



National Conference on

***Digital Business
Transformation
in India***

***Published in Collaboration with
International Journal of Engineering
Sciences(IJES)***

ISSN: 2277-9698

National Conference on
Digital Business
Transformation in India

Published Year: 2022

Jan 28th -Jan30th

Raajdhani Engineering College

**Near Mancheswar Railway Station, Mancheswar Railway Colony, Bhubaneswar, Odisha
751017**

Published in Collaboration with
International Journal of Molecular
Sciences(IJMS)

ISSN: 1422-0067



**MESSAGE
BOARD**

MESSAGE



SRI CA. B. RAMPRASAD RAO

Chairman

Raajdhani Engineering College, Bhubaneswar

I am delighted to know that Raajdhani Engineering College Bhubaneswar is organizing National Conference on Jan 28th -30th Jan2022 and publish a proceedings on “National Conference On Digital Business Transformation in India”.

Participation of different personalities from the field of engineering, science and industries will definitely bring awareness among the participants and promote this to help the development of society and nation ultimately.

I hope the outcome from such type of seminar will benefit every stake holders and give our institution a new dimension.

I wish the program all success.

A handwritten signature in black ink, appearing to be 'SRI CA. B. RAMPRASAD RAO'.

SRI CA. B. RAMPRASAD RAO

Chairman

MESSAGE



DR. MANOJ KUMAR PALO

Vice-Chairman

Raajdhani Engineering College, Bhubaneswar

It gives me immense pleasure to know that Raajdhani Engineering College Bhubaneswar is organizing National Conference on Jan 28th - 30th Jan2022 and publish a proceedings on “National Conference On Digital Business Transformation in India”.

Dignitaries present in the forum will focus on role and responsibility of Professional Student in a wider way and inspire the participants to work for the society and nation. I hope this national seminar will disseminate and share elaborate knowledge and experiences in creating the awareness among the professionals for development of the nation.

I wish the national seminar all success.

DR. MANOJ KUMAR PALO

Vice Chairman

MESSAGE



PROF. (DR.) BIMAL SARANGI

Principal

Raajdhani Engineering College, Bhubaneswar

I am glad to know that Raajdhani Engineering College Bhubaneswar is organizing National Conference on Jan 28th -30th Jan2022 and publish a proceedings on “National Conference On Digital Business Transformation in India”.

This forum will discuss extensively about the role and responsibility of the professionals through sharing the knowledge and experiences from the experts. I hope this seminar will bring a positive impact on participants to understand their responsibility and participation as individual for the development of the nation.

I thank the organizers and wish the program a grand success.

A handwritten signature in blue ink, appearing to be 'B. Sarangi'.

PROF. (DR.) BIMAL SARANGI

PRINCIPAL

Contents

<i>Sl. No.</i>	<i>Name Of The Chapters</i>	<i>Page Nos.</i>
1.	Re-Defining The Exchange Environment Of Handicraft Market Through Marketspace: An Empirical Study By Dr.DEBASIS PANI	2
2.	Strategic Innovations – Ways Of Leveraging Customer Acquisition And Retention By Dr. PRANABA NANDA DAS	9
3.	Impact Of Banking Industry In India Due To Global Financial Crisis Through Mergers And Acquisitions By Dr. RAMESH CHANDRA RATH	16
4.	Factors Affecting Consumer Perception Towards Online Green Marketing: An Empirical Investigation By ANAND GOUDO	25
5.	E-Money And E-Finance: As Financial Category By BIJAY KUMAR KINTALI	33
6.	Consumer Perception Towards Automobile Industry: A Study On Two Wheelers By BIKASH SARANGI	42
7.	An Empirical Study On The Effect Of Digital Marketing On Online Shopping Among Younger Generations In Bhubaneswar, Odisha By DWIPANITA MISHRA	48
8.	Comparative Study Of Amazon Ec2 And Microsoft Azure Cloud Architecture By JYOSHNA PANDA	53
9.	Digital Transformation: An Advent Of The New Tomorrow In Agile Marketing By KENGUA ASHOK KUMAR	61
10.	Green Marketing As Weapon For Success By LAXMIPRIYA DASH	68
11.	A Study On Marketing And Distribution Of Hul It's Rural Orientation In Uttar Pradesh By NIRANJAN BIDIKA	74
12.	An Empirical Assessment Of The Impact Of Training And Development On Employees' Job Performance By NIRANJAN NAIK	78
13.	Role Of Digital Payment System In Creating Cashless Economy In India By PRANAB KISHORE BEHERA	85
14.	Green Marketing For Green Tourism In Ramachandi: Exploring The Sustainable Development By RUPA SWETA ANAND	95
15.	Clean Energy Products: An Ecosystem Approach By SANTOSH KUMAR BARAL	103
16.	Title: Embedded Advance Digital Media Planning Strategy: A Case Of Promotion Cost Minimization On The Net By SASMITA SAHOO	116
17.	Organisations Of Tomorrow And Future Workplace By Supply Chain Management By SUBHRANSU SEKHAR TRIPATHY	123
18.	Impact Of Digitization On Financial Transactions: A Study By SUSHREE SHEETAL BEURA	128
19.	An Empirical Assessment Of Effectiveness Of Online Marketing And Its Determinants From A Marketers' Perspective By VENKATA RAMANA KOTHAKOTA	134
20.	The Role And Importantance Of Foreign Direct Investment (Fdi) In India- An Overview By Dr.DEBASIS PANI	146

<i>Sl. No.</i>	<i>Name Of The Chapters</i>	<i>Page Nos.</i>
21.	Cyber Security Through Threat Intelligence By Dr. PRANABA NANDA DAS	153
22.	Virtual Buyer-Seller Interaction: A True Predictor Of Online Purchase-Intention By Dr. RAMESH CHANDRA RATH	158
23.	Alteration Of Healthcare Service Quality In India:An Explorative Investigation On Digital Intervention By ANAND GOUDO	168
24.	Machine Learning Techniques For Detection Of Spammers In Online Social Networks: A Survey By BIJAY KUMAR KINTALI	173
25.	Preparing Human Resources For Digitization/ Impact Of Digitization On Human Resource Management By BIKASH SARANGI	183
26.	Effect Of Green Human Resources Practices On Job Satisfaction: Evidence From It Sector In India By DWIPANITA MISHRA	190
27.	High-Performance Work System: Impact On Organizational Performance By JYOSHNA PANDA	198
28.	A Study On The Impact Of Digitalisation Towards Cashless Economy In India By KENGUA ASHOK KUMAR	207
29.	Employee Perception Towards Technology Adoption – A Study In Selected Organizations Of Bhubaneswar By LAXMIPRIYA DASH	213
30.	Impact Of Organizational Climate On Working Environmentand Employee Performance By NIRANJAN BIDIKA	220
31.	Contemporary Relevance Of Management Education Status In India: Issues And Challenges By NIRANJAN NAIK	225
32.	Reaction Of Indian Stock Market To Announcement Of Demonetisation: A Sectoral Analysis By PRANAB KISHORE BEHERA	236
33.	An Analysis On Impact Of Behaviour On Investment Decision Of Investors In Twin City Of Odisha By RUPA SWETA ANAND	243
34.	A Study On Awareness Of E-Banking Services In College Students Of Botad By SANTOSH KUMAR BARAL	250
35.	Effect Of Selected Macroeconomic Variables On Financial Performance Of Airports Authority Of India: A Review By SASMITA SAHOO	256
36.	A Study On Investment Options And Investors Attitude Towards Investment In Private Insurance Companies By SUBHRANSU SEKHAR TRIPATHY	263
37.	Metamorphosing Of Economy Into Cash Less Economy: Is Indian Society Ready To Be Transformed By SUSHREE SHEETAL BEURA	272
38.	Role Of Mobile Wallet In Cashless Economy In Odisha By VENKATA RAMANA KOTHAKOTA	276

Marketing

RE-DEFINING THE EXCHANGE ENVIRONMENT OF HANDICRAFT MARKET THROUGH MARKETSPACE: AN EMPIRICAL STUDY

Dr. DEBASIS PANI

Abstract:

Handicraft is an indispensable part of Indian Culture. The Indian culture is interwoven with crafts which makes it more vibrant and Incredible. According to the reports of Exports Promotion Council, there are about twenty three million handloom and handicraft artisans in India in 2019. The exports of handicraft have also increased about 10.52% since quarter years. In spite of this, India occupies only about two percent of world trade in handicrafts. The lack of advertisements, lack of awareness to adopt the new technology and gap of its promotion through digital technology and platforms mainly hinders its global presence. The present research paper will contemplate about the barriers of handicraft promotion in global market. It will also attempt to comprehend the amalgamation of digital technology embedded with marketing efforts for Handicraft Industry. The implied findings of this study will suggest managerial and promotional interventions required to waft handicraft industry in International marketplace.

Keywords: Handicrafts, Artisans, Export, Impact of e-commerce, Marketplace, Z-Analysis.

Introduction

Handicraft represents the uniqueness of a country, its culture and its rich heritage. As reiterated by **Patel & Shah (2016)**, India is a country of great cultural heritage and the Indian handicrafts have a prosperous history of several centuries. Handicrafts and artisans in India are known worldwide for this uniqueness and symbolize the inherent creativity that these artisans possess. Lately, with the advent of mechanized replication of handicraft articles (not handmade), and coupled with middle men controlling the demand-supply mechanism, the sector has been under tremendous pressure. Primarily, the concerns faced by the artisans are manifold and non-marketing of these products makes it more

difficult for them. Indian handicraft industry is labour intensive and is generally decentralized and spread all over the country. Though handicraft industry employs millions of artisans, it is still miniscule with respect to the global industry. **Nigel et.al (2011)** opines that the role of strategy management is crucial in marketing management as traditional approach of marketing has not been playing a significant role in marketing of handicraft sector. This scenario is changing with the advent of many websites promoting the E-commerce of Indian handicraft industry. Government has also initiated various efforts to provide market opportunities to the artisans doing business in unorganized sector.

Theoretical Framework

Barriers of Handicraft Industry:

India's total export for the textiles have managed to recover to \$39.3 billion in FY2013-14 which have increased by 12.5% from the previous year. The export have increased from a sharp decline of \$45 billion in FY2012-13. According to the Ministry of Textiles, handloom production is expected to decline 4% to around 1,116 million sq. m. in FY2014-15, compared to increases seen in all other sectors:

- Mill (6%)
- Power loom (3%)
- Hosiery (7%)

Meanwhile, the share of handloom in total textile production is expected to shrink to 10%, which is less than half of the 23% share in FY1995-96. The multiple reasons for the decline of this industry in different clusters can be attributed to factors such as: reducing exports, lack of modernization, changing consumer preferences, high production costs, and market dynamics. As the handloom industry occupies a significant place due to its economic importance, India cannot ignore this industry.

Advent of Ecommerce industry:

In Asia-pacific India has fastest growing E-retail industry today along with China (<https://timesofindia.indiatimes.com>, India Business News). Increased adoption of smart phone and increasing rate of internet penetration has paved way for new marketing strategy for existing industry. According to (Taylor, T. & Owusu, E.D.E., 2012) internet users in Indian increasingly very high across the globe and probable that India is cross US in the up-coming years. E-commerce is an effective marketing strategy for promoting the sales as well as branding. In India Handicraft Market is more popular than other nation. Devendra, et al., 2012 stated that e-commerce is one of the best tools where customer can doing their business consists of selling and buying every products or services over electronic system uses of computer networks. E-commerce changes the infrastructure of the business as well as ease the financial transaction policy. This will ensure in framing strategies which will be inclusive in nature regarding key business activities (<https://www.smartinsights.com/digital-marketing-strategy>). Seller can use strategy base tools to promote their business like SEO (Search Engine optimization), E-mail marketing, Social Media marketing (like Facebook, Twitter, Instagram, YouTube etc.), SEM (Search Engine Marketing) and SMO (Social media Optimization) and other associated tools also. From the Indian business perspective, e-commerce transformed the business module from offline retail industry to online retail mode and has given a new way for Indian entrepreneur/ marketer (<https://www.ibef.org/industry/e-commerce.aspx>). The ongoing digital transformation in the country is expected to increase India's total internet user base to 829 million by 2021 from 560.01 million as of September 2018.

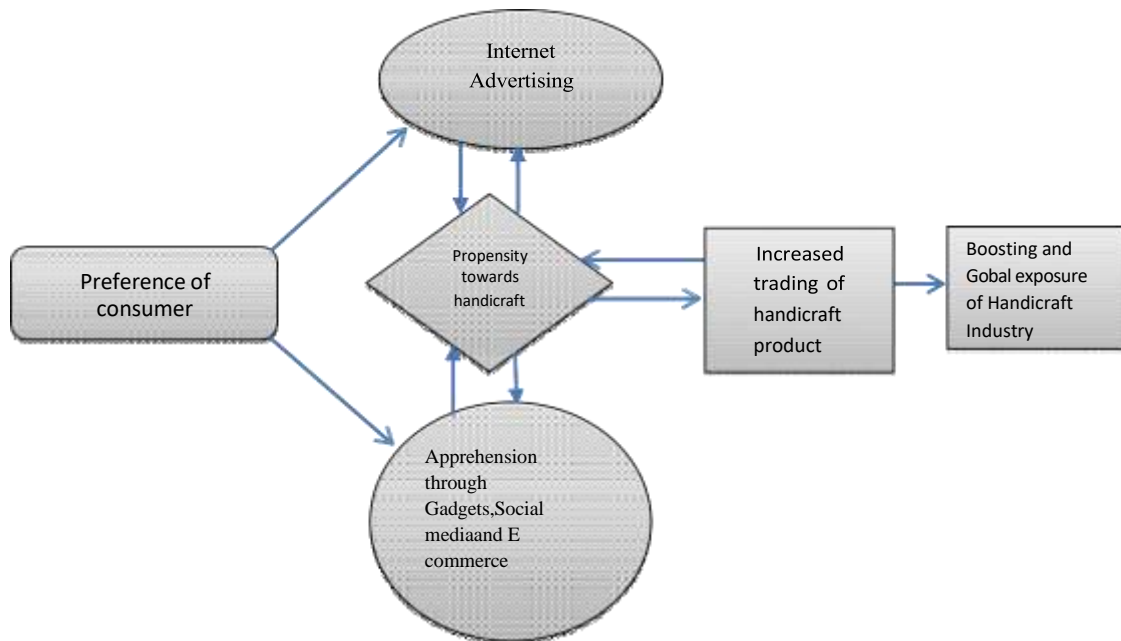


Fig 1: Conceptual Model- Promotion of Handicraft market through online advertisement

Research Gap

After completion of detailed literature survey, it has been learnt that there is a direct co-relation between factors concerned with subject study are under mentioned:

1. Customer awareness towards a product is directly co-related with online advertisement for particular product.
2. Increment in total sales volume of a product is co-related to customer awareness towards that product. A field survey through face to face interview has been carried out by the researcher in areas wherever handicraft/handloom products are produced and following points were learnt:
 - (a) The handicraft/handloom products are lacking of sales promotions/ advertisements.
 - (b) Wide area customer awareness is very poor due to under sale promotions/advertisements.
 - (c) The market of handicraft product in West Bengal is declining day by day mainly due to sale promotion/advertisement & customer awareness.

Hence, it is evident from the above that the handicraft/handloom market of West Bengal is declining day by day which requires detailed study to identify major causes of declining, i.e. sales promotions/ online advertisements/online markets and customer awareness. This study will not only help to suggest possible measures be taken to revive but also contribute towards the development of artisans, society, and state and after all nation's economy as a whole.

Objectives

Based on the research gap the specific objectives have been framed:

- (i) To extract whether customer awareness, an indicative factor for increasing sales of handicraft products.
- (ii) To mine out whether online portals acts as an indicative factor in promoting handicraft industry.

Hypotheses

H0₁: Web Based Advertisement is not a mediating Factor to Promote Handicraft

H0₂: Online shopping portals are not an indicative factor for increasing the cognizance of handicraft products.

Research Methodology

The research gap has been prepared by ingeminated search of relevant literature and detailed analysis of existing research progressions. The questionnaire have been prepared in order to assess the preference and indepth analysis of the consumers after their purchase of handicraft products. The respondents have been chosen from the cohort of consumers who have previous experience of handicraft products. The research paper is descriptive one and aimed to see the possibilities in the society due to technical infusion. In depth analysis of primary and secondary data have been done to explore latent attributes. The questionnaire has been validated by in depth qualitative investigation. Sampling has been drawn from the city of Kolkata .A total of 120 questionnaires have been distributed and among this 100 questionnaires have been selected based on inclusion criteria.

The data have been analysed through statistical “Z” analysis for testing of Hypothesis. Z-analysis is used for whether two populations mean are different and the population of study area is large and variance is known. For this investigation the survey period was from 1st January, 2019 to June, 2019.

Research Question:

For this investigation open ended dichotomous questionnaire has been made. The study was established to excavate the question how ecommerce and innovative strategies have directed to explore the handicraft industry.

Analysis and discussion

Hypothesis 1:

H0₁: Web Based Advertisement is not a mediating Factor to Promote Handicraft

Further, it is hypothesized that 60% of population have given opinion that online advertisement of Handicraft/Handloom is an influencing factor for increasing customer awareness.

Appended below please find the tabular format containing inputs refined from primary data collected from target population through close ended questionnaire.

Total sample size	S	100
Total number of online customer opined that online advertisement is influencing factor for increasing customer awareness	P ₀	88
Proportion	P ₀	0.88
As, it is Hypothesized that 60% of population opined that online advertisement of Handicraft/Handloom is an influencing factor for increasing customer awareness	μ ₀	0.55

Table1: Detailed calculation through “Z” Analysis for Hypothesis 1

Formula of statistical “Z” analysis is under mentioned:

$$Z = \frac{p_0 - \mu_0}{\sigma \text{ for } p_0}$$

Where, $\sigma \text{ for } P_0 = \sqrt{\left(\frac{p_0 q_0}{s}\right)}$ and $q_0 = 1 - p_0$

After completion of calculation, the value of $Z = 7.50$ have been obtained. After applying 5% level of significance the value of Z as obtained and restricted as 1.695. Hence, it is observed and indicated that value falls within rejection region. The same indicates that **null hypothesis 1** is rejected and it can be that advertisement of handicraft through online mode is an influencing factor for changing customer buying motives.

For Hypothesis 2:

H0₂: Online shopping portals are not an indicative factor for increasing the cognizance of handicraft products.

Further, it is hypothesized that 60% of population opined that online portal market acts as catalyst for changing customer buying motives. Appended below please find the tabular format containing inputs refined from primary data collected from target population through close ended questionnaire.

Total sample size	S	100
Total number of online customer opined that online portal market acts as catalyst for changing customer buying motives	P ₀	75
Proportion	P ₀	0.77
As, it is Hypothesized that 60% of population opined that online portal market acts as catalyst for changing customer buying motives	μ ₀	0.55

Table 2: Detailed calculation through “Z” Analysis for Hypothesis 2

Formula of statistical “Z” analysis is under mentioned:

$$Z = \frac{p_0 - \mu_0}{\sigma \text{ for } p_0}$$

$$\text{Where, } \sigma \text{ for } p_0 = \sqrt{\left(\frac{p_0 q_0}{s}\right)} \text{ and } q_0 = 1 - p_0$$

After completion of calculation, it has been found that value of $Z = 5.365$. After applying 5% level of significance the value of Z is supposed to be restricted within 1.695. Hence, it is observed that value falls within rejection area. The same indicates that **null hypothesis 2** is rejected and it is evident that online portal market acts as catalyst for changing customer buying motives.

Conclusions

The extracted results have indicated about the association of handicraft industry with the internet based promotion. The internet based promotion mediated through online advertisements with the technological infusion will conceive Handicraft industry to a newer height. The indigenous handicraft industry will incredibly levitated to international market space by inclusion of strategic from this study. Thus through online advertisements, the strategy can be redefined by social media, e commerce and web advertisements. Besides this, the livelihood of the artisans will also get improved paving way for rural development.

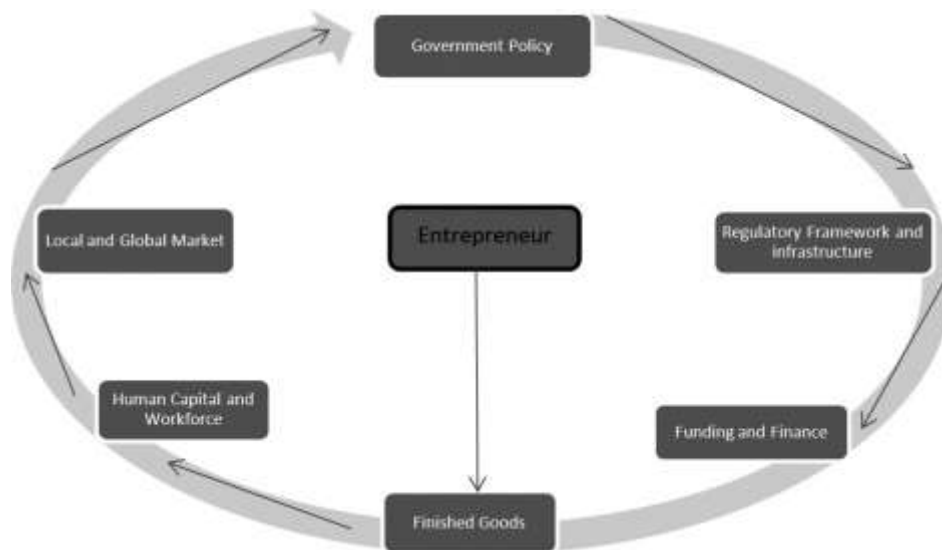


Figure 2: The process of inaugurating online market can be streamlined by following process

Discussions and managerial implications of the study:

The findings of the study are having real implication of digitalization in Handicraft industry. The study is explorative and empirical investigation to define the extant relationship between the demographic variables like gender, age, income, area of residence, education level with the buying intentions of the online shoppers. By assessing the demographic attributes which influence the buying behaviour, the e-marketers, entrepreneurs, academicians, marketing strategist and online portals can tailor made their strategies to influence the online users to buy from the online portals. The study will help online portals and entrepreneurs in overcoming the socio economic hurdles and assessing complex texture and consumer psychology and impact of demographic variations on them. . The utility of the study can be expanded to entrepreneurs, academicians, marketing strategist and online portals to increase their coverage across Indian demography.

Limitation of the Study:

The limitation of the research can be extended to following aspects:

- (i) The research can be extended to other parts of the West Bengal. In West Bengal most of the areas where artisans make their products uniquely but due to barriers in marketing and promotion, they are unable to get proper value for their creation.
- (ii) The strategies based on this frame work can be utilized to frame and incorporate it in handicraft market in Bengal and procedures for sustainable development of the handicraft organization through digitalization..

Acknowledgement

This research was supported by the Seacom Skills University Bolpur, West Bengal. We would like to thanks the officials of the Seacom Skills University Bolpur West Bengal for giving this support and administrative as well as technical assistance. We would like to show gratitude to Professors from Amity University Patna and also like to thank to Vice chancellor and Pro. Vice Chancellor of Amity University, Patna for providing guidance while accomplishing this research work. We would also like to give gratitude to our Family members and also the artisans of Handicraft Industry, West

Bengal who embedded the concept of e-commerce in their own start-up (Handicraft Business) for grant success.

REFERENCES

- [1] Abisuga-Oyekunle, O. A., &Fillis, I. R. (2017). The role of handicraft micro-enterprises as a catalyst for youth employment. *Creative Industries Journal*, 10(1), 59-74.
- [2] Chakraborty, A. (2013). Rationale of handicraft on women employment in rural area: A case study on Jari workers of Bhagawangola-II block, Murshidabad district, West Bengal. *Research Journal of Humanities and Social Sciences*, 4(2), 271-276.
- [3] Deshwal, P., Dr. (2016). Online advertising and its impact on customer behavior. *International Journal of Applied Research*, 2(2), 200-204.
- [4] Frolova, S. (2014). The role of advertising in promoting a product. *Thesis of Centria University of Applied Science*.
- [5] Ghosh, A. (2013). Triggering innovation and creativity in traditional handicrafts sectors-an Indian perspective. *Management Insight*, 8(1).
- [6] Kasemi, N. (2014). Problems of pottery industry and policies for development: case study of Koch Bihar district in West Bengal, India. *International Journal of Advanced Research in Management and Social Sciences*, 3(7), 238-247.
- [7] Mapdar, S. (2011). A study on the handloom textile clusters in India with special reference to select clusters in West Bengal.
- [8] Saha, B., &Bahal, R. (2016). Livelihood diversification pursued by farmers in West Bengal. *Indian Research Journal of Extension Education*, 10(2), 1-9.
- [9] Vanishree, M., Dr., &Shanthi, L., Dr. (2013). "A study on customer awareness and satisfaction towards kentucky fried chicken (KFC) in Coimbatore". *Global Research Analysis*, 2(1).
- [10] Kaur, R. (2014). "How E-commerce is boosting handicraft industry in India". Retrieved from <http://www.mapsofindia.com/my-india/india/how-E-commerce-is-boosting-handicraft-industry-in-india>
- [11] Rahman, Z., &Bhattacharyya, S.K. (2002). "E-tailing of Services: An Indian Scenario" *Singapore Management Review*, Vol. 24, No.1, pp 67-79.
- [12] Bhagat, R., &Sambargi, S. (2019). "Evaluation of personal innovativeness and perceived expertise on digital marketing adoption by women entrepreneurs of micro and small enterprises".
- [13] Leung, W. F., &Cossu, A. (2019). "Digital entrepreneurship in Taiwan and Thailand: Embracing precarity as a personal response to political and economic change". *International Journal of Cultural Studies*, 22(2), 264-280.
- [14] Kumar, M. S., & Kumar, M. A. (2018). "Analysis of transformation and usability of it infrastructure in marketing management".
- [15] Biginas, K., Koumproglu, A., &Wyer, P. (2019). "How companies used marketing techniques during the economic crisis in Greece to inspire customer loyalty and build emotional connections". *On Research*, 2, 61.
- [16] Yadav, R., &Mahara, T. (2019). "An empirical study of consumers intention to purchase wooden handicraft items online: Using extended technology acceptance model". *Global Business Review*, 20(2), 479-497.



STRATEGIC INNOVATIONS – WAYS OF LEVERAGING CUSTOMER ACQUISITION AND RETENTION

Dr. PRANABA NANDA DAS

Abstract

The digital transformation has led to many innovations in this era. One of them is electronic commerce which has led to further invention of online shopping. Of late, online shoppers are increasing in numbers day by day. Moreover many new online retailers are also mushrooming up. This is leading to a clutter in the online retail industry with various issues being faced by the online retailers. One of the major issues is acquisition and retention of customers. This study has tried to analyse the strategies used by some online retailers to acquire and retain customers. Further the findings will be learning for new startups in this industry.

Keywords: Online retailing, strategic innovations, customer acquisition, customer retention

Introduction

The advent of the Internet technology has resulted in a variety of new information. The easy access of these has helped online retailers improve their marketing efforts and distinguish themselves from competitors to gain customers' business. One of the most significant development in the business environment has been the implementation of Digital Marketing and social media marketing strategies. This has led to maximization of the return on investment -Return on investment (ROI) - of these in Electronic Commerce (EC) and this fact has led to research about the digital industry (Saura et. al., 2019). Ecommerce giants have been using digital marketing the most. With the growing use of internet users and easy access to internets due to the advent of mobile phones customers are buying more from the online sellers than the brick and mortar ones. "E-commerce is defined as the process of buying, selling, and exchanging products, services, advertisements, and information through electronic communication technologies (Chiu, Tzeng, & Li, 2013) by utilizing computer networks and the Internet (Turban, King, Lee, Warkentin, & Chung, 2002)". E-commerce is the transaction of goods and services over the Internet (Gökmen, 2012) and the application of the internet to buy, sell, and support products and services (Kasemsap, 2016).

According to a report by Ernst & Young, titled, “Re-birth of E-Commerce in India” India is at the verge of a digital revolution. The urban population had made internet an integral component of their lifestyle. The advent of 4G services and the declining of broadband subscription prices is leading to ever-increasing number of “netizens”. Convenience of online shopping, and changes in the supporting ecosystem are some of the critical aspects that are playing a pivotal role in boosting up the growth of E-commerce and consequently life style changed in India. In view of rising E-commerce based activities, it generates paramount interest to explore the various facets associated with E-commerce (Sinha, 2016).

For online marketers stores converting clicks and views into sales for business has become an imperative. Having high customer retention rate means, saving time and money in the long run. It is because a two percent increase in customer retention has the same effects on the bottom line as cutting other costs by ten percent. By focusing efforts on keeping the current customers, the corporate will grow over time, while saving on advertising and other marketing strategies. While the existing ecommerce giants are focusing more on customer retention strategies the new entrants who are in the question mark phase are thrusting upon customer acquisition. The benchmark report by Clevertrap, has analysed 3.1 billion data points across 18 million devices and 15 million unique users has come up with the following insights. The cut throat competition in the online market has led to low customer retention rates. The ecommerce brands are losing customers faster than acquiring them. On an average a shopping app loses 86% of its customers in the first four weeks of download (Karnik, 2019). But there are some ecommerce sites which are still going strong inspite of the clutter and competition. Keeping in view the above discussion the study has tried to analyse the strategic innovations formulated and adopted by the ecommerce giants for leveraging customer acquisition and retention.

Literature review

The Indian e-commerce market is at an inflection point. The credit goes to the disruption of the telecom landscape, with dramatic reduction in data rates and rapid adoption of 4-G smartphones and feature phones. With a reliance on mobile technology and a need for more bandwidth, networks in India have tested 5G capabilities that will be deployed by 2020 (Sawhney, 2018). Various technologies such as Natural Language Processing, Recommendation system, and Text mining techniques are mostly used to contour the shopping experience, in accordance to consumers’ personal preferences (Jain & Kumar, 2015a). These customer reviews present a challenge for retailers and manufacturers of analysis and discovers useful information which helps in improving customer experience Mattosinho (2010). On the other side, mining and summarizing opinions from the text about specific entities and their aspects can help consumers decide what to purchase. According to Liu (2012), Sentiment analysis is the process used often to extract the opinions or sentiments from customer reviews placed on blogs, forums, shopping websites etc. It is used to identify and extract subjective information contents in the text, such as opinions and feelings. The work of Gowtamreddy (2014) explained that an opinion expressed by customers helped manufacturers to improve their products or services. Potential customers also used these opinions for purchase decisions making. According to Alghamdi (2013), accurate understanding of these sentiments or opinions expressed in social media websites could bring tremendous business opportunities and help in decision making. One of the importance’s of these sentiments is to identify important aspects of your products or services by tracking regularly or for a particular time period about your brand or product across any channel. Social media such as Tweets, blog posts, YouTube videos, News stories, Facebook posts also help in knowing, how people feel about your brand.

The amount of unstructured data produced by customers in E-commerce websites increased dramatically during the phase known as Web 2.0. Customers’ opinions represent a valuable and

important type of information which should not be neglected or ignored by the e-commerce industry. From the customer perspective, considering others users' opinions before purchasing a product is a common behavior long on the Internet. According to Liu(2010), various survey agencies claimed that 70-90% customers buying decisions are influenced by online reviews through this E-commerce websites customer has access to thousands of opinions, which significantly improves decision making. This feature shows that customer reviews are the proven sales drivers(Jain and Kumar, 2017).

Customer acquisition and retention strategies- some cases

Acquiring and retaining customers is perhaps the most difficult and important task for any organization. In the following section some cases have been discussed regarding the innovations in strategies adopted by online shopping sites for leveraging customer acquisition and retention.

Amazon

The key to Amazon's strategy in India is its ability to think globally but act locally – leveraging its massive scale, logistics capabilities and balance sheet while creating customized local offerings developed ground-up for the Indian market (Sawhney, 2018). They personalize the shopping experience of their customers making it more convenient. The convenience lies in the product related to personalization and brand engagement by building a rational or emotional bonding between a brand and the customer. The next strategy adopted by Amazon India is faster home delivery of the product at your doorstep. It takes care of the customers' preference and remembers their shopping habits. Retention strategies adopted are more personalised than acquisition strategies as the corporate is counting upon the customers data. There is a provision of reordering the same product if one wants to. Moreover the automation process makes it easier for management of a brand (<http://sjc.marketing>, 2018).

Amazon is often the first choice that a customer makes, when it comes to purchasing goods online. If we look closer at the reasons for Amazon's success, there is more beyond low prices and a wide variety of products. They have the knowhow to enrich the customer's experience and the customer is bound to come back for more. One of the successful retention effort by Amazon is **Amazon Prime**, the corporate's customer loyalty program. After its launch in late 2004, it was predicted that Amazon would break even on the program within 2 years but in just 3 months they reached the break-even point. The results were astounding as Amazon stock prices shot up and its sales grew by 30% during recession when other retailers were struggling. According to marketing analysts, Prime members increase their purchases from the site by about 150% after joining and were responsible for as much as 20% of Amazon's overall sales. Amazon Prime, being a paid subscription service, requires customers to pay 999 rupees annually along with a free 30-day trial to avail certain services. In the beginning, it gave a **free two-day shipping** to all Prime members. Later this evolved into a variety of shipping benefits as unlimited free and fast delivery within 1-2 days, video streaming, ad-free music, exclusive access to sale and deals. Amazon has also partnered with other companies to provide non-monetary benefits to its Prime members in the form of free ebooks, TV shows, movies and now even music. They get access to these additional services within their rupees 999 subscription.

Why it works?

What Amazon did was to address a major pain-point of the customer i.e. high shipping charges. Sometimes shipping charges would go higher than the value of the purchase itself. This has often led to abandonment of the cart. This problem was solved by Amazon Prime. A Prime member can place an order and get free shipping irrespective of the value of the order. Amazon's wide variety of products at competitive prices along with a convenient distribution system made this an irresistible option. Prime members stopped shopping at other places merely because Amazon made it fast and free and customers shopped even for simple items like a pack of coffee beans on Amazon.

Amazon's 7 Strategies to Win in India

1. **Deep customer understanding:** Amazon has invested time, energy, and resources to understand the nuances of India's consumer market. Amazon realized that Indian consumers are not comfortable buying online or they may lack the education to read online product reviews. So it has established kiosks in small local retail locations that set up entrepreneurs to offer an assisted buying service for consumers.
2. **Accommodating bandwidth challenges:** Amazon realized that over 500 million Indian consumers continue to still use feature phones with slow network connections. So it has designed a slimmed down version of its app to adjust to slower network speeds. The modified app still allows for a decent browsing experience, while accommodating the reality of network constraints.
3. **Using Artificial Intelligence to find addresses:** Residential addresses in India are often only best guess mates of location, which makes delivery a challenge. Amazon is using machine learning and artificial intelligence (AI) to bring better precision to delivery, including a 0-to-100 confidence score for an address.
4. **Ferretting out fake products and fraud.** E-commerce in India has been plagued by a plethora of fake reviews, which has made buyers cagy. Amazon is working to improve trust among its buyers and sellers by combating fraud and fake reviews for third-party products on its site, while promoting safer products. Amazon's Indian team has designed algorithms to detect fake reviews, fraudulent transactions, and fake products.
5. **Expanding logistics and fulfillment:** Amazon is expanding its network of fulfillment centers in India by five, raising the total to 67. Amazon understands the importance of expanding its infrastructure and delivery network to improve the customer experience and enable tens of thousands of small and medium businesses to fulfill orders more efficiently.
6. **Onboarding assistance for third-party sellers:** In addition to carrying products from major sellers with promotions for the local market, Amazon is facilitating e-commerce for smaller retailers that offer unique products. Amazon has created an innovative initiative called "Tatkal" which means "instantaneous" to demonstrate how a small seller can be ready to sell on Amazon's site within 60 minutes. Amazon uses vans that visit smaller retailers and suppliers. The vans have a photo studio so Amazon employees can take pictures of products, catalog them, and get sellers ready to sell.
7. **Local R&D:** Amazon's largest R&D center outside Seattle is in Bangalore. This signals its commitment for the long haul to understand the nuances of the market and to create user experience innovations specifically for the Indian market (Sawhney, 2018).

Flipkart

Leading E-commerce giant of India, Flipkart have 75 million registered users who had helped the corporate to attain 5 billion dollar GMV (Gross merchandise value) of sales in FY15. GMV is the indicator of performance of the corporate in terms of Total value of merchandise sold by the corporate during the period (Bhasin, 2019).

Flipkart customers incorporate middle class social groups who are comfortable with online shopping and find it convenient. Majority of the shoppers are the professional who are busy with their business & find it convenient to buy anything online instead of visiting the physical outlet so as to save time & money. Its "Big billion days" is the most successful campaign till now that has helped the corporate in increasing its sales during the festival season. Flipkart caters to the customers changing needs & wants. With the increase in per capita income and alterations in buying patterns, customers are getting more acquainted and are comfortable in buying online. Flipkart uses

undifferentiated targeting strategy, since buyers of all demography purchase items online which is available to everyone where the delivery is possible. Flipkart has positioned itself as a trust worthy and customer friendly E-commerce brand (Bhasin, 2019).

According to Counterpoint Research, Flipkart and Amazon together captured nearly 87% of the online smartphone market in 2017. Now, as online retailers look beyond the saturated metros to add new webshoppers, the private label-strategy from Flipkart is expected to gain momentum. Almost 45% of Flipkart's sales come from smaller towns and cities, whereas Amazon India's strong foothold in metros versus smaller towns is clearly displayed with a split of 65% and 35% of share.

Flipkart has private labels in categories including electronic accessories, furniture, large appliances and staples, which are expected to account for 15-20% of its overall sales volume within the next three years. Amazon India is also trying to capture the small town opportunity, but as its strength lies in the metros, the American ecommerce corporate is building loyalty through the subscription service Amazon Prime. Flipkart is also looking to relaunch its premium offering Flipkart First. Analysts, however, are skeptical about the move.

Flipkart is focussing on the wallet play to thwart Paytm or Amazon and drive growth through other strategies. In terms of short-term sales strategy for smartphones Flipkart is aggressive on exclusive model launch and building its own Billion brand along with target to sell more products to its existing users. Amazon on the other hand is building all around product portfolios by including diverse product categories.

Learning for startups

Startups and new entrants in the online shopping market can learn from the strategic innovations of the on line retail giants. Amazon's strategy in India holds important lessons for the e-commerce giant in other markets, as well as for other companies aiming to expand their international reach. The key is to act glocally which is a combination of global scale and resources with an in depth and granular understanding of each market, while empowering the R&D and customer-service teams to tailor solutions and solve customers' problems systematically. The loyalty program should make you stand out by addressing customers' needs and wants. Giving out rewards, discounts, and offers based on loyalty points can be one way of retaining customers. The customer can also be rewarded for being loyal to the corporate for a longer duration. These strategies work well if there is a large customer base and enough customers making repeat purchases. A tiered loyalty system can be built if the brand is new to the ecommerce world, which gives out base rewards to a relatively new customer and the rewards increase as the customer's tenure increases with online store.

There are ten core values painted on different pillars and walls inside the Myntra office, Bangalore which are as follows :

1. Customer Wow
2. Pursuit of Excellence
3. Ownership
4. Do things differently
5. Follow your Passion
6. Data drives decisions
7. Respect, Equality and Transparency
8. Do More with Less
9. Continuous Learning & Growth
10. Work Hard, Play Harder

The other learnings for startups include use of differentiate marketing activities related to customer retention and customer acquisition and automatic process to save resources and improve brand engagement (<http://sjc.marketing> , 2018). Emails can be used to remind the customer about a product that he/she abandoned while making the final purchase. Customized content such as newsletters can also be sent to grab their attention. Users can be targeted according to their online behaviour and then modify the website in real-time. Display product recommendations on the website based on user demographics and past browsing and buying behaviour. The website can display tailor-made pop-ups and content to suit the customers' choices (Nangia, 2016).

The corporate can make the next purchase of the customers worthwhile by create voucher codes and putting them in the product packaging for the customer on his/her next purchase. The experts at Browntape suggested that the best way to get consumers to come back for more is if you give them a reason to. Amazon.in allows the sellers to prepare voucher codes for their products. It is a promotion feature offered by the online marketplace. The code generated enables to offer customers, free shipping, money off (on products in the form of discounts), buy 1 get 1 free and other customised offers. A single voucher code can be used for multiple products or a single item. At the same time, multiple voucher codes can be created for a single item, the offer is decided by the seller. The end date of the voucher code can be set up to a certain date or left open for an uncertain amount of time. Another helpful feature about this option is, one can choose to hide or display the voucher codes on Amazon. This way one can choose who gets to use the code.

A seller can go that extra mile by offering its consumers the benefit of after sales services. It is difficult for some to obtain much-needed assistance after the purchase of items like televisions, desktops, sound systems and even furniture. It can be mentioned on the product page the different after sales services the seller provides. Manufacturer warranty and guarantees are also useful to customers and make them feel secure when purchasing from you for the first time and all over again.

Make sure the customers are reminded right from day one about the other products available and at attractive prices. Before shipping an order be sure to leave the customer a note in the package with maybe a link to or names of products that are on discount. You can inform them of your limited period offers and even provide a leaflet of the products going on sale. Or you can also use the marketplace chat feature to inform existing buyers about deals and offers or your wide range of products.

Always show consumers the appreciation by thanking them for buying from you. This adds a personal touch. Exceed expectations of the customers by delivering the goods faster. In addition to this, you can also boost your status on an online marketplace by becoming an Assured seller on Flipkart or perhaps a Fulfilled seller on Amazon. Always make sure you a pro with the basics like your product descriptions and images. And, make sure your customer gets a choice, not only in products but exchanges and refunds as well.

Match the competitor's price with your own and find out the POPs and PODs. Their items can be bought and the differences and similarities checked. The customer reviews can be checked and compared with the brands own products. If consumers claim they are getting their money's worth. Compare these with what you are offering and see if you can make any improvements in pricing. However, make sure you do not go too low with your prices or you may forfeit profits. Before expansion, you must perfect customer loyalty. It is a more feasible option for sales growth. With the help of these , you should be able to get there. Remember the key takeaway here is meeting customer needs, exceeding expectations and creating an awareness about your products (Menezes, 2017).

According to eCommerce Expert Richard Lazazzera, there are seven main strategies that companies should use in order to achieve high customer retention rates:

- Utilize customer accounts.
- Implement a customer loyalty system.
- Send regular customer newsletter emails.
- Surprise and delight your customers.
- Reach out and connect on social media, and post often
- Offer a discount or credit to return
- Implement right place, right product, right time emails

Conclusion

There is no doubt that these companies have reached heights because they take care that their customers keep coming back for more. With so many players in the ecommerce arena, one can retain its customers only if their expectations are not only met, but exceeded. There are lessons to be learnt from ecommerce giants in terms of the big strategies and the small tactics they adopt to keep their customers happy. Startups can take these lessons home and place their own unique strategies that work the best.

References

- Bansal, V. and Veriyar, M. (2017). “Flipkart, Amazon to adopt new strategies in new year” / economictimes.indiatimes.com/articleshow/62246689
- Bhasin, H. (2019). “Marketing strategy of Flipkart – Flipkart strategy analysis”, Marketing91.com
- Jain, V. K., & Kumar, S. (2017). Improving Customer Experience Using Sentiment Analysis in E-Commerce. In *Handbook of Research on Intelligent Techniques and Modeling Applications in Marketing Analytics* (pp. 216-224). IGI Global.
- Karnik, A. (2019) 86% of users quit shopping apps after 4 weeks: new research from Clevertrap, PR Newswire ;New York. August 21
- Kasemsap, K. (2016). Implementing electronic commerce in global marketing. In *Encyclopedia of e-commerce development, implementation, and management* (pp. 591-602). IGI Global.
- Menezes, R. (2017), 6 strategies to attract customer for repeat purchase. Indianonlineseller.com
- Nangia, S. (2016), The best retention strategies used by ecommerce giants and why they work.inc42.com
- Saura, J. R., Palos-Sanchez, P. R., & Correia, M. B. (2019). Digital marketing strategies based on the e-business model: Literature review and future directions. In *Organizational Transformation and Managing Innovation in the Fourth Industrial Revolution* (pp. 86-103). IGI Global.
- Sawhney, M. (2018) “7 ways Amazon is winning by acting globally in India”, Forbes.com.
- Sinha, A. B. (2016). “E-COMMERCE: ITS PROLIFERATION, PERFORMANCE & PATRONAGE FROM MAKE-IN-INDIA”. *Vidwat: The Indian Journal of Management*, 9(1).
- Sony, A. (2014). “How Myntra wows its customers”. yourstory.com.
- (2018, January 24) What Amazon can teach us about customer acquisition and retention, <http://sjc.marketing/amazon-can-teach-us-customer-acquisition-retention/>
- (2019, December 19) The Importance of eCommerce Customer Retention: Strategies to Keep your Customers Coming Back for More, <https://ecommercefastlane.com/importance-ecommerce-customer-retention-strategies-keep-customers-coming-back/>



Impact of banking industry in India due to global financial crisis through mergers and acquisitions

Dr. RAMESH CHANDRA RATH

ABSTRACT

This article talks about the Study of Service Quality, Brand Equity, Customer Satisfaction and Customer Loyalty in Restaurants of Odisha. Food is more than just a basic necessity, a pleasure that plays a significant role in the understanding of happiness. There are different varieties of food and cuisines preferences built by cultural and ethnical backgrounds, geographical locations and social classes. *Food* can tell us a lot about the history and traditions of various nations and regions. *Eating meat habits, herbs and crops* – everything makes its contribution to the traditional cuisine and culture. There are many places where we can get so many types of foods, it may be Indian, Continental, Chinese, Thai etc. Now-a-days all these varieties of foods are available under one roof i.e.s called Restaurant. A restaurant is the most popular name in this present world, it's a public place which open to all for selling food. Now days the restaurant is not just a place to come and eat but now it's becoming a place where people can meet and spend time together to enjoy. Restaurant is a public place, provide food and beverage on a commercial basis. Open for all people to take refreshment, provide food and beverage against money. The article signifies the role of service quality in restaurants. The article gives certain examples of different types of restaurants with variety of food items. Overall it explains the concept how brand equity, customer loyalty and customer satisfaction with different variables puts impact on restaurants.

Keywords: Service Quality, Brand Equity, Customer satisfaction, Customer Loyalty, Restaurants.

INTRODUCTION

For some people food is just a basic necessity to satisfy basic needs but for others food is a pleasure that plays a significant role in the understanding of happiness. There are so many different cuisines and food preferences built by cultural and ethnical backgrounds, geographical locations and social classes. *Food* can tell us a lot about the history and traditions of various nations and regions. *Meat eating habits, herbs and crops* – everything makes its contribution to the traditional cuisine and culture. India is a land of cultures, spices, Africa is a continent of sauces, Europe discloses esthetical

beauty of food and opens up new opportunities and inventions for those who value and enjoy eating. There are many places where we can get different varieties of foods, it may be Indian, Continental, Chinese, Thai etc. Now-a-days all these varieties of foods are available under one roof i.e.s called Restaurant.

In this present world, a restaurant is the most popular name, it's a public place which open to all for selling food. Now days the restaurant is not just a place to come and eat but now it's becoming a place where people can meet and spend time together to enjoy. Restaurant is a place which provide food and beverage on a commercial basis. Its open for all people to take refreshment, provide food and beverage against money, all food and beverage to satisfy guests. (Admin,2012) The word restaurant comes from rest and rent, so guest rest in and pay rent for having refreshment and beverage. Many people think that hotels and restaurants are the same in function and definition, actually its different, hotel has accommodation system to stay night with some facilities like food, but restaurants you can get that facilities without accommodation. (Admin,2012)

The good restaurant always provides a good level of service to it costumers, because it is so important to attract more costumers to visit again. In some cases, the costumers can feel so hungry and maybe some of them are stressful from hard work and they want the restaurant to process orders very accurately, nicely, and quickly furthermore they want the restaurant to prepare delicious fresh food. Finally, employees should be well-dressed, clean, and trained very well in treat costumers nicely and courteously and be willing to serve the customers. (ELS,2009).

In restaurants service quality, brand equity, service marketing mix, customer satisfaction and customer loyalty play a vital role. Customers get attracted by restaurants good service, well-known brand and their need and satisfaction. If a customer gets satisfaction from a restaurants service they provide by their employees which includes the 7 P's of marketing mix i.e.s the food (product), ambience and appropriate area (place), suitable and feasible price (price), awareness (promotion), well behaved and neat employees (people), well maintained (process), and proper elements (physical evidences).

Current enterprises recognize both service quality and customer loyalty are critical factors to maintain the competency for business development. Deming (1981) and Garvin (1987) identified the service quality is the satisfaction for matching the customers' demand. Customer loyalty has been regards as the key indicator for customer retention. Oliver (1997) claimed the customer

loyalty will drive customers to buy the same brand products even competitors' have better offers. Jones and Sasser (1995) indicated the customer loyalty is the behavioral intention to maintain the relationship between customer and service suppliers. The issues of brand equity and marketing mix strategy have been discussed in the academy field and recognized as necessary tools for building corporate competency in business world. Lo (2012) claimed brand equity may strengthen intangible assets and create overall success for companies. Ponnam (2011) indicated the most common brand equity model encompasses five dimensions, such as brand awareness, perceived quality, brand royalty, brand association, and another proprietary asset. This model has been empirically applied in previous researches (Atilgan, Aksoy, and Akinci, 2005; Kim and Kim, 2004; Yoo, Donthu, and Lee, 2000).

Service Quality

Service quality has been recognized as the effective tool to improve the customer loyalty. Hu (2011) indicated service quality, brand equity, and marketing mix strategy have significant and positive

relationship to customer loyalty. However, very few studies have examined the mediator role for brand equity on the relationship between service quality and customer loyalty. Hsieh and Lee (2007) indicated the relationship between publication relationship and customer loyalty is moderated by brand image. The service quality naturally been regarded as an approach for managing public relationship. This study followed these theory concepts and extended previous research.

Brand Equity

Brand equity is the value a brand name brings to all stakeholders including producers, retailers, and consumers (Tuominen, 1999). It exists when stakeholders gravitate toward a specific brand, or willing to pay more for the same level of quality because of a name. This study defines brand equity from a customer perspective. Despite the recent prominence in marketing, there is little consensus on how brand equity is created (Pappu et al., 2005; Kayaman and Arasli, 2007).

Customer Satisfaction

Satisfaction is a mental state of pleasurable fulfillment derived from consumption (Oliver, 1999). Satisfaction reflects an overall judgment on one product's superiority that occurs after consumption, guided by reference points set before consumption. Although satisfaction is related to perceived quality, it is considered as a distinctive long-term mental state (Sureshchander et al., 2002; Gustafsson et al., 2005). Satisfied customers create and sustain deep psychological bonds with preferred brands. Customer satisfaction is linked to economic performance given the relationship with profitability, market share and return on investments (Bitner, 1990; Oliver, 1999). Additionally, satisfaction is linked to non-economic performance given the relationship with behavioral and attitudinal loyalty (Bloemer and Kasper, 1995). Also, satisfaction influence other aspects of consumer behavior such as buying more products, buying other products from the same supplier, increasing the tolerance for higher prices and positive word of mouth. Customer satisfaction directly relates to brand equity in restaurants, higher customer satisfaction will increase the brand equity customers assign to restaurants.

Customer Loyalty

Approaches to the study of customer loyalty fall into three broad categories: the behavioral approach, the attitudinal approach and the integrated approach (Oh, 1995). The integrated approach takes account of both behavioral and attitudinal variables, in order to create its own concept of customer loyalty. We adopt the integrated theory of customer loyalty as our methodological framework. The concept of customer loyalty is understood as a combination of customers' favorable attitude and the behavior of repurchase.

RELEVANCE OF THE STUDY

Now-a-days people have become choosier towards everything, including the type of food they will consume. For their choice, there are different types of food varieties in the market like Indian, Thai, Chinese, Continental, etc. these cuisines are easily available in restaurants as they are mushrooming rapidly. Where we go, we will get a restaurant with variety of cuisines. Restaurants provides different types of services for customers. But not only eating most of restaurants now provides meeting area in for those customers who wants to arrange special events in the restaurant such as marriage or engagement, birthday party, and graduations, company special meetings, or others that's why restaurants are becoming more important place in now days. People are more aware in today's

scenario, they know where to go and what to have. Restaurants fall into several industries classification based on menu style, preparation methods and pricing. And also, how the food is served to the customer helps to determine the classification. Not only they see quality includes taste, flavor, hygiene but also, they see quantity as how many pieces, different categories of restaurants like ethnic, casual dining, fine, dining, barbecue, buffet etc., goodwill of the restaurants (brand), the ambience, the service, the satisfaction they get after visiting, all these matters a lot rather than price. Taking all these into consideration the research is all about service quality, brand equity, customer satisfaction and loyalty which plays a vital role to attract customer and to develop business.

REVIEW OF LITERATURE

The relationship between service quality and customer loyalty and to test the moderating role of brand equity and the mediating role of marketing mix strategy on this relationship. The population in this research was selected as customers from four retail chain stores in Taiwan, resulting in 200 individual surveys for analysis. The results indicated brand equity, service quality, and marketing mix strategy have significant and positive relationship on customer loyalty. The results also supported the hypotheses that brand equity moderated the relationship between service quality and customer loyalty, and marketing mix strategy presented partial mediating effect on the relationship between service quality and customer loyalty through path analysis. Finally, this research generated the recommendations for corporate operations and suggested future scholar studies (Dr. Yu-Jia Hu 2012).

Customer, management, and contact personnel perceptions of consumer-based brand equity (CBBE) and its dimensions utilizing a services branding triangle framework in the banking industry. Data were collected from customers, managers, and contact personnel of three types of banks in Turkey - state, private, and foreign (Musa, Tulay, Paul, Zeliha, 2016). Focused the study to show the relationship between service quality, brand image, customer satisfaction, and customer loyalty in the KTV industry (Chao, Wu, Yen, 2015). Suggested an interactive model of service brand development. The design employed in the research represents a holistic and systemic approach to services branding and the methodology employed is conceptual desk research (Skaalsvik, Olsen, 2014). Suggested an interactive model of service brand development. The design employed in the research represents a holistic and systemic approach to services branding and the methodology employed is conceptual desk research (Skaalsvik, Olsen, 2014). Investigated the effects of services marketing mix (including: price, product, place, advertising, physical evidence, process and people) on four dimensions of brand equity dimensions (including: perceived quality, brand loyalty, brand awareness and brand association), (Aghaei, Vahedi, Kahreh, Pirooz, 2013).

Business-to-business (B2B) manufacturing firms increasingly integrate services into their product portfolios under the same brand umbrella. This article aims to develop a conceptual model of the drivers of success for such B2B product-to-service brand extensions (Brown, Sichtmann, Musante, 2011). The effects of service quality on brand image, service quality on customer satisfaction, service quality on brand equity, service quality on customer loyalty, corporate rebranding on brand image, corporate rebranding on customer satisfaction, corporate rebranding on brand equity, brand image on customer satisfaction, corporate rebranding on customer loyalty, brand image on brand equity, brand image on customer loyalty, customer satisfaction on customer loyalty, brand equity on customer loyalty. The research has proven that (1) the service quality significantly affects the brand image; (2) the service quality significantly influence the customer satisfaction; (3) the service quality significantly

affects the brand equity; (4) the service quality significantly affects the customer loyalty; (5) the corporate rebranding has significant effects on the brand image; (6) the corporate rebranding has no significant effect on the customer satisfaction; (7) the corporate rebranding has no significant effect on brand equity; (8) the corporate rebranding has no significant effect on the customer loyalty; (9) the brand image has significant effect on the customer satisfaction; (10) the brand image has significant effects on the brand equity; (11) the brand image does not have significant effects on the customer loyalty; (12) significant effects from the customer satisfaction on customer loyalty; and (13) significant effects of the brand equity on the customer loyalty (Chaniago Aspizain, 2016).

Dimensions of service quality affect the brand equity in the fast food industry. The results show that the entire dimensions of service quality of model SERVQUAL (tangible factors of services, reliability, responsiveness, assurance and empathy) have a positive and significant impact on the brand equity. It also became clear that among the five dimensions of quality of services, the tangible factors of services have the most impact on the brand equity in the fast food industry (Esmaeilpour Majid, Mohamadi Zahra, Rajabi Azade, 2016). A holistic model that investigates the direct influence of service quality on building consumer based brand equity, along with the mediating role of corporate credibility and perceived value. The results suggest that perceived value and corporate credibility fully mediate the relationship between perceived service quality and consumer based brand equity. A self-administrated questionnaire was used to collect data from the customers of local and foreign banks in the Islamabad and Rawalpindi regions of Pakistan. The hypothesized relationships were tested using structural equation modeling procedure (Sadia Jahanzeb, Tasneem Fatima, Muhammad Mohsin Butt, 2013).

RESEARCH GAP

Various researches were done on service quality, brand equity, customer satisfaction, customer loyalty separately, but all these approaches have not been done together interlinking each other. The sector of the study will be restaurant, in which research is very limited taking. The proposed study is an attempt to study the effect of service quality on brand equity, to identify the link between brand equity, customer satisfaction and customer loyalty; to examine the relationship between service quality, customer satisfaction and customer loyalty; which has not been done and its new for research.

RESEARCH OBJECTIVE

1. To examine the relationship between service quality, brand equity, customer satisfaction and customer loyalty.
2. To identify the link between brand equity, customer satisfaction and customer loyalty.
3. To measure the effect of service quality and brand equity on customer loyalty.

RESEARCH METHEDOLOGY

Sampling

As the proposed research is conducted to find out customer satisfaction, the data for the study will be collected from customers. The population for this study will be the exiting customers. A purposive sampling method will be applied for drawing samples from the restaurant under the study.

Factor Analysis Design (Hair, Black and Tatham, 2009)

- Factor analysis is mostly performed often only on metric variables, although specialized methods exist for the use of dummy variables; a small number of “dummy variable” can be included in a fact of metric variables that are factor analyzed.
- If a study is being designed to reveal factor structure, strive to have at least five variables for each proposed factor.
- For sample size:
- The sample must have more observations than variables.
- The minimum absolute sample size should be 50 observations
- Maximize the number of observations per variables, with a minimum of 5 and hopefully at least 10 observations per variable.

Data Collection

The data for the proposed study will be collected by the using of different questionnaires. Separate questionnaires will be used for service quality, brand equity, customer satisfaction and customer loyalty to collect information from respondents. Follow up Personal interview will be conducted to substantiate the data collected from customers.

Satistical Tools

Regression analysis, factor analysis, SEM (Structural Equation Model) will be used to explain the relationship between all the approaches in the study. In order to analyze the data descriptive statistics were employed. Service quality, brand equity, customer satisfaction and customer loyalty will be measured using different variables considering the customers of the restaurants.

SCOPE OF THE STUDY

The study will be conducted in restaurants of all categories operating in Bhubaneswar. The future study can be done *firstly*, by taking all these approaches in other cities of Orissa and may be in other states with more sample size. *Secondly*, this study sector is restaurant, the future study can be conducted in different sectors with these approaches or others.

CONCLUSION

The primary purpose of this study was to examine the relationship between service quality, brand equity, customer satisfaction and customer loyalty, to identify the link between brand equity, customer satisfaction and customer loyalty and to measure the effect of service quality and brand equity on customer loyalty. The survey will be done in restaurants of Odisha covering all the factors mentioned above. In Odisha restaurants are mushrooming and the demand for food is increasing. A restaurant or an eatery, is a business which prepares and serves food and drinks to customers in exchange for money. Meals are generally served and eaten on the premises, but many restaurants also offer take-out and food delivery services, and some offer only take-out and delivery. Restaurants vary greatly in appearance and offerings, including a wide variety of cuisines and service models ranging from inexpensive fast food restaurants and cafeterias to mid-priced family restaurants, to high-priced luxury establishments. So, this study is basically to know the services provided by the restaurants to the customers, how the quality puts impacts on customers, how the customers are satisfied with the service, brand and how they become loyal to the restaurants.

REFERENCES

- Abadh Jibi Ghimire (2012) ALIN SRIYAM, Presented in Partial Fulfillment of the Requirements for the Master of Arts Degree in Business English for *International Communication at Srinakharinwirot University* May 2010
- Bikram Jit, S. M., & Kaur, M. (2013). Exploring branding strategies of FMCG, services and durables brands: Evidence from India. *The Journal of Product and Brand Management*, 22 (1), 6-17 . doi: <http://dx.doi.org/10.1108/10610421311298650>
- Biljana Angelova, Jusuf Zekiri (2011). Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model). *International Journal of Academic Research in Business and Social Sciences*
- Brown, B., Sichtmann, C., & Musante, M. (2011). A model of product-to-service brand extension success factors in B2B buying contexts. *The Journal of Business & Industrial Marketing*, 26(3), 202-210. doi: <http://dx.doi.org/10.1108/08858621111115921>
- Chaniago Aspizain (2016), The effects of service quality and corporate rebranding on brand image, customer satisfaction, brand equity and customer loyalty: study in advertising company at Tvone, DOI <https://doi.org/10.18551/rjoas.2016-12.26>, RJOAS, 12(60), December 2016
- Chao-Chan Wu (2011), The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management* Vol. 5(12), pp. 4873-4882, 18 June, 2011
- Christian Grönroos, (1994) "From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing", *Management Decision*, Vol. 32 Issue: 2, pp.4-20, doi: 10.1108/00251749410054774"Consumer Brand Loyalty in the Retailing Industry. *Mediterranean Journal of Social Sciences*, Vol 4 No 14"
- Djekic, I., Kane, K., Tomic, N., Kalogianni, E., Rocha, A., Zamioudi, L., & Pacheco, R. (2016). Cross-cultural consumer perceptions of service quality in restaurants. *Nutrition and Food Science*, 46(6), 827-843. Retrieved from <https://search.proquest.com/docview/1842823843?accountid=172344>
- Esmailpour Majid, Mohamadi Zahra, Rajabi Azade (2016), Effect of dimensions of service quality on the Brand equity in the fast food industry, *Studies in Business and Economics* no. 11(3)/2016
- Gloria K.Q Agyapong. (2010). The Effect of Service Quality on Customer Satisfaction in the Utility Industry – A Case of Vodafone (Ghana). *International Journal of Business and Management*. Vol. 6, No. 5; May 2011
- Gