovations and Technological change.

3. RESEARCH METHODOLOGY

Research method and technique followed in the study is largely depends on secondary data collection, referring to various research studies and reports, News paper reports and Articles. Data collection was done through referring to different websites including government and non government organizations for collecting numerical data which was useful in collecting important information and data analysis related to the current study.

4. LITERATURE REVIEW

Review of literature indicated only limited number of studies have been undertaken to carry out analysis of Issues and Challenges in front of Transforming India Initiatives and to form a long term strategy to effectively counter them.

Unemployment in, India and China to rise over next two years says International Labour Organization (ILO). The article was published into the Indian newspaper daily Business Line dated 23rd January, 2018 In India, the number of jobless is expected to increase to 18.6 million in 2018 and 18.9 million in 2019, (<http://www.thehindubusinessline.com>) against 18.3 million in 2017, as per the report. The unemployment rate is estimated at 3.5 per cent for all three years. China, too, is going to witness an increase in the number of unemployed to 37.6 million in 2018 and 37.8 million in 2019 from 37.4 million in 2017, the report estimated. Unemployment in the Asia Pacific region will increase to 83.6 million in 2018 and 84.6 in 2019 from 82.9 million in 2017. The report also pointed out that a lot of jobs being created are of poor quality despite strong economic growth and some 72 per cent of workers in South Asia will have vulnerable employment by 2019.

One of the reports published in the Business daily live mint dated 29th June, 2017 says that there is a public anger over the unemployment issue. It further says that The "Mood of the Nation" survey of more than 11,000 respondents across 19 states conducted in May this year shows that unemployment is becoming a major concern among people in the country. Nearly a quarter of those surveyed identified unemployment as the biggest problem facing the country today. The data shows that youngsters are relatively more likely to be concerned about the unemployment problem. Around one-third of the youth

(18-25 years) covered in the survey saw unemployment as the biggest problem. For the entire population, this share was lower at 24%. It is the educated youth who are relatively more concerned about joblessness. 33% of college-educated youth considered unemployment to be the most important problem. Among non-literate youth this proportion was much lower at 23%. This might be partly related to the quality of higher education in the country, which tends to produce graduates who are often unemployable. Job-related anxieties are most acute in India's small cities and towns. Almost three out of 10 respondents (29%) residing in these areas identified unemployment as the most important problem. The proportion of such respondents was lower in villages and metropolitan cities at 22% and 23%, respectively.

An article published in Business Today dated 3rd October, 2016, said that according to World Bank report, India accounted for the highest number of people living below International Poverty Line. Report further said 30% of its population lived below poverty line at 224 million.

Earnest Young's attractiveness survey India (2015) reported that India will be youngest country in the world by 2020 with median age of 29 years wherein 65percent of population of India would be in the age group of 18 to 35 years. Graduates in this age group are facing one of the great problems of unemployment. Global economic fluctuations, slowdown and shrinking job market are further adversely affecting employment prospects of graduates. In a challenging scenario like this, initiative like Make in India has generated hope for the better employment prospects for our graduates in near future.

S.Soundharia. (2015). Make in India - Transforming India This research paper 'Make in India'- Scheme for Transforming India focuses on the advantages of investment in the industry sector and what changes it will bring to our manufacturing sector. It also describes the importance of start-ups in manufacturing sector which can play key role in its development.

5. ANALYSIS OF MAJOR CHALLENGES IN FRONT OF TRANSFORMING INDIA INITIATIVES

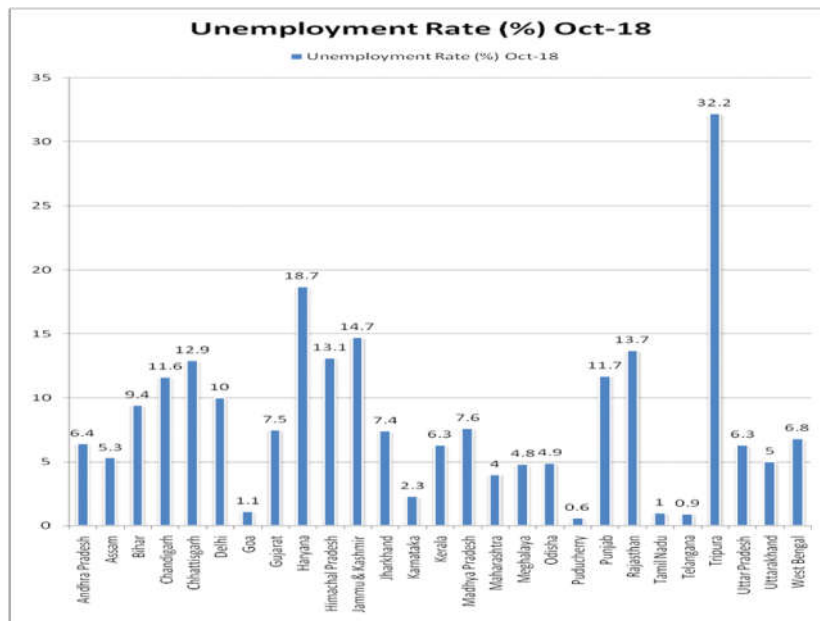
5.1. Unemployment

'Make in India' campaign has put forth a plethora of opportunities before the industry to achieve their ambitious goals and capture world market. Make in India initiative aims at creating India a global manufacturing and export

hub. An ample chance of creating new job opportunities for Indian youth seems bright.

India will be home to 1.35 billion souls by 2020, out of which 906 million will be of working age. These 906 million will need jobs to sustain India's growth, and these jobs can only be provided by the sustained growth of the manufacturing and service sectors. The challenge ahead, therefore, is to create jobs to employ India's rapidly

growing working age youth. Make in India therefore is the only way forward to reduce the unemployment scenario. To create new job opportunities for this 906 million is a big challenge in front of our country. How all the sectors put together create more employment prospects will be a question before all of us to be answered in the near future based on the implementation of the Make in India initiative and performance of the industries.



Source: <https://unemploymentinindia.cmie.com/>

The above mentioned table shows high unemployment rate in several states which is above average. Places like Tripura has highest unemployment rate which is as high as 32.2 percent whereas place like Puducherry has the lowest unemployment rate which is as low as 0.6 percent.

5.2. Poverty

According to World Bank report of May 27, 2016, 80% of India's poor live in rural areas. Poverty rate in rural areas was 25% whereas it was 14% in urban areas. As per the report 1 in 5 Indians is poor. To fight with the element of poverty, India has taken considerable steps to counter this problem during past two decades. There is an urgent need to accelerate the poverty reduction measures in rural areas by developing connectivity between rural India and urban India. There is also need to develop mechanism to reduce pressure on agriculture and to focus on developing agro based industries and services sector.

There is an urgent need to create new avenues for the gainful employment opportunities in rural areas so that

working age population in rural areas get more employment options within nearby areas. This will help in reducing undue pressure on urban areas. There is also need for the holistic development including women, schedule tribes etc. They also need to be the part of the main stream. Quality of life of people needs to be improved further. New earning opportunity can be created for them to improve their living standard.

The following table gives picture year wise poverty numbers living in rural and urban India.

Year	Number of Persons Below Poverty Line in Rural India	Number of Persons Below Poverty Line in Urban India	Number of Persons Below Poverty Line in India
1973	2612.9	600.46	3213.36
1983	2519.57	709.4	3228.97
1993	2440.31	763.37	3203.68
2004	2209.24	807.96	3017.2

Source: Government Data open source

5.3. Population Growth

India's current population is 1,355,440,696. It includes 51.6% males & 48.4% females. India's population has grown at the rate of 1.26% annually. Population growth in the country is one of the major concerns because India is the youngest country in the world having largest working age population between the ages of 18 to 35 years. Around 900 million people are in the working age group. Compared to this job creation is very less. People especially youth are unable to get gainful employment despite having qualifications. Offering jobs to large population is not an easy task hence new initiative like Start up India campaign was launched. It aims at creating job creators in the country rather than job seekers.

There is a challenge in terms of keeping the country healthier this aims at improving basic medical facilities for every citizen as well as improving sanitisation facilities across the country. Swatch Bharat Abhiyan is one such initiative its primary focus is to make our surroundings clean and healthier so as to ensure better human life for every citizen. A main challenge faced by rural healthcare in India is lack of access to basic healthcare. Lack of Infrastructure and resources is a cause of concern.

5.4. Education

Education in India is provided by the public sector as well as the private sector, with control and funding coming from three levels: central, state and local. Under various articles of the Indian Constitution, free and compulsory education is provided as a fundamental right to children between the ages of 6 and 14.

Education system in the country is facing problem though the number of educational institution are increasing day by day however the quality of education is one of the areas of concern. With each passing day education is becoming expensive. Since education is very important to get a job or profession, parents are ready to spend as much as they can include their life time savings so that their wards' future is secured. Moreover current studies

have become exam oriented rather than skill based education. Due to lack of employability skills among the graduating youth, they fail to get right kind of a job hence leading to problems of unemployment.

5.4.1.: Number of Recognised Educational Institutions In India (Provisional)

Sl. No.	States/No. Union Territories	Pre-Degree/ Junior Colleges/ Higher Sec. Schools	High/Post Basic Schools	Middle/Sr. Basic Schools	Primary/Jr. Basic	Universities / Deemed Schools Universities	Colleges for Professional Educatuion	Poly-technics
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	5143	18776	15421	66834	31	4473	213
2	Arunachal Pradesh	118	191	920	1941	2	23	3 ^a
3	Assam	1081	5482	14133	31202	8	546	10
4	Bihar	2217	2286	25587	42573	20	1031	17
5	Chhattisgarh	2799	2029	15488	35274	9	584	15
6	Goa	82	378	438	1254	1	39	4
7	Gujarat	3575	6269	42145	0	26	1218	104
8	Haryana	3278	3493	3483	13987	12	1002	32 ^b
9	Himachal Pradesh	1727	1466	5084	11376	7	582	26
10	Jammu & Kashmir	889	2216	8877	15446	10	303	0
11	Jharkhand	1044	1429	14863	26731	8	161	19 ^b
12	Karnataka	3644	13447	33126	26302	29	979	273
13	Kerala	2223	1602	3059	6790	11	448	59 ^b
14	Madhya Pradesh	5463	6658	96797	43662	21	1311	49
15	Maharashtra	5019	16455	27654	49095	42	3446	227 ^c
16	Manipur	123	761	732	2435	1	73	3 ^b
17	Meghalaya	125	676	2259	6627	2	118	3
18	Mizoram	98	538	1353	1821	1	29	2
19	Nagaland	69	337	465	1662	1	74	0
20	Odisha	1293	7974	22649	54150	15	874	24
21	Punjab	2733	2924	3792	13950	14	578	89
22	Rajasthan	7616	14945	36788	47818	24	1610	71
23	Sikkim	59	126	244	749	3	18	2
24	Tamil Nadu	3660	3112	9810	28218	43	1936	363
25	Tripura	336	504	1246	2307	3	29	1
26	Uttar Pradesh	9751	7893	53281	147376	36	3104	163
27	Uttarakhand	1633	1143	4365	15660	12	225	0
28	West Bengal	4341	4454	2623	49908	20	841	57
29	A&N Islands	53	46	67	212	0	5	2
30	Chandigarh	68	65	23	24	3	24	3
31	D&N Haveli	13	19	85	210	-	3	0
32	Daman & Diu	16	13	37	66	0	3	1
33	Delhi	1392	480	588	2563	19	155	79 ^c
34	Lakshadweep	12	3	10	23	0	3	0
35	Puducherry	121	180	108	301	2	90	0
	India	71814	128370	447600	748547	436	25938	1914

Notes: Professional Education includes Engineering & Technology, Architecture, Medical and Education/Teacher, Arts Science and Commerce Training Colleges.

Source: <https://data.gov.in/catalog/total-number-recognised-educational-institutions-india-provisional>

According to World Bank report on skilling India dated 23rd June, 2017, India is the world's fastest growing economy, expected to grow at 7.2 percent in 2017-18, and at 7.7 percent by 2019-20. The government of India has ambitious plans to transform India into a competitive, high-growth, high productivity middle-income country. The economy is now diversifying from being largely agro-based to a manufacturing and service-based economy. These ambitious plans to transform the Indian economy are highly dependent on the availability of jobs and the quality of the labour force. This has resulted in an increased demand for skilled labour over the past few years. More than 12 million youth between 15 and 29 years of age are expected to enter India's labour force every year for the next two decades. The government's recent skill gap analysis concludes that by 2022, other 109 million or so skilled workers will be needed in the 24 key sectors of the economy. At present, however, school leavers have few opportunities to acquire job specific skills; only 2.3 percent of India's workforce has received some formal skills training.

According to report of The Wire dated 11th May, 2017, a government appointed panel has found that the first iteration of the government's flagship skilling scheme - the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) - spent over Rs 1,500 crore in skilling over 18 lakh people but failed to achieve key objectives such as high rates of job placement.

The report further said that, "SSCs entire focus seems to have been on implementation of the PMKVY without regard to whether it will really meet the exact skill needs of the sectoral industry or turn out skilled manpower of global standards or persons that would get placed after the training," says the report. More damningly, the Prasad committee goes on to suggest that the flagship government skilling programme was carried out to ensure the financial stability of the various sector skill councils and in the process monetarily benefiting the private vocational education sector. "The entire effort seems to make the SSCs financially strong by way of different mechanisms but in the process, there was a compromise on quality and basic objectives of their creation at every stage," the report, which was submitted to the government last December but only recently made available for public comments, states.

5.5. Corruption & Black Money

Demonetisation was one of the major reforms towards

fight against Corruption and Black Money. According to CNBC report dated 7th September, 2017, The Reserve Bank of India said in its annual report on Aug. 30 that 99 percent, or around 15.28 trillion rupees (\$238.7 billion), of the demonetized 500- and 1,000-rupee notes were deposited or exchanged for new currency. This made revolution by opening gateway for the digital India initiative. Demonetisation brought revolutionary change in the banking system, and financial transactions. Mobile Banking, Online Payment Methods have become more popular and easy to operate through mobile phones. Gradually Indian economy is becoming cashless and has moved towards plastic money. Due to new innovations and technological advancement, this period may be considered as a digital revolution era.

The success of Digital India Initiative depends upon the internet connectivity and speed in the country. One of the reports says that India has the lowest internet speed and connectivity compared to the other countries of the world. India had 86.77 million 4G subscribers in 2016, the latest statistics released by telecom regulator TRAI on July 3, 2017 indicates

6. CONCLUSION

India stays in village. Initially majority of the population was dependent on agriculture. However over the years need for industrialization was felt hard to give balanced growth to the country and to increase employment prospects of our rising population and to reduce the burden of agriculture sector. Transforming India initiatives therefore is the way forward for the modern India to reduce the unemployment scenario in the country by creating new job opportunities.

Despite of new initiatives there are few sectors which are suffering with the effect of global economic slowdown. Sectors affected are Textiles, Leather, Metals, Automobiles, Gems & Jewellery, Transport & IT / BPO. Due to this, process of employment generation into these sectors remained slow. The performance of these sectors will be significant in the mass employment generation process.

Reduction of jobs due to effect of downsizing by many industries is also one of the causes of low employment generation. Today companies are more capital intensive rather than labour intensive. Due to this reason capital intensive industries require low manpower compared to labour intensive industries. Many industries have started reducing their staff especially some of the MNC

companies exited from Indian market due to tough competition by domestic companies.

High levels of automation in the industries have reduced their manpower requirements. Production processes are fully automated in many industries. Usages of robots in manufacturing, is common now. Product designs, Production, planning, etc. are based on computers. More usage of Internet of Things (IOT), 3D Printing, Computer Aided Design and Manufacturing further reduced the human capital requirements of the industries. Now they require quality manpower with industry specific skills.

All the above mentioned factors have correlation with each other as high population growth requires high requirement for employment if the sectors not generating enough jobs or employment opportunities then this may lead to increase in poverty. Poverty effects the education. Lack of education causes unemployment as well as increase in the economic and social offences like corruption and black money.

References

1. Pti. (2016, October 03). India has highest number of people living below poverty line: World Bank. Retrieved January 01, 2018, from <https://www.businesstoday.in/current/economy-politics/india-has-highest-number-of-people-living-below-poverty-line-world-bank/story/238085.html> (Business Today, 2016)
2. Indias Poverty Profile - World Bank. (2016, May 27). Retrieved January 01, 2018, from
3. Countrymeters.info. (2016, May 27). India Population. Retrieved January 01, 2018, from <https://countrymeters.info/en/India>
4. India. (2015, December 03). Retrieved January 01, 2018, from <http://www.who.int/countries/ind/en/>
5. Lee, Yen Nee. "India Tried to Get the 'Black Money' out of Its Banking System - It Ended up Doing the Opposite." CNBC, CNBC, 7 Sept. 2017, www.cnbc.com/2017/09/07/demonetization-reserve-bank-of-india-suggests-that-demonetisation-allowed-black-money-to-enter-banking-system.html.
6. Rangeet.ghosh. "Total Number of Recognised Educational Institutions in India (Provisional)." Data.gov.in, 14 June 2013, data.gov.in/catalog/total-number-recognised-educational-institutions-india-provisional.
7. "How Modi's Flagship Skill India Project Stumbled Hard in Its First Year." The Wire, The Wire, thewire.in/economy/modi-skill-india-stumbled.
8. <http://www.telecomlead.com/telecom-statistics/india-86-77-million-4g-subscribers-2016-trai-77616>, 2017

Transcending From a Healthy Life to a Holistic Living - Role of Spirituality

Bhaves A. Kinkhabwala* and Ravi Gor**

Abstract

Purpose

Ever Changing world pose upon a new dynamic thrift into a new outlook and the phrase "health care" should be shifted to "human care". Health is one of the most important aspects of the entire wellbeing of a living creature. Life is not a single block but, built up by so many components and also do not survive in isolation so, one component affect the other one and if one component is not functioning properly or having effective functioning then certainly it will have negative or positive impact on other and thereby the overall wellbeing is determined with a genesis of level of functioning of different components. In view of above, a comprehensive approach towards the life and wellbeing is a need for an hour and therefore, a holistic approach for human care is the necessity.

Design/methodology/approach

Involves multi disciplinary study and mainly library and qualitative research.

Findings

More and more efforts should be towards development of Spiritual Quotient (SQ).

Spirituality is an essential component of a holistic approach to life, its finds expression in creativity and all art forms and is the bit that adheres together our conscious intellect and our intelligent action. Spirituality sustains us from within when all else fails; spirituality allows us to dream, aspire and raise ourselves up

Research limitations

In this paper primary research is not carried out due to constrain of having sufficient base for the statistical tools and analysis. Future research has scope for judicious application of the statistical tools and analysis thereof for coming out quantifiable and measured outcome when bridging between the spirituality and healthy as well as holistic living

Originality/value

This research study is useful for developing an approach for the human care and having a comprehensive approach towards the life and wellbeing.

Keywords: health and human care, spirituality,

Paper Type

Article / Conceptual paper

I. Background

From childhood we all have been remembering a famous quote "health is wealth". With a passage of time the very genesis of said proverb need to be given a fresh thought. Ever Changing world pose upon a new dynamic thrift into a new outlook and the phrase "health care" should be shifted to "human care". Health is one of the most important aspects of the entire wellbeing of a living creature. Human being is at the apex level of the living creature and thereby possesses the foundation encompassing not only health but, many other factors. Such many other factors are mental health, psychological

comfort, healthy environment, emotional balance, emotional support, inner peace, mental peace and so on. Life is not a single block but, built up by so many components and also do not survive in isolation so, one component affect the other one and if one component is not functioning properly or having effective functioning then certainly it will have negative or positive impact on other and thereby the overall wellbeing is determined with a genesis of level of functioning of different components.

In view of above, a comprehensive approach towards the life and wellbeing is a need for an hour and therefore, a holistic approach for a human care is the necessity.

* Doctoral Student - Ph.D in Management, B.K. School of Business Management, Gujarat University

** Associate Professor, Department of Mathematics, Gujarat University, Ahmedabad

II. What is Health ?

Health is not a state of absence of disease at physical level but, it is state of overall wellbeing both at physical and mental, psychological and also at emotional level. Health is a level of equilibrium between outer and inner world comprising positive and blissful well being and living a productive and meaningful life with a sense of self respect, self satisfaction. In 1948, however, the Constitution of the World Health Organization defined health as "a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity." This definition affirms that health is a positive, multidimensional state that involves three major domains: physical health, psychological health and social health (Straub, 2002).

III. What is holistic life style ?

Human life is having two aspects, (1) that connected with the physical body - called materialism and (2) that relating to the inner self (the soul) - known as spirituality.

Materialism stands for preferences for acquiring and possessing material things and comforts and having a life in which pleasures associated with the body are given priority above all.

Spirituality means having connected with the self and the soul and having a life in which actions are decided and performed with an object of the welfare of the soul. Priority is given to the soul compared to the body. So, way of life is "simple living, high thinking".

This implies, a man who is focussed with Spirituality needs to practice a prudent restraint or self control over the outward senses and stay happy and satisfied with what is possessed. In the event that, for instance, the consumption of food is kept reasonable, it has the twofold advantage of life span and security from illnesses. Then again the utilization of a lot of sugar, salt and fat can prompt to diabetes, hypertension and arteriosclerosis separately. Observing an excessive amount of TV or a too much exposure to PCs harms the visual perception. Youths today listen to noisy popular music, which seriously influences their listening to capacity. Overindulgence in sexual exercises diminishes the vitality of a person.

Individuals who rehearse and regular practice restriction and self control never encounter money crisis, keep up a sound body and solid personality. They are called individuals of character; they receive respect and regard from the general public, the society.

A study of the lives of great personalities (who given priority to the soul as their true guide in life) with ordinary general public (who strived for the bodily pleasures) reveals that real bliss, joy, satisfaction and happiness lie in taking soul at the priority. In spite of the fact that it is necessary and also important to take care of the body for survival, the lesson being highlighted here is that one should evolve from the lower physiological need to the higher level needs of the soul. Paying importance and prioritizing bodily and outward senses requirements leads to frustration. On the other hand, following the soul principally and also meeting the minimum needs and requirement of the body leads to the state of eternal bliss and permanent happiness. It is this happiness individuals are after today yet at times prevail with regards to discovering it.

IV. What is a holistic living ?

As mentioned above, life when taken is piecemeal that is to say one of the components of making life gives an impression of "wholeness" but, that is not the correct interpretation of perceiving the life. During secondary school days a very famous story was taught wherein seven blind people touches an elephant from different parts of the body and defines an elephant by saying an elephant is like a pillar by those who touched the legs, further saying that an elephant is like a thin rope who touched the end tail but, such a partial view, grasp, understanding and perceiving a thing or matter is really very dangerous as it is an old proverb having a meaning that half knowledge is more dangerous than the ignorance. In the same way a tag of Success / failure, happy / unhappy etc. cannot be attached to anyone by just looking in isolation - health (physical, mental), work (employment / business), bank balance, lifestyle, relationships in society etc. there arises the difference between wholeness vis-à-vis holiness. Looking to all the segment of a person's life viz. health (physical, mental), work (employment / business), balanced lifestyle, relationships in all sectors of society, it's all about living a wholesome with bliss and keeping a balance between body, mind and spirit.

V. Route of Human Care

It is true that individual cells have a finite life span, and when they die off they are replaced with new cells. As The New York Public Library's Science Desk Reference (Stonesong Press, 1995) notes, "There are between 50 and 75 trillion cells in the body.... Each type of cell has its own life span" (www.livescience.com)

This cell renewal is not a new experience for all of us. We have noticed that our hair falls daily and still we do not get bald (at least not until males reach a certain age). We donate blood and new blood cells are formed.

But, an interesting and striking point to be noted that if body cells get replaced at specific intervals then any disease associated should also have been vanished with the replacement of cells but, in reality this is not the truth. We can see people suffering from disease (Disease is disturbance in ease so, disease) since long period and many years. So, this proves that disease is not at body level, physiological level, in the body cells but, are having roots somewhere else i.e. at subtle body.

Subtle body is a combination of psycho-spiritual constituents. According to Bhagwad Gita, the subtle body comprises mind, ego and intelligence which control the gross physical body (13.6-7) .

Human care a holistic approach comprising well being at:

physical health = through preventing (and not curing) illness, exercise, adequate diet, lifestyle in conformity with upgraded and updated health care system

psychological health = through self acceptance, openness of mind, positive thinking and emotions

emotional health = through sensitivity, awareness, presence of mind, feelings and sentiments in right direction

intellectual health = through reading, learning, creativity, flexibility and acceptance to changing environment

social health = through nurturing relationships, sensitive and responsible to the social welfare

occupational health = through right choice of career option and profession, proper work-life balance

environmental health = through responsible to the elements of an environment and alignment with the environmental elements

spiritual health = through meaningful life, constant connection with the self and the supreme nature, authority - the God, following the ideal value system, discovering and sharing with others happiness, unconditional love, respect, bliss

VI. Why Spirituality should be the way for a holistic living ?

Spirituality should a way of life and not a technique or a tool time being. As mentioned above, it is pertinent to note that in human body, body cells are continuously and

periodically replaced by new cells but, disease remains in the body. Ideally with replacement of cells, disease should have been vanished so, it proves that illness is not at physical level but, at subtle level called the "sukshma shareera". There are five bodies comprising five significant layers of the human consciousness :

(1) The physical Consciousness (Annamaya Kosh) which is manifested in the activities of hormones and enzymes etc.

(2) The Awakened Consciousness (Pranmaya Kosh) which is active in the form of bioelectricity

(3) The Psychic Consciousness (Manomaya Kosh) which gives rise to bio-magnetism.

(4) The intuitive Consciousness (Vigyanmaya Kosh)

(5) The beatitudinous consciousness (Anandmaya Kosh) which subtly exists in the reticular Activating System in the Cortical Nuclei.

Any disease is the reflection of an absence of ease at the subtle level of consciousness. First a disease enters to Manomaya Kos and then finds a path towards the outer physical level so, unless and until a disease is cured at the subtle level of consciousness, it will still erupt even though get cured at outer physical level.

The human body is a complex ensemble of interlinked systems of over 75×10^{12} cells. A large number of independent 'powers' govern the activities of its various constituents. The 'power' behind the biochemical activities of the nucleic acids, genes and chromosomes in reproduction and other genetically controlled processes is an example of such creative powers. The defensive power of the body is manifested by the immune response. The vital power linked with bio electricity and bio magnetism is also amongst the most important subtle powers existing in our body. Due to their manifestation in the form of (bio) physico-chemical activities, the presence and extent of these powers can easily be measured by the technique like tissue histology, ECG, EMG, ELISA etc. The subtle effects of these vital powers are tremendous. These can be awakened and experienced by certain spiritual practices (www.awgp.org).

In addition to above, there are seven chakras and AURA are at the root of a state of healthiness or otherwise.

VII. Nuances engraving Spirituality

The word "Spirituality" comes from the Latin term "Spiritus", which means "breath". In its true sense Spirituality is highly individualistic and certainly applies at a personal level. Many have tried to institutionalize for the foundation of Spirituality and that is welcomed so as to channelize the group energy but, at its route Spirituality is an individual persona and multidimensional nuances of Spirituality caters to the individuals depending upon the individual capacity and level of consciousness. Therefore, many times it seems difficult to describe, explain and convince the foundation of spirituality.

1) Mr. P. Rajagopalachari (2002) says : "spirituality is the natural expression of once own inner Self. Spirituality is the science of divine human perfection up to the highest limit of divinization"

2) Kelemen and Peltonen (2005), opined : "Spirituality is a positive emotion that serves to bring together the rational and the embodied aspects of human life while at the same time reaching to make a connection with a larger universe. To make this a guideline for human existence at work, it is, however, necessary to understand it as an art, requiring regular exercise and constant working on one's self and one's relation to the world"

3) This student / author believe that : "Spirituality is the God's gift to the mankind given by way of an inherent virtue and quality that deals with introspection, magnification, refinement and purification of total physis, psychological and intellectual levels through managing the self and further nurturing intrinsic values and tendencies towards the supreme level of consciousness for attaining self actualization through the route of the balanced life between materialistic world and the inner world and generating value addition at both the personal level and for the mankind in general ".

Based upon the personal experience, characteristics of being Spiritual at individual level are the feel of : wisdom, emotions, awareness, completeness, living in the present, presence of mind, willpower, sacredness, sensitive, sensible, inner peace, inner love, joy and happiness, faith in oneself and to the God, unconditional love, acceptance, drive of excellence, balanced life, importance of the ethics, values and virtues in life, quest for the truth etc.

VIII. What encompasses Spirituality for the holistic living ?

Religion and Spirituality are two different connotations. Religion can be part of the Spirituality. "Spirituality is the

God's gift to the mankind given by way of an inherent virtue and quality that deals with introspection, magnification, refinement and purification of total physis, psychological and intellectual levels through managing the self and further nurturing intrinsic values and tendencies towards the supreme level of consciousness for attaining self actualisation through the route of the balanced life between materialistic world and the inner world and generating value addition at both the personal level and for the mankind in general ".

Spiritual practices may include meditation, mindfulness, prayer, the contemplation of sacred texts, ethical development and the use of psychoactive substances. Love and/or compassion are often described as the mainstay of spiritual development (Dalai Lama, 1999).

Waaajman discerns four forms of spiritual practices:

- Somatic practices, especially deprivation and diminishment. Deprivation aims to purify the body. Diminishment concerns the repulsemment of ego-oriented impulses. Examples include fasting and poverty.
- Psychological practices, for example meditation.
- Social practices. Examples include the practice of obedience and communal ownership, reforming ego-orientedness into other-orientedness.
- Spiritual. All practices aim at purifying ego-centeredness, and direct the abilities at the divine reality. (Waaajman, 2000).

Based upon the personal experiences, the student / author believes Spirituality can be developed through :

- 1) Thorough study of Vedas, Upanishads, ancient holy scriptures. Further rethinking and grasping the essence of such readings and implementation thereof.
- 2) Yoga, Pranayam techniques are quite useful for physical as well as mental health.
- 3) Gayatri Mantra is having a very powerful effect on the five bodies and 24 places in the human body. See below picture depicting the effect of Gayatri Mantra (www.awgp.org).
- 4) Healing is yet another tool for curing the illness at physical, mental and emotional level. Healing means to set right, restore to spiritual wholeness, health or soundness cure.



"Shiviyog" has proved the effective scientific tool for the healthy life.

The doctors who are combining Shiv Yog with their regular treatment are finding that:

- They are able to make better diagnosis
- The patients are more comfortable and receptive to them and respond well to the treatment they prescribe
- The recovery rate of the patients has improved
- Their own energy levels are very high
- They themselves now enjoy much better state of health
- They enjoy better reputation as their efficiency and quality of treatment is much better now. (<http://shiviyog.com/research/>)

- 5) Prayer, Meditation is widely known for the living holistic life. Einstein has rightly explained with a small formula $E = MC^2$. From above formula, a spiritual inference can be drawn that energy is formed from vibration and vibration is formed from thought which is an outcome of emotions and that energy leads to materialization.

So, it would be :- Emotion --> Thought --> Vibration --> Energy --> Materialization.

- 6) Giving unconditional love, respect to all, doing philanthropic activities with a view to "something to give back to the society" definitely helps to grow in manifold.

IX. What next ?

Spirituality should be a way of life and not a technique or a tool time being. More and more efforts should be towards development of Spiritual Quotient (SQ). Focus should be on interweaving Spirituality as a natural part of life addressing the interiors of human life through regular practice.

Spirituality is an essential component of a holistic approach to life, its finds expression in creativity and all art forms and is the bit that adheres together our conscious intellect and our intelligent action. Spirituality sustains us from within when all else fails; spirituality allows us to dream, aspire and raise ourselves up (<http://www.speakingtree.in/allslides/what-is-iq-eq-sq>).

X. Conclusion

The world has tried enough to take decisions and tackling health issues on the basis of different streams of medical sciences but, a deeper insight is required with a flare of spiritual dimension. Perhaps this is the only way left to take a try and which can be a source of hope for a healthier and sustainable living. We have to decide "what kind of health status required for the future?" and answer shall underlie to quest for the self awareness and subsequently providing guidelines to the next generations. Spirituality is somewhat less explored domain in the field of medical science so, a great scope to explore and reap the fruits. Spirituality is the gift of the God and is interwoven with the inner self however, need to be uncovered with the constant and continuous practice.

It's a very popular saying that - Journey being at home and also a very famous story of Zen master who realizes at the last stage of life that instead of changing the word, society it would be rather worth that I should first change myself - these two aptly answers the intricacy and issues being faced by an individual, the society, nation.

References

- 1) Straub R.O. (2002), Health Psychology, New York, Worth Publishers
- 2) <http://shiviyog.com/medicalmiracles/> (Source : <http://shiviyog.com/medicalmiracles/> retrieved on 14th December, 2017)
- 3) <http://shiviyog.com/research/> (Source : <http://shiviyog.com/research/> retrieved on 14th December, 2017)

- 4) http://www.awgp.org/spiritual_wisdom/gayatri/activation_of_internal_power_centres_by_gayatri_sadhan(Source : http://www.awgp.org/spiritual_wisdom/gayatri/activation_of_internal_power_centres_by_gayatri_sadhan retrieved on 14th December, 2017)
- 5) Shriram Sharma Acharya, "Astonishing Powers of Biophysical & Subtle energies of the human body", Shri VedmataGayatri Trust, 2012
- 6) <http://www.speakingtree.in/allslides/what-is-iq-eq-sq> (Source : <http://www.speakingtree.in/allslides/what-is-iq-eq-sq> retrieved on 14th December, 2017)
- 7) Rajagopalachari P. : Spider's Web , July 2002, Published by SRCM Chennai
- 8) Kelemen, M., &Peltonen, T. (2005). Spirituality: A Way to an Alternative Subjectivity?. Organization Management Journal, 2(1), 52-63.
- 9) Dalai Lama, Ethics for the New Millennium, NY: Riverhead Books, 1999
- 10) Waaijman, Kees (2000), Spiritualiteit. Vormen, grondslagen, methoden, Kampen/Gent: Kok/Carmelitana (retrieved through the source : <https://en.wikipedia.org/wiki/Spirituality#CITEREFWaaijman2000> on 20thDecember, 2017)
- 11) <http://www.livescience.com/33179-does-human-body-replace-cells-seven-years.html> (Source : <http://www.livescience.com/33179-does-human-body-replace-cells-seven-years.html> retrieved on 21st December, 2017)
- 12) http://www.awgp.org/spiritual_wisdom/scientific_spirituality/five_important_levels_of_the_human_consciousness (Source : http://www.awgp.org/spiritual_wisdom/scientific_spirituality/five_important_levels_of_the_human_consciousness retrieved on 22nd December, 2017)

Analysis of Agricultural Commodities at Multi Commodity Exchange in India

Priyanka Kansara* and Kamini Shah**

Abstract

Purpose

After demonetization people are eager to use various digital payment modes because now a day's different modes of payment are available. In other words we can say that e-payment is a method in which a person can make online payments for his purchase of goods and services without physical transfer of cash irrespective of time and location using various modes of digital payment. The aim of present study is to analyze the awareness of university students for digital payment system and how they perceive new payment method.

Design/methodology/approach

Inferential statistical research design is used for the present study.

Social Implications

India is expected to have significant share of youth in total population by 2020. So present study can help for assisting various government schemes, programme related to digital payment.

Findings

And it was found people are aware and there is no significant difference in their perception on the bases of various demographic factors like income, age, profession. It was found that most of the students are using banking cards and paytm. They consider digital payment system is better than traditional method of payment. So it is clear that students are aware about digital payment and there is great future ahead for this method of payment.

Research limitations

The study is restricted to 115 university students only and data has been collected through questionnaire which may suffer from the subjectivity biases of respondent.

Keywords: Digital Payment, Students, Digital Wallet, Online Payment, Payment System

Paper Type

The paper is empirical in nature.

Introduction

Payment are made using variety of mode which are known a payment instrument like cash , checks etc. so Digital payment is a method of making payment through digital modes.

Digital payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment. No hard cash is involved in the digital payments. All the transactions in digital payments are completed online. It is an instant and convenient way to make payments. The following are the different types of digital payments.

Evolution of payment system

Since 1960s digital payment system has been in operations and day to day there is a great improvement in this system. As the present digital modes of payment have been pass through barter system, commodity money metallic money, paper money, bank money and virtual money. Years ago there was no money. In barter system people exchange goods for goods without any valuation whereas the main advantage of plastic money is that there is no need to carry cash to make transactions

Electronic payment system is a mode of payments over an electronic network such as the internet. In other words we can say that e-payment is a method in which a person

* Assistant Professor, Smt. J. B. Patel College of Commerce Studies & Research, Anand - 388 001, Gujarat, India

** Associate Professor, Dept. of Business Studies, Sardar Patel University, Vallabh Vidyanagar-388 120, Gujarat, India*Corresponding Author

can make online payments for his purchase of goods and services without physical transfer of cash and cheque, irrespective of time and location.

Since many years the use of technology in various commercial activities increased to the emergence of various new supporting services in the marketplace. And as we know, payment is an integral part of commercial activities, digital payment system is an integral part of e-commerce.

The use of electronic distribution networks are payment systems activate a further practice in commercial sector since 1960s and especially for transfer of big amounts of money. Digital/Electronic payment system's concept has been affected by these changes.

Generally the term electronic payment means any payment to businesses, bank or public services from citizens or businesses, which are executed through a telecommunications or electronic networks using modern technology. From the above definition it is obvious that, the electronic payments that will be the object of present result, are the payment that are executed by the payer himself, whether the latter is a consumer or a business, without the intervention of the another natural person.

One more concept of digital payment is popular and that is the payment is made from distance, without the physical presence of the payer and naturally it does not include cash.

In other words an electronic payment system is a system of financial exchange between buyer and seller in the online environment that is facilitated by digital financial instruments.

So from the above it is clear that digital payment is a way of payment which is made through digital modes. In digital payment both the parties i.e. payer and payee use digital modes to make payment and to receive their dues. Electronic payment is also known as digital payment. Now a days digital payments are considered as one of the most easy instant and convenient method because this system save time as person pay digitally, he won't need to withdraw cash from account and can save him from long queues of ATMs and banks. It does not save time only but little bit money as well.

For development of national payment system of any country's central bank play main role in any country. In India reserve bank play main role. In India RBI of India

as Central Bank of a country playing crucial role and has taken different initiatives for a sound, safe, efficient and secure system. In India payment systems are regulated by Payment and Settlement Systems Act, (PSS Act). The PSS Act was legislated in December 2007 for introducing and upgradation of safe payment system in country. Central bank has taken different initiative. The dominant features of large geographic spread of the Country and the vast network of branches of the Indian banking system require the logistic of collection of delivery of paper instruments.

Digital Payment in Gujarat

Since the prime minister has announced to transform India into cashless economy, Gujarat has also joined in this. Various training and awareness programmes have been organized to train the people about cashless system. The main aim of such programme was to promote digital payment and aware people that how it can change society. Such training programmes include training to youth, communities and training to anganwadi workers, Asha workers.

After demonetization cashless transactions are very popular. There are various platforms for digital transactions which are as follow.

- NFC or MST transmission waves platform sound based payments platform
- Sound based payments platform
- Mobile Money Identifier
- UPI App based payments platform
- QR code based payments system
- USSD code payments system
- Aadhar enabled payment system
- Net banking payments platform
- Digital Wallet payment System
- Magnetic stripped cards.

To promote digital transaction some of the famous temples in Gujarat accept donation through

e-wallet and ATMs . For this purpose they introduced swipe machines as well. The trust has also started to accept e-payment for the "Prasad".

1. Review of Literature

Extensive research related to digital payment has been carried out from various perspectives. The review of

research studies at national and international has been presented in two categories viz.

(a) Studies outside India.

(b) Studies in India.

(a) *Studies outside India*

Chaudhari et. al. (2014) in their research paper, "A Study on Awareness of E-banking Services in college Students of Bhusawal City" Most of the students have their saving account in nationalized bank. They are aware about different e-banking services. Students trust & used net banking. ATM service is popular among students. It is also found that there is need to create awareness about digital security.

Gandhi et. al.(2014) in their research article, "Pre and Post Behavioral Study of Students regarding e-commerce and Cyber Security" In the field of e-commerce students had idea about purchase and sale only. Students don't have credit/debit card as they are not financially independent. Students are quite confident after getting knowledge of e-commerce. They are also ready to spread awareness among friends, parents and others.

Kher et. al. (2018) in their research article, "A study of Awareness among Youth About Digital India Initiatives". The study shows that from total respondents 81.25% female and 92.21% male were aware about the digital payment initiative.

Kalyani (2016) in his research paper "An Empirical Study about the Awareness of Paperless E-Currency Transaction like E-Wallet using ICT in the Youth of India" As with changing environment it is better and advisable to accept and adopt change. As the digital payment system is one of the advancement of modern financial system. Mobile wallet is popular among customers only for some specific services like paying bills, recharging etc. It is observed that awareness of mobile wallet and its practical usability is quite low.

Singh et. al. (2017) in their paper "Study of Consumer Perception of Digital Payment Mode" There was no significant difference was perceived by the respondents on the bases of gender, age, profession and annual income. Adoption of digital payment was influenced by education level. It was also found that the area where education level is high in such area acceptance of digital pyment is much higher.

(b) *Studies outside India*

Warwick et.al (2000) in his study, "Credit Card Consumer: College Students to sign in as customers. It is for their promotion activity. The study look after the credit card activity of students of Midwestern campus, the study reveals that majority of the students were not interested and don't have knowledge. They were using credit card but don't have detailed knowledge. There was a question on university and business schools that -Are they preparing their students to become knowledgeable customer?

Al-Amer, 2006 in their research work on, "Young Generation Attitude and Awareness Towards the implementation of Smart Card in Bahrain: an exploratory Study" As smart cards are one of the advancement and innovation of information and communication technology. For the present study data was collected from students of university of Bahrian through questionnaire. The study examines the impact of government for awareness program for usage and features of the smart cards.

Raihan et.al.(2013)"A Risk perception Analysis on the use of Electronic Payment System by Young Adults" Nation's competitiveness can be increased by use of e-payment system as it is beneficial both to customer and service providers. The Customer satisfaction is depends on how risk is perceived by them.

Davies (2017) in his research work, "To study university Student's Perception towards their cashless financial transaction" The cashless method is used by young people as they are more aware of technology. It was also clear that all participants compare methods of payment to determine time consumed by each. The study shows positive perception towards cashless financial transaction. The perception of university students was quite different from other generation people.

Research Gap:

Most of the studies were on particular mode of payment like digital wallet, pay-tm and credit card but for overall digital payment awareness studies have not been attempted by any researchers in India. No particular studies have been conducted particular for students for digital payment awareness and perception. Most of the studies are carried out of India.

3. Research Methodology:

3.1 Identification of the research problem:

Youth being enthusiastic, vibrant, innovative and dynamic in nature is the most important section of the population. Youth shows strong passion, motivation and will power which also make them the most valuable human resource for fostering economic, cultural and political development of a nation. India has world's second largest population. As per one survey population of India in the year 2018 is estimated 1.35352 Billion. India is expected to have 34.33% share of youth in total population by 2020.

It is need of the hour to welcome digital payments in an era of technology revolution. Indian government has great focus on digital India and making the country cashless economy. It is therefore relevant to pay attention towards awareness and perception of people about digital payments. The primary research question for this study has been identified as follow:

"Awareness and perception about digital payment among university students"

3.2 Objectives of the study

1. To study awareness about digital payment among university students.
2. To know whether students using digital payment service or not.
3. To study the sources of information about digital payment.
4. To understand how students perceive digital payment service
5. To understand various risk and challenges faced by students while using digital payment.

3.3 Research Design:

This research applies the inferential statistical research design.

3.4 Data collection

The data for the present study was collected from primary and secondary sources. Secondary data was collected from websites, newspaper, journals, magazines etc. Primary data was collected through structure questionnaire. Questionnaire was distributed among students.

3.5 Sample Size & Technique:

The sample size consisted of 115 student respondents.

Convenience sampling technique was used for a period of one month August.

3.6 Hypotheses of the study:

The following hypotheses have been examined:

1. There is no significant awareness about digital payment among students.
2. There is no significant difference in the awareness among P.G. and U.G. students.
3. There is no significant difference in the perception of male and female students.
4. There is no significant impact of age on their perception.
5. There is no impact of family income on their perception about security while using digital payment.
6. There is no impact of residential area on their awareness for digital payment information.

3.7 Data Analysis and Interpretation:

The collected data from the different sources were analyzed using appropriate statistical techniques like t-test, chi-square test, Anova test, Excel and SPSS etc. Frequency analysis has been done to analyze the awareness of respondents about digital payment. For analyzing perception of respondents on the basis of their age and family income, chi-square test and for analyzing their perception on the basis of income and education, Anova test has been used.

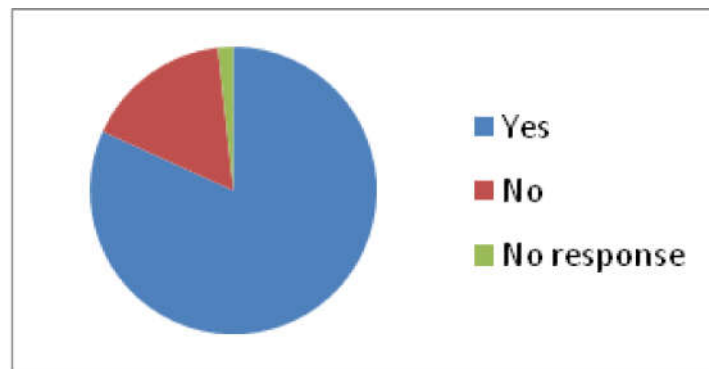
Table 1 Demographic Profile of Respondents

	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Gender</i>	<i>Female</i>	50	43.5
	<i>Male</i>	65	56.5
<i>Age</i>	<i>18-21 years</i>	70	60.9
	<i>22 to 26 years</i>	37	32.2
	<i>27 to 35 years</i>	8	7.0
<i>Faculty</i>	<i>Arts</i>	3	2.6
	<i>Commerce</i>	60	52.2
	<i>Science</i>	48	41.7
	<i>Others</i>	4	3.5
<i>Degree</i>	<i>Diploma</i>	3	2.6
	<i>M.Phil</i>	4	3.5
	<i>P.G.Diploma</i>	4	3.5
	<i>Ph.D</i>	3	2.6
	<i>Postgraduate</i>	39	33.9
	<i>Undergraduate</i>	62	53.9
	<i>No response</i>	3	2.6
<i>Family income</i>	<i>Upto 15000</i>	47	40.9
	<i>15001to 25000</i>	28	24.3
	<i>25001 to 40000</i>	14	12.2
	<i>Above 40000</i>	23	20.0
	<i>No response</i>	3	2.6
<i>Residential area</i>	<i>Rural</i>	43	37.4
	<i>Semi urban</i>	22	19.1
	<i>Urban</i>	50	43.5

From the above table 1, it is clear that majority 60.9% of the total respondents are between 18 to 21 years of age whereas only 7% are of 27 to 35 years of age. From total respondents 56.5 % were male and 43.5 were female. 53.9% of them are undergraduate degree and 2.6% have Doctoral degree 40.9% of the respondents have their monthly family income below Rs. 15000 20% of them have above Rs. 40000 income and 2.6 of them

have not responded for their family income. 43.5% of them were belongs to urban area whereas 19.1% were from semi urban area. Most of the respondents (52.2%) were from commerce background and only 3.6% were from arts.

Statistical Analysis:

Figure 1 Awareness about Digital Payment

The above graph indicates that from the total respondents around 81.7% are aware and using or plan to use digital payment method. Only 16.5% have never used digital payment system. And only 1.7 % has not responded.

H1: There is no significant difference in the awareness among P.G and U.G students for information about digital payment.

Table. 2 Descriptive statistics

Score of enough information about digital payment		N	Mean	s.d	Standard error
	Post graduate	39	1.3590	.48597	0.07782
	Undergraduate	62	1.3710	0.48701	0.06185

Table.3 t- test for PG and UG students means

	Levene's test for equality of variance		t-test for Equality of means						
	F	Sig	T	DF	Sig.(2tailed)	Mean difference	Std. error Difference	95% confidence interval of the Difference	
	Lower	Upper	lower	Upper	lower	Upper	lower	Upper	Lower
Equal variance assumed	0.059	0.808	-0.121	99	0.904	-0.01199	0.09945	0.18534	-0.20933
Equal variance not assumed			-0.121	81.031	0.904	-0.01199	0.09940	-0.20977	0.18579

We can observe that the mean of UG students is higher than PG students. This indicates that UG students have more information compare to PG students. As p value is 0.904 which is more than 0.05 so we accept null

hypothesis. It means there is no significant difference in the mean score of UG and PG students.

H2: There is no significant difference in the perception of male and female students.

Table.4 descriptive statistics for male and female

Score of enough information about digital payment		N	Mean	s.d	Standard error Mean
	Male	65	1.2462	0.43412	0.05385
	Female	50	1.4600	0.50346	0.07120

Table.5 t-test for Equality of means of male and female

	Levene's test for equality of variance		t-test for Equality of means						
	F	Sig	t	DF	Sig. (2tailed)	Mean difference	Std. error Difference	95% confidence interval of the Difference	
	Lower	Upper	lower	Upper	lower	Upper	lower	Upper	Lower
Equal variance assumed	15.820	0.000	-2.442	113	0.016	-0.21385	0.08756	-0.38731	-0.04038
Equal variance not assumed			-2.396	96.829	0.019	-0.21385	0.08927	-0.39102	-0.03667

We can observe that the mean of female is higher than male students. This indicates that female students have more information compare to male students. As p value

is 0.019 which is less than 0.05 so we cannot accept null hypothesis. It means there is significant difference in the mean score of male and female students.

H3: There is no significant impact of age on their perception.

Table. 6 ANOVA test for Impact of Age on their Perception

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig
The cost of using digital payment mode is high	Between Groups	2.167	2	1.083	0.519	0.597
	Within Groups	234.007	112	2.089		
	Total	236.174	114			
Do you think that digital Payment system is not necessary?	Between Groups	1.541	2	0.770	0.356	0.701
	Within Groups	242.407	112	2.164		
	Total	243.948	114			
How much satisfied are you with the service of digital payment?	Between Groups	5.051	2	2.525	1.663	0.194
	Within Groups	170.115	112	1.519		
	Total	175.165	114			
Continues using digital payment	Between Groups	0.030	2	0.015	0.718	0.491
	Within Groups	1.929	93	0.021		
	Total	1.958	95			

Table 6 helps in drawing following inferences:

- $p = 0.597$ for their perception about cost of using digital payment is high which is Higher than 0.05 and therefore there is no significant difference in their perception.
- $p = 0.701$ for their perception about their thinking digital payment system is not necessary which is higher than 0.05 and therefore there is no significant difference in their perception.
- $p = 0.194$ for their perception about their satisfaction with digital payment which is higher than 0.05 and

therefore there is no significant difference in their perception.

- $p = 0.491$ for their perception about their thinking about continuous using of digital payment system is higher than 0.05 and therefore there is no significant difference in their perception.

So we can conclude that Age of respondents do not have much impact on their perception.

H4: There is no impact of family income on their perception about security while using digital payment.

Table.7 Cross tabulation for income

Income		SD	Disagree	Undecided	Agree	SA
	Upto 15000	1	2	3	26	15
	15001 to 25000	0	3	1	13	11
	25001 to 40000	0	0	1	5	8
	Above 40000	0	1	2	9	11
	Total	1	6	7	53	45

Table.8 Chi-Square Tests

	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.851	12	.797
Likelihood Ratio	8.608	12	.736
N of Valid Cases			0.467

a. 13 cells (60.0%%) have expected count less than 5. The minimum expected count is .13

Table shows p value of chi-square test is .797 which is higher than 0.05, therefore null hypotheses cannot be rejected at 5% level of significance. Therefore there is no

association between family income and their perception for security while using digital modes.

H5: There is no impact of residential area on their awareness for digital payment information.

Table.9 Chi-Square Tests

	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.483	2	.014
Likelihood Ratio	8.209	2	0.016
N of Valid Cases	115		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.46

Table shows p value of chi-square test is 0.014 which is less than 0.05, therefore null hypotheses is rejected at 5% level of significance. Therefore there is association between residential areas and their awareness about digital payment awareness.

3.8 Major findings

1. Majority of the respondents 81.7% using /plan to use digital payment system.
2. Residential area of respondent has much impact on their awareness.
3. Family income of respondent has no impact on their perception
4. Age of respondent not have much impact on their perception.
5. There is significant difference between perception of male and female.
6. There is no significant difference in the awareness and perception of UG and PG students.
7. Most of the respondent 34.8 have been informed about digital payment through friends and relatives.
8. Network connectivity is one of the most important problems faced by respondents.
9. Majority of respondents 80.9% believes that digital payment system can reduce corruption in India.

10. 84.3% of respondents agree that digital payment system is better than offline system.
11. 73% of respondents were agreed that digital payment system can eliminate to bring money which is beneficial.
12. Only 1.7% of respondents have never used digital payment mode whereas 47.8 % are using many times.
13. 81.7% of respondents want to continue using digital modes of payment.

3.9 Limitations of the research

1. The study is restricted to university students only.
2. Primary data was collected through questionnaire which may suffer from the subjectivity biases of the respondent.
3. The present study is limited to only 115 respondents of university. Although the care has been taken in selecting the samples but then also it may not be representative of the actual population.

3.10 Scope for further research

1. Similar type of studies can be undertaken for other emerging technology.

2. The study can be expanded to cover the state wise implementation and awareness among respondent on digital payment.
3. Similar study for other stakeholder viz., school students, millennial, rural population senior citizens etc. would be interesting to carry out.

Conclusion

The study reveals that the students are highly aware about digital payment. As most of the respondents consider digital payment system easy, convenient and time saving as it is available 24*7. It will definitely help students of all faculties and all age from different residential area. It will also help. Digital payment will help for betterment of students.

References

- Al-Alawi, A. I., & Al-Amer, M. A. (2006). Young generation attitudes and awareness towards the implementation of smart card in Bahrain: an exploratory study. *Journal of Computer Science*, 2(5), 441-446.
- Chaudhari, A., Patil, M., & Sonawane, M. (2014). A Study on Awareness of E-Banking Services in College Students of Bhusawal City. *International Journal of Innovative Research and Development*, 3(1).
- Davies, A. E. (2017). To Study University Students' perceptions Towards Their Cashless Financial Transactions (Doctoral dissertation, Cardiff Metropolitan University).
- Desai, H. V. (2014). Pre and post behavioral study of students regarding e-commerce and cyber security, *Journal of Global Research in Computer Science*, 3(2), 30-32.
- Kalyani, P. (2016). An Empirical Study about the Awareness of Paperless E-Currency Transaction like E-Wallet Using ICT in the Youth of India. *Journal of Management Engineering and Information Technology*, 3(3), 18-41.
- Ab Hamid, N. R., & Cheng, A. Y. (2020). A risk perception analysis on the use of electronic payment systems by young adult. *order*, 6(8.4), 6-7.
- Singh, S., & Rana, R. (2017). Study of Consumer Perception of Digital Payment Mode. *Journal of Internet Banking and Commerce*, 22(3), 1-14.
- Warwick, J., & Mansfield, P. (2000). Credit card consumers: College students' knowledge and attitude. *Journal of Consumer Marketing*, 17(7), 617-626.

Websites:

https://www.google.co.in/search?q=1.+https%3a%2f%2fwww.payumoney.com&rlz=1c1rnra_enus505us505&oq=1.+https%3a%20%2fwww.payumoney.com&aqs=chrome..69i57.2402j0j8&sourceid=chrome&ie=utf-8 (2018, July 15)

https://www.google.co.in/search?q=2.+www.google.co.in&rlz=1c1rnra_enus505us505&oq=2.+www.google.co.in&aqs=chrome..69i57.1187j0j8&sourceid=chrome&ie=utf-8 (2018, July 21)

https://www.google.co.in/search?q=3.+http%3a%2f%2fwww.narendramodi.in%2f&rlz=1c1rnra_enus505us505&oq=3.+http%3a%2f%2fwww.narendramodi.in%2f&aqs=chrome..69i57.8796j0j9&sourceid=chrome&ie=utf-8 (2018, July 28)

https://www.google.co.in/search?q=4.+http%3a%2f%2fiosrjournals.org%2f&rlz=1c1rnra_enus505us505&oq=4.+http%3a%2f%2fiosrjournals.org%2f&aqs=chrome..69i57.4995j0j9&sourceid=chrome&ie=utf-8 (2018, July 30)

https://www.google.co.in/search?q=5.+http%3a%2f%2feconomictimes.com&rlz=1c1rnra_enus505us505&oq=5.+http%3a%2f%2feconomictimes.com&aqs=chrome..69i57.4192j0j9&sourceid=chrome&ie=utf-8 (2018, August 1)

https://www.google.co.in/search?q=6.+http%3a%2f%2fwww.kaavpulations.org&rlz=1c1rnra_enus505us505&oq=6.+http%3a%2f%2fwww.kaavpulations.org&aqs=chrome..69i57.3796j0j9&sourceid=chrome&ie=utf-8 (2018, August 9)

https://www.google.co.in/search?q=7.+http%3a%2f%2fwww.business-standard.com&rlz=1c1rnra_enus505us505&oq=7.+http%3a%2f%2fwww.business-standard.com

com&aq=chrome..69i57.3986j0j9&sourceid=chrome&ie=utf-8 (2018, August, 9)

https://www.google.co.in/search?q=8.+http%3a%2f%2fwww.forbes.com&rlz=1c1nra_enu505us505&aq=chrome..69i57.11838j0j9&sourceid=chrome&ie=utf-8 (2018, August 9)

https://www.google.co.in/search?q=9.+http%3a%2f%2f+www.allresearchjournal.com&rlz=1c1nra_enu19505us505&aq=chrome..69i57.4363j0j9&sourceid=chrome&ie=utf-8 (2018, August 10)

https://www.google.co.in/search?q=10.+http%3a%2f%2f+www.irmbrjournal.com&rlz=1c1nra_enu505us505&aq=chrome..69i57.5115j0j9&sourceid=chrome&ie=utf-8 (2018, August 16)

https://www.google.co.in/search?q=11.+http%3a%2f%2fwww.ijera.com&rlz=1c1nra_enu505us505&aq=chrome..69i57.4001j0j9&sourceid=chrome&ie=utf-8 (2018, August 16)

Cluster Branding: Issues and Challenges

Bhamra Manmeet Harjit* and Kaushal Kishore**

Abstract

Purpose: This paper has worked on to define the role of clusters and its significant role in the development of an economy. This paper also made an attempt to understand the issues and challenges evolve around clusters and how branding can help them to survive.

Design/methodology/approach: With the help of several secondary data sources, authors tried to understand the linkages between clusters and branding in general.

Findings: Cluster branding in developing economy has its own importance. Cluster initiatives are organized efforts to increase growth and competitiveness of different clusters within a region. Cluster supports the economy in accelerating the industrialization, introducing and developing innovations, creating employment and attracting FDI etc. Although clusters offer several benefits to the economy and firms but sustainability and scalability of such clusters require some meaningful insights from academia and policy makers.

Research limitations / Implications: In this study, the major limitation was the data collection, as it was done through secondary sources only, which added to further challenge. The secondary data analysis and study had its limitations on coverage of Indian clusters. The branding of clusters in India is still evolving and soon researchers will have more information to access.

Keywords: Clusters, Cluster initiatives in Gujarat, Cluster Branding, Cluster's stakeholders

Paper Type: Conceptual

Overview:

Porter (1990) has defined that clusters and national competitiveness have become key concerns of government and business. Rosenfeld (2005) in a study suggested that clusters have become a pot of gold for economic development. In many developed nations, especially the European nations, cluster has been playing an essential role in the overall development which is not only business oriented but for all the other aspects like tourism as well. In these nations, not only the big renowned Multinationals Corporations (MNC) companies but also Small and Medium Enterprises (SME) have gained from cluster initiatives through recognition and investments. As these companies work together like a community for the overall benefits in the long run, thus it is being said that clusters co-operate, instead of just competing with one another. Such arrangements not only give them financial gains, but also helps them for better productivity and human resource skill enhancement.

In this competitive world, globalization has become a common phenomenon where nations around the globe are competing for better funding, which might be advanced

through cluster initiatives. Thus, in order to achieve all these gains, it becomes essential for all the clusters to better themselves differently in the eyes of the world to get better recognition and identity. Ivan Boesso (2012) studied that "Globalization has dramatically increased the need for specialization and excellence for clusters to foster and accelerate".

The major challenge is that, the clusters categorically don't know what they really stand for in the initial stages of their development, which leads to poor visibility and lack of identification in the eyes of the world (potential investors). The absence of clarity, poor investments and low degree of commitment of members and stakeholders are the prime reasons of failure of clusters.

Branding is known for its impact on stakeholders in the form of identity, competitiveness and survival. Considering the issues and challenges with clusters, role of cluster branding has emerged.

Research Methodology:

This study was conducted as an attempt to understand the perspective of the clusters, cluster branding and

* Ph.D. Scholar, School of Petroleum Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar, Gujarat

** Assistant Professor, School of Petroleum Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar, Gujarat

various challenges and procedures involved in cluster branding as a concept. Data collection for the study was purely through secondary sources as the study on cluster branding is still evolving in India. The data collected for the study was through several studies done in the past, including academic literature and practitioners oriented reports in the field, which were thoroughly reviewed. Several websites of the companies, consulting firms and government's agencies were referred as part of study.

Literature Review:

Rosenfeld (2005) has defined that almost any geographical grouping of similar or complementary companies, can be described as a cluster. Porter (1990) has introduced the concept of a business cluster in 1990, as "a geographical concentration of interconnected businesses, suppliers, and associated institutions in a particular field". Rosenfeld (2005) has confirmed that definition of clusters by Porter has remained almost the same except in 2005, where he (Porter) re-defined cluster, "as a geographic concentration of interconnected companies, specialised suppliers, service providers and firms in related industries and associated institutions in a particular field that compete but also cooperate". Sarkar (2014) has suggested that "the targeting of industrial development programmes at specific industry clusters generally will provide greater economic development benefits than those associated with more unfocused industrialization".

Solvell, Lindqvist, & Ketels (2003) examined many clusters, however, face branding and image related challenges. Koszarek (2013) has suggested that in today's competitive environment, it is important for clusters to differentiate themselves with the strategic focus on the development of branding and marketing strategies.

Several studies on branding has emphasized on that how branding is important for a cluster's development and overall success. It becomes essential for clusters to understand the importance and then formulate a proper branding strategy, will help to attract investments and skills. The branding strategies will also maintain the interest of the internal existing members and would help in long term survival of the cluster as a brand.

In a globalised scenario, it becomes essential for a cluster to know their own importance, identification and to know what they really stand for and what they want to achieve eventually from this cluster setting. Answering such questions ensure that these clusters will formulate branding strategies in order to make the cluster a success in the competitive world.

To support the industries and clusters, government of India and state governments have taken many initiatives as a safeguard for such emerging companies in particular geographical areas. The state government of Gujarat understands the importance of cluster development and tried to support them through policy intervention. Government of Gujarat (2016) stated that, "The development of small and medium enterprises has taken place in the form of different industrial clusters. There are, in all 83 industrial clusters for different industry groups have been identified in the state, developed at a number of different locations. The approach of cluster-based development has helped in improving cost competitiveness of the industries by way of creating common facilities, developing market centres and brand names, promotion of skill".

The State Government has also further taken initiatives to extend support for further solidification these clusters through involvements such as, technology up-gradation, quality improvement, setting up of common facility centres, skill development facilities, etc. with the active assistance of R&D institutions, as well as industry associations (Annexure-2).

Pathak (2015) in an article informed that "Gujarat Maritime Board, Government of Gujarat, (2016) in an article informed that, the regulator of private-sector ports and marine activities in the state, plans to set up a maritime cluster by 2017 on the lines of the ones that exist in London, Rotterdam, Hong Kong and New York. These clusters house maritime-related service providers such as ship owners, shipping agents, ship chandlers, and shipping finance and insurance firms and maritime education institutes.

The maritime cluster has potential to become a hub for the entire country but not only for the state of Gujarat. This geographic concentration of interconnected maritime companies will not only compete with each other, but will also cooperate to support rapidly growing shipping industry of the nation.

Solanki (2009) referred that the government of India, under the development for handloom has sanctioned a total of 419 handloom clusters, among which 9 handloom clusters are based out in Gujarat. In the year 2008-2009 these clusters were sanctioned and were allotted to Gujarat state handloom and Handicraft Corporation. Cities like Gandhinagar, Junagarh, Amreli, Porbandar, Vadgam, Bhuj and Ahmedabad are being sanctioned

under it. These efforts are done for the overall up-liftment of the textile industry of the nation, in which handloom and weavers clusters are playing an integral role. Ministry of Textiles (2018) confirms that Patan and Bhujin Gujarat has been identified as clusters by Ministry of Textiles. iNDEXTb (2016) informed that, the Government has decided to recognise a cluster with a critical mass of a minimum of 50 units located within the radius of 10 km at a particular location.

Government of Gujarat (2016) confirms that the development of small and medium enterprises has taken place in the form of different industrial clusters. There are, in all 83 industrial clusters for different industry groups have been identified in the state, developed at a number of different locations. The approach of cluster-based development has helped in improving cost competitiveness of the industries by way of creating common facilities, developing market centres and brand names, promotion of skill (Please refer Annexure-1).

The Gujarat State government is not only targeting and concentrating on the brand development of textile or marine cluster development but also other major areas of industrial cluster development like that off the ceramic industry which is one of the speciality of the state. lyndem (2015) in an article informed that, "the curtains rise once again on Indian Ceramics 2015, there is no better time than now to reflect and emphasise how branding is a key prerequisite for success in the ceramic industry as in any other, in particular, ceramic tiles.

Government of Gujarat (2016) confirms that the state government, while realising the power and the important role of clusters in the development of the economy of the state has now decided to support the formation and existence of clusters by not only providing them necessary financial assistance but also technical and managerial assistance in order to strengthen the cluster development in the state (Please refer annexure-2).

When talking about cluster branding, it should not only be limited towards business to consumers companies (B2C) but also cover business companies (B2B). Which can be explained, considering the scenario of ceramic industry, according to the lyndem (2015), the sales portion which is contributed by manufacturers and builders towards industrial building is way ahead than the contribution from the sales to direct consumers. Thus, it reflects the importance to motivate the regional B2B

companies to not only participate in clusters as a member but also to make their clusters let seen in front of the global economy. This can be clearly witnessed in Gujarat, through Morbi's ceramic clusters which is said to be the 2nd largest cluster in the world according.

Discussions:

According to Solvell, Lindqvist, & Ketels (2003)"branding is the sole reason why cluster initiatives fail majorly".Andersson , Solitander, & Ekman (2012) explained, "The general benefits from branding of cluster can be recognition, reduction in risk which would in turn increases opportunities and visibility".

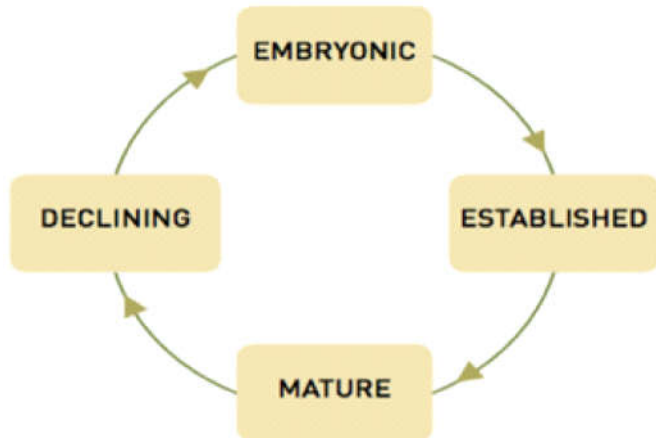
The various literature review suggests that how branding can help to make or break the success of a cluster, as it has a major impact on the growth competitiveness along with growth performance of the clusters. Thus, it is essential for these cluster organizations to properly plan and execute a successful brand building activity for their success.

While once achieving these benefits from cluster branding the cluster organizations eventually become much stronger, profitable and also helps them to build and maintain positive corporate reputation which in the end helps the cluster organizations in support of FDIs and global recognition. Especially which is beneficial to small and non-reputed enterprise members of the cluster, on the other hand, increases talent attraction, export promotion, and sales which leads to economic gains. Being in a cluster organization it helps the member companies economically, they become much clearer about their strategic development (their company specific) and technological innovation processes as the outcome of cross learnings.

According to Andersson , Solitander, & Ekman (2012) two factors stand out for branding and marketing of clusters: first the size of the geographical location the cluster covers, and second, the stage of a cluster's development, described by its position in a life- cycle perspective. Geographically defined clusters have three types - city or municipality clusters, regional clusters (which can cover several municipalities) and virtual clusters (several nations can be the member). Regional clusters can also be a virtual cluster in the sense that the cluster organization can include national and international members; but still maintain a regional hub for its activities. Another factor which effects the branding strategy of the cluster is the life cycle of the cluster and where the particular cluster stands in (which stage).

The life - cycle perspective defines how clusters develop over a period of time. They emerge, grow, mature and finally decline. The cluster life cycle guides the cluster architects to understand what kind of support and strategic interventions clusters may need at different stages of development.

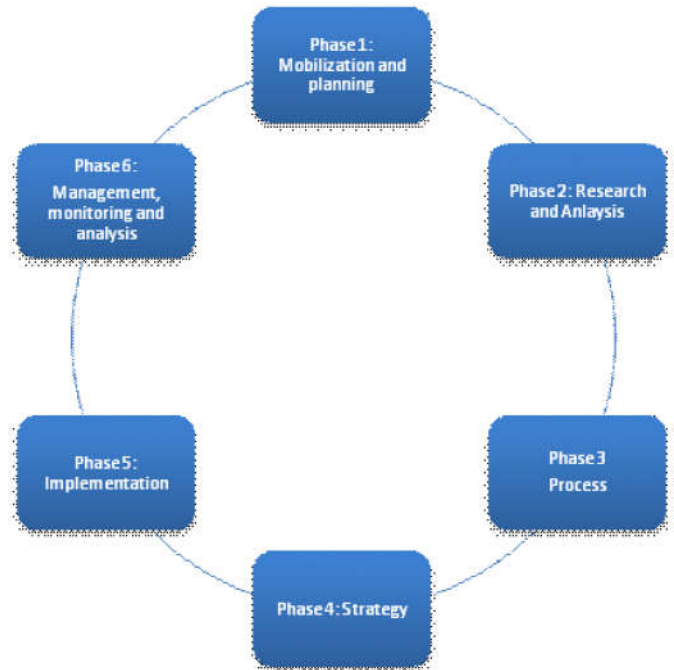
Cluster Life cycle by Andersson , Solitander, & Ekman , (2012)



Embryonic is the early stage, cluster is still growing and still has the potential to grow further. In mature stage cluster has almost achieved its objective or is still stable but has very few chances to grow, and lastly, declining stage where the cluster is falling and such stage it can either reinvent or end the cycle. Like in the early stage of cluster, the clusters need to make themselves known or being showed to the world, in order to increase their recognition and identity and like in the next stage of Established the cluster still may need to work on attractiveness and differentiation in order to attract proper funds and manpower. But as the cluster develops, focus can be shifted from communicating the merits of the cluster organisation and the cluster to emphasis on individual cluster actors and solutions to a larger audience.

The cluster brand Management Process - According to Andersson , Solitander, & Ekman , (2012), "the most unique element of cluster branding is how the cluster brand is actually public good and benefits several different stakeholders and many different purposes. Even though cluster branding is a management issue, there are actors involved from both ends private and public". which resultantly makes it very challenging as all the actors have different interests.

Six Phases of a cluster Brand Management Process by Andersson , Solitander, & Ekman , (2012);Vainola(2015)



As reflected in the above figure Andersson, Solitander, & Ekman, (2012) has developed a model representing the six phases of cluster branding process. The first phase is mobilization and planning which dealt with building interest, creating participation and planning by stakeholder. A team is being formed for brand building process with the support of formal management structure. The second phase is research and analysis. This stage of brand building procedure majorly involves understanding the brand distinctiveness of the cluster, the brand appearance and potencies of the cluster becomes really vital. And it becomes important to listen to stakeholders, as it effects their inclination to support. The third phase is the process, this stage involves action from the previous stages, where it requires materializing the branding platform in a comprehensive process. Which also may involve expressing brand vision and also deliberate upon how the cluster wishes to seen as a brand in the future. The fourth phase is strategy, this stage basically indulges in creating or deciding and working on a primary branding strategy which includes deciding on basic values, the positioning, marketing and communicating strategy or plans etc.

The fifth phase is implementation which talks about making things work. Making the plan work also bring brand to life. Last but not the least, the sixth phase is management,

monitoring and evaluation. During this phase, the evaluation of the previous phase is done, ensuring that the process runs smoothly, branding promises are achieved and modification is done. Sometime cluster brand audit can take place measuring and evaluating how the branding strategy implementation and management has progressed and functioned

When talking about the success of a cluster organization, the cluster manager plays an important role. The manager of the cluster is not only expected to be knowledgeable regarding the specific area where the cluster operates but also, he should have that overall personality which eventually plays a vital role in the contribution of the success of cluster organization. The cluster manager should have proper networking skills and connections which have a significant function. Additionally, cluster manager does involve branding and selling of what the cluster intends to do, considering both tangibility and intangibility aspects pragmatically. Vainola (2015), "the cluster manager has a significant role both in cluster branding and also in the overall success of the cluster".

Cluster Branding has its own limitations and challenges. When it comes to the cluster initiatives SME's are the ones which are greatly benefitted but compare to large companies. Big companies sometimes think that their brand is being diluted as SMEs contribution and recognition is most of the time is question mark. Due to which cluster members showing lack of commitment and finally disrupt the speed of cluster branding.

To make cluster initiatives and branding effective, the stakeholders like media, potential members or investors, financial institutions, policy makers and also the customers can be engaged in various ways. And for that the cluster manager and the cluster as whole have to choose appropriate communication tools in order to convey the cluster's message to such stakeholders and target masses. Andersson, Solitander, & Ekman (2012); Vainola (2015) in their study suggested that unlike products and corporate branding, geographical branding or branding for a cluster is under the control of one single central authority, making co-ordination challenging.

Conclusion:

It seems clear that the branding and marketing of cluster has many challenges. And in order to motivate efforts towards the effective branding and marketing of clusters, a set of actions needs to be undertaken. And definitely from the all the studies it clearly reflects that making the

cluster more visible can work in the success of cluster brand management. And with this the cluster clearly needs to show their USPs or competitive advantage in order to become a successful cluster initiative, thus it is recommended that the cluster branding initiative should have a clear set of processes. Involvement of cluster members is essential in order to secure their commitment to the cluster as a brand. Effective branding and communication requires different tools and channels, different marketing activities like trade fairs or basically making one's cluster visible at the respective markets, the cluster should use a mix of both traditional and non-traditional channels tools. The cluster managers should seriously think about the PR activities that can well support the overall reputation of the cluster as well as drive certain specific issues.

Cluster initiatives have to be supported at a regional level with the full involvement of the local authorities in order to succeed in the pursuit of branding and marketing of the cluster as a brand. Cluster branding should be consistent with the image of the region and it should be part of territorial marketing strategy. SME based clusters in Gujarat which have huge potential with the support of policy at the regional and national levels both which is being given by the Government. A cluster's strategic marketing and branding capacity is significantly improved by public source and co-funding. Clusters when in the initial stage of development should not only pay attention on the marketing and branding aspects, but also should keep a holistic concentration on the other factors.

Limitations:

This study was attempted to understand cluster and cluster branding through based on several studies done in India and abroad. Any geographical grouping of firms which belong to similar field is known as a cluster. The finding on clusters suggested that branding can support such clusters in many ways for which a different level of study was expected.

In this study, the major limitation was the data collection, as it was done through secondary sources only, which added to further challenge. The secondary data analysis and study had its limitations on coverage of Indian clusters. The branding of clusters in India is still evolving and soon researchers will have more information to access.

The future scope for the study has a huge potential, as the study can be carried out with an Indian context, keeping in mind that the sector of cluster and cluster branding is

still in the introductory stage. The data collection can be more primary data oriented, where the major insights can

come from current cluster managers, cluster members and policy makers.

**Annexure-1: Some important industrial clusters identified in Gujarat
(Government of Gujarat, 2016)**

Sr. No.	Type of Cluster	Location
1	Brass Parts	Jamnagar
2	Castings & Forgings	Ahmedabad, Bhavnagar, Jamnagar, Rajkot, Vadodara, Anand
3	Ceramics	Morbi, Thangadh, Himatnagar, Ahmedabad
4	Chalk Industry	Porbandar
5	Common Salt	Anjar, Gandhidham, Dasada
6	Dyestuff	Ahmedabad
7	Data Processing	Ahmedabad, Surat
8	Diamond Processing	Ahmedabad, Surat
9	Fabrication	Ahmedabad, Vadodara
10	Fish Processing	Veraval
11	Machine Tools	Rajkot
12	Oil Engines	Rajkot
13	Power driven Pumps	Ahmedabad, Mehsana
14	Re-rolling Mills	Bhavnagar
15	Textiles	Ahmedabad, Dholka, Surat
16	Textiles-Ginning	Ahmedabad, Manavadar
17	Textiles-Printing	Jetpur
18	Textiles-Khadi	Wadhvan
19	Textiles-Finishing	Bhuj
20	Textiles-Synthetic	Surat , Mangrol
21	Jari-Printing	Surat
22	Textiles-Powerloom	Ahmedabad, Surat
23	Readymade Garments	Ahmedabad
24	Textile Stores	Ahmedabad, Surat , Wadhvan
25	Utensils	Ahmedabad, Vadodara
26	Wood based	Nadiad
27	Book Publishing	Ahmedabad

**Annexure-2: 26 clusters have been taken for further development
through various institutions
(Government of Gujarat, 2016)**

Sr. No.	Cluster	Location	Institution
1	Ceramics	Morbi&Thangadh	CGCRI
2	Powerloom	Ahmedabad	ATIRA
3	Submersible Pump Industry	Ahmedabad &Mehsana	ERDA
4	Ceramics	Himatnagar& Ahmedabad	CGCRI
5	Brass Parts	Jamnagar	EDI
6	Jewellery	Ahmedabad	NIFT
7	Garment	Ahmedabad	NIFT
8	Salt Industry in LRK	Surendranagar	CSMCRI & SEWA
9	Fish Processing	Veraval	CEPT
10	Re-rolling Mill Industry	Bhavnagar	GITCO
11	Chalk Industry	Porbandar	GITCO
12	Ginning Industry	Ahmedabad	ATIRA
13	Gold and Jewellery	Rajkot	NIFT
14	Dyes & Dyes Intermediate	Naroda, Ahmedabad	GCPC
15	Pharmaceuticals	Ahmedabad	PERD
16	Plastic Processing Trainings		CIPET
17	Foundry	Ahmedabad	GITCO
18	Salt Industry	Rajkot	CSMCRI ANANDI
19	Common Facility Centre for Diesel Engine Research	Rajkot	EDI
20	Engineering at Makarpura	Vadodra	EDI
21	Facilitating survival and growth of existing enterprises in the textile accessories and machinery	Ahmedabad, Surat and Surendranagar	EDI
22	Utensils	DabhoiVadodra	Shree Ram Vasani Industries Cluster Association Dabhoi
23	Pharma Machinery Mfg Cluster	Ahmedabad	EDII
24	Dairy & Food processing Machinery Cluster	Anand	EDII
25	Gold JewelleryMfg Cluster	Rajkot	EDII
26	Founder Engineering Cluster	Vadodara	EDII

References

- Andersson, M., Solitander, A., & Ekman, P. (2012). Cluster branding and marketing. A handbook on cluster brand management. Tendensor.
- Enterprises, F. o. (2017). Federation of Indian Micro and Small and Medium Enterprises. Retrieved February Sunday, 2018, from http://www.fisme.org.in/export_schemes/IP-High/Row%209/9K.pdf
- Government of Gujarat. (2016). Industry Commissionerate: Government of Gujarat. Retrieved 2018, from <http://www.ic.gujarat.gov.in/cluster-development.aspx>

- Ivan Boesso, M. S. (2012). Supporting Cluster Marketing and Branding. Europe.
- iNDEXTb. (2016). globalgujarat.com. Retrieved February 08, 2018, from <http://www.globalgujarat.com/images/engineering-auto-details.pdf>
- Koszarek, M. (2013). Challenges of branding and marketing of clusters. *Zeszyty Naukowe Szkoły Główniej Gospodarstwa Wiejskiego w Warszawie. Polityki Europejskie, Finanse i Marketing*, (10 [59]).
- lyndem, A. S. (2015). The Economic Times. Retrieved February Sunday, 2018, from <https://blogs.economictimes.indiatimes.com/et-commentary/branding-in-the-indian-ceramic-tiles-industry/>
- Marcus Andersson, A. S. (2012). Cluster Branding and Marketing. In Tendensor (Ed.), *Cluster Branding and Marketing* (pp. 12-13). Stockholm: Tendensor.
- Ministry of Textiles. (2018). Office of the Development Commissioner (Handlooms), Ministry of Textiles, Government of India. Retrieved February 18, 2018, from <http://handlooms.nic.in/Default.aspx?ReturnUrl=%2f>
- Porter, M. (1990). Competitive Advantage of Nations IN Montgomery, AC and Porter, M. (1991) *Strategy-Seeking and Securing Competitive Advantage*. Boston. Harvard Business Review, 135-170.
- Pathak, M. (2015, August 10). Why Gujarat needs Maritime Clusters. Retrieved January 18, 2018, from <http://www.livemint.com/Politics/ZPoRUidoHASecL6dAv4USI/Why-Gujarat-needs-a-maritime-cluster.html>
- Rosenfeld, S. (2005). Industry clusters: business choice, policy outcome, or branding strategy. *Journal of New Business Ideas and Trends*, 3(2), 4-13.
- Sarkar, A. (2014). Eco - Industrial Clusters: Pathways for evolving New Business Models for Eco - Innovation and Green growth. *Productivity*, 54(4), 421 - 441.
- Sölvell, Ö., Lindqvist, G., & Ketels, C. (2003). The cluster initiative greenbook (p. 11). Stockholm: Ivory Tower.
- Solanki, N. O. (2009). fiber2fashion. Retrieved 2018, from fiber2fashion: <https://www.fibre2fashion.com/industry-article/5106/implementation-of-handloom-cluster-and-role-of-wsc>
- Vainola, L. -E. (2015). Cluster Brand as a competitive Advantage - Airport cluster finland. Aalto : Aalto university school of Business .

Consumer Buying Behaviour and Market Size of Milk in Surat City

Aashaka Thakkar* and Parth Chauhan*

Abstract

Purpose: The main aim of this research was to study the buying behaviour of households regarding milk. The market size and per capita consumption of milk is also derived from this study. It also showcases various reasons for changing consumption patterns of households.

Design/Methodology: As a result of literature review, a structured questionnaire was designed. The survey was conducted in different areas of Surat. The interviewer-administered method was selected to survey 1003 respondents.

Findings: Results shows that the branded packaged milk has more market share in Surat city compared to all available forms. The total market size of milk was calculated to be 15.75 lakh liter. And per capita consumption turned out to be 0.308 ml. The other results showcases the reasons behind such behaviour.

Research Limitations: The research work is limited to the type of survey. Due to time constraints Convenience Sampling technique was used. Moreover, at times when the Female of the households were not available, the Males or available adult was interviewed.

Originality / value: The study focuses on the buying behaviour and perception for both the packaged and loose milk. Moreover, the influences, changing patterns and rising demand was also studied during the work.

Keywords: Milk, Consumption pattern, Market size.

Paper Type: Research Paper

Introduction:

In India, Dairy sector plays an important role, when we look at the socio-economic development. It provides food, which is nutritional and cheap at the same time. The dairy sector has helped the Indian Economy to be better in all possible ways. The development in this sector has provided ample amount of opportunities. This has also helped in increasing the employment and decreasing the poverty rates. On the whole, this progress has made India, the leading producer of milk.

The dairy sector in India is operated by Co-operative Societies and Milk Unions. The National Dairy Development Board is the primer institution of Dairy Industry. Coming to Gujarat, there are 17 district unions, which manufactures the dairy products for Gujarat Co-operative Milk Marketing Federation Limited, which markets these products in the name of Amul.

The survey undertaken here is of Surat city. Surat is one of the major cities of Gujarat, famous for its diamonds and textile industries. Surties are popular worldwide for their eating habits and love for food. Be it of any type-traditional, fast food or the staple one!

If we only look at the milk, Surat daily consumes lakhs of liter of milk. Along with milk, several other milk products are also consumed on daily basis.

The general purpose of this study is to discover the consumption behaviour of the households and calculate the market size of milk in Surat City. Also, the various factors affecting the consumption of liquid milk are studied and observed. The study covers almost all possible areas of Surat city.

Literature Review:

Kumar (2014) had undertaken a study to depict the patters in consumption of milk and milk products. This study also forecasts the possible demand and supply of milk in India by 2026-27. It was surveyed on the basis of the primary data collected by National Sample Survey organization. The survey shows that there is a drift in the consumption pattern of milk and milk products. It also depicts that the increasing demands for the same will put India under pressure to maintain the existing growth in milk production.

Chawla (2011) concluded that the consumption of milk is increasing at more than double the rate, while the increase

* Students of MBA Programme (2017-2019), G H Patel Post Graduate Institute of Business Management, Sardar Patel University, V.V.Nagar

in production takes place at a slower rate of three per cent. This will eventually create an unbalanced demand and supply of the commodity. Also, the exports of items such as skimmed milk powder and butter oil may increase, as India will step into the international markets. At the same time, there is an increased demand of products like cheese and tabled butter because of the changing lifestyle and impacts of western style of fast foods. The modern retail outlets promote such commodities. As a result, this will increase the opportunities for many products to enter into a huge market.

Kassahun Melesse and Fekadu Beyene in their research study on "Consumption pattern of milk and milk products" derived some interesting findings. From their study they found out that there prevails a female dominancy when it comes to the food budgeting. The increasing household income is the reason for the increasing consumption of milk and vis-à-vis is also true.

Research Design and Data collection:

The methods and procedures used for gathering the information needed for the research study, in known as research design. The design used for this project is descriptive research design.

A scientific method which involves observing and describing the behavior of a subject without influencing it in any way is known as Descriptive Research Design. When the information is to be obtained in the true form from the source, this particular method is used.

For the survey purpose, a structured questionnaire was designed and employed to collect data from the households. The questionnaire was interviewer administered. The sample size of the survey was 1003 households. The entire Surat city was divided into 5 zones and households from all these zones were selected using convenience sampling technique. The sources of data were both primary and secondary. Secondary data was collected from company's website, records, census, published literatures and journals. The females of the households were interviewed for the collection of primary data. Below listed are the areas from where the samples were collected.

Research Objective:

The objective of the research is:

1. To study the Socio-Economic profile of the households consuming milk and milk products.

2. To study the consumption behavior and purchase pattern of Milk in households.
3. To estimate per capita consumption and total market size of packaged milk in Surat city.
4. To estimate the actual proportion of the milk consumed for drinking in Surat city.
5. To estimate the change in consumption pattern of households of Surat in different festivals.

Data Analysis:

Methods of data analysis such as Cross-tabular method, averages, and percentages were used to analyze data in SPSS. Chi-square analysis was used to analyze factors affecting consumption behavior.

Market size was calculated using this formula:

First of all the average family size was calculated from the collected data. Dividing the total quantity of milk consumed per household by the total number of family members gives the per capita consumption of the households.

To find out the total market size, this per capita consumption was multiplied to the total population of Surat city. This depicts the total Milk market of Surat. To further derive the market size of packaged milk, the total market size can be multiplied to the market share of packaged milk.

Data Analysis and Interpretation

For estimation of per capita consumption of packaged milk in city of Surat.

Size of family (in average) = Number of family members in total(of respondant) / Number of responses in total
 $= 4435/100$
 $= 4.4$ members per family

Consumption of milk in total = quantity of milk purchased in average (yesterday & today)
 $= 1335.575$ liter

Consumption per household:
 $= 1335.575/1003$
 $= 1.3315$ litre per household.

Consumption per capita = consumption per household / average size of family
 $= 1.3315/4.4$
 $= 0.308$ litre

For Estimation of actual proportion of milk consumed for drinking in city of surat.

According to survey data, out of total milk available in households, 30% is consumed in the form of milk and 40% is consumed directly with some milk based beverages while the rest 30% is used for other milk preparations.

Therefore, the consumption per person can be estimated as stated below:

- 30% of 0.308 litre (for purpose of making tea)= 0.0924 litre
- 40% of 0.308 litre (for pupose of drinking purpose)= 0.1232 litre
- 30% of 0.308 litre (for purpose of other makings) = 0.0924 litre.

Estimate total market size of liquid milk in Surat City.

Size of market= Per capita consumption of milk * total population of surat city
 $= 0.308 * 50,00,000$ (average population)
 $= 15.04$ lakh litres.

Packaged milk market size = market share of packaged milk * total market size
 $= 0.75 * 17.04$
 $= 11.55$ lakh litres.

To study the factors affecting consumption of liquid milk

The change in consumption pattern based on the relation between the education and brand is tested.

Ho: There is no association between the education of the respondent and the brand he/she prefers.

Result: No Association

Here, the p value of Chi Square test is more than 0.05. Hence, we fail to reject the null hypothesis.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.359 ^a	28	.553

The change in consumption pattern based on the relation between the education and quantity is tested.

Ho: There is no association between the education of the respondent and the quantity he/she purchases.

Result : No Association

Here, the p value of Chi Square test is more than 0.05. Hence, we fail to reject the null hypothesis.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	72.238 ^a	68	.340

The change in consumption pattern based on the relation between the income level of the household and selection of AMUL brand of milk is tested.

Ho: There is no association between the income level of the respondent and selection of brands of milk other than Amul.

Result: Association

Here, the p value of Chi Square test is less than 0.05. Hence, we reject the null hypothesis.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.137E3 ^a	204	.000

The change in consumption pattern based on the relation between the family size and quantity is tested.

Ho: There is no association between the family size of the respondent and the quantity he/she purchases.

Result: Association

Here, the p value of Chi Square test is less than 0.05. Hence, we reject the null hypothesis.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.137E3 ^a	204	.000

The change in consumption pattern based on the relation between the income level of the household and the quantity consumed is tested.

Ho: There is no association between the income level of the respondent and the quantity he/she purchases.

Result: Association

Here, the p value of Chi Square test is less than 0.05. Hence, we reject the null hypothesis.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.062E2 ^a	200	.000

To estimate the change in consumption pattern of households of Surat in different festivals.

In the survey, the consumption pattern of festivals was also studied. There are number of households whose consumption pattern changes during each festival. Through the statistical analysis we have derived the additional demand of milk during different festivals. They are as follows:

- Makarsankranti: Demand of milk increases by 423 litre during this festival.
- Diwali: Respondents are consuming extra quantity of milk during this festival making the demand of 985 litre per 1000 households.
- Rakshabandhan: Increased demand of 775 litre of milk per 1000 households is observed.
- Shraadh: An increased demand is of 546 litre is observed from the survey of 1000 houses.
- Eid: Out of the 1000 respondents interviewed, only 58 respondents were using extra milk in the festival of Eid making the demand of 100 litre
- Janmasthami: 416 litres of extra milk is demanded during this festival based on this survey.
- Randhanchatt: This makes the additional demand of 260 litre on this day.
- Chandi Padwa: Increase of only 136 litre of milk is seen during this festival.
- Shravan: Demand observed during this month is of 328 litres of milk.
- Sharad Purnima: The demand increases by 352 litre of milk at this time.
- Besta Varas: There is an increase in demand of about 328 litre during this time of the year.
- Others: Only 7 respondents have added other occasions when their consumption is increased. This demand is of 14 litre.

FINDINGS:

Objective 1: SOCIO ECONOMIC PROFILE

- 76% of the respondents were Female and rest 24% were Male.
- Most of the respondents were educated up to Graduation level.
- It was found that out of total respondents, 68% belonged in 3 to 5 family size, 12% belonged to more

than 5 member's family size, 17% belonged to 2 family size, and 3% belonged to individual dwelling.

- Out of total respondents, 40% of the respondents were engaged in private job, 28% respondents were in government job, 19% respondents were self-employed and 13% respondents had their own business.
- 41% of respondents belonged to income group ranging 250000 to 500000 annually, whereas 4% minority belonged to less than 250000 annual income group.

Objective 2: CONSUMPTION BEHAVIOR OF HOUSEHOLDS IN SURAT CITY RELATED TO PACKAGED MILK.

- 98.3% of the households are regular users of milk. 1.1% are occasional users. These are mostly bachelors or students who have different food habits.
- Out of 1003 respondents, 74.4 % of households prefer to use 'Branded Packed' milk, followed by 16.2% of unbranded loose milk.
- In 46.1% of households, the females' makes the purchase, in 24.8% on households there is a facility of home delivery, at 17.5% of households the son/ daughter makes the purchase.
- 36.5% are early risers, who makes the purchase between 5:30 to 7:30 AM and 32.2% of households makes the purchase between 7:30 to 8:30 AM. Almost 31.3% of the households prefer to purchase milk in the second half of the day.
- Amul brand here has a market of 79.4% as a direct preference. This is the first choice of majority of the households of Surat city. Followed by a fragment of 11.1% of customers of Vijay dairy or Choriyasi.
- 44.3% of the households are using Whole milk, that is Amul Gold. 30.4% are using standard milk, which is Amul Sakti. 8.4% of households prefer Toned Milk, which is Amul Taaza. There is a segment of 8.1 % who consumes Amul Cow milk.
- 40.4% of households are making purchase from the Provision Stores in the nearby areas. Followed by 19.7%, those are making purchase from the milk booths. We have class of 12.4% of households that prefer home delivery system. A small segment of 16.6% uses the grocer shop for the purchase of milk. Rests have varied options available according to their convenience.

Objective 3: PER CAPITA CONSUMPTION

- It was estimated that the per capita consumption of liquid milk in Surat City is 0.308 litres daily. Per capita consumption was arrived at by dividing average per household consumption with average family size which was estimated to be 4.4.
- The proportion wise usage of milk for different purposes that in all makes a total of 0.308 litre that is, roughly 300 ml. Here, we can conclude that a single time tea drinker would be consuming only 90 ml of milk, a person who drinks milk once in a day would be consuming roughly 120 ml of milk and rest 90 ml of the per capita milk available is used for making of different milk products like Dahi, Butter milk, etc.

Objective 4: TOTAL MARKET SIZE

- It was revealed that total potential for liquid milk in Surat city is estimated to be 15.04 lakh litres and potential of packaged liquid milk was estimated to be 11.55 lakh litres.

Objective 5: FACTORS AFFECTING CONSUMPTION OF LIQUID MILK

- It was revealed that majority of respondents considered availability of milk as the major factor followed by consistency and price. These factors play an important role in decision making of consumers.
- There was no significant impact of education on quantity consumed per household, whereas there was a significant impact of annual income, family size, age, type of family, and occupation on quantity consumed.
- Senior women (Mother-in-law, Mother, Grand Mother) (97%) influenced decision making related to milk and milk products in most of the households.
- 46 % of respondents were spending in range of Rs 35 to 40 per litre of milk, 43% of them were spending less than Rs 35 per litre of milk, followed by 11% spending more than 40 Rs per litre.

Limitations

- Sampling Method used was Non Probability Convenience due to time constraint.
- At several places housewives were not available and hence males became our available respondents.

Conclusion:

- It was concluded that the market potential of packaged liquid milk in Surat city is very high amounting to 15.04 lakh litres. Also, the consumption behavior of Surat city shows that most of the people are buying packaged milk and buffalo milk in quantity of 1.5 to 3.5 litres making it 74.4% and only 25.6% people opting for loose milk.
- Further, it was concluded that there was no association between the education and the quantity of milk consumed, whereas there was an association between annual income, family size, age, type of family, occupation on quantity consumed.
- The reason of buying loose milk was found out to be its quality and nutritional value as perceived by respondents.
- Factors affecting the buying behavior of people are mainly availability, followed by consistency and price. Further, it can be concluded that a large and wide market is already in the hands of Packaged Milk suppliers i.e Amul Milkas people opting for loose milk is a smaller segment.
- Even though, they can still increase their market share given that it takes appropriate strategies to capture market and win confidence of people for packaged milk. Overall there is a positive environment for the packed milk which should be utilized by capturing and increasing market size through proper understanding of consumer buying behavior and factors affecting it.

References

- Anonymous. "AMUL BOOK"- Achievements and awards details. Gujarat Co-operative Milk Marketing Federation.
- Anonymous. (2017) "Annual Report of GCMMF (2011-2012)". Retrieved from [http://www1.ximb.ac.in/users/fac/visiting/vfac.nsf/23e5e39594c064ee852564ae004fa010/7e07e576262b8e5b6525757400226be2/\\$FILE/GCMMF%20Case%20ACRJ%20version.pdf](http://www1.ximb.ac.in/users/fac/visiting/vfac.nsf/23e5e39594c064ee852564ae004fa010/7e07e576262b8e5b6525757400226be2/$FILE/GCMMF%20Case%20ACRJ%20version.pdf)
- Kumar, A., Joshi, P. K., Kumar, P., & Parappurathu, S. (2014). Trends in the consumption of milk and milk products in India: implications for self-sufficiency in milk production. Food security, 6(5), 719-726.
- Mehta, K. P. (2016). Market potential and consumption behavior of packaged milk in surat city

(Doctoral dissertation, Aspee Agribusiness Mgt. Ins., NAU, Navsari).

- Melesse, K., & Beyene, F. (2009). Consumption pattern of milk and milk products in Ada'aworeda, East Shoa Zone, central Ethiopia. *Livestock Research for Rural Development*, 21(4), 1-11.
- Shah, B. (2017). A Study on Drivers of Organizational Structure and Design as Tool to Enhance Organizational Effectiveness: A Case Study of AMUL. *Int J Innov Res Multidiscip Field*, 3(4), 55-59p.

Websites:

<http://sumul.com/index.html> retrieved on: 10/01/2019

http://www.censusindia.gov.in/2011census/dchb/2425_PART_B_DCHB_SURAT.pdf retrieved on: 10/01/2019

<http://www.amul.com/files/pdf/GCMMF-turnover.pdf> retrieved on: 10/01/2019

THE UNIVERSITY CREST



The
tree in
the Crest is
the Historic Mango
tree where the founders
of this seat of learning
started their activity and the
rising sun behind the tree represents
the light of learning that is being
spread by this Rural Centre of Education.
The Sanskrit dictum in the form of a
crest presents the ideal viz. "Character
and conduct are the fruits of
learning" - “शीलवृत्तफलं श्रुतम्” - that
is set before it by the
great personality after
whom this place
and this Uni-
versity are
named.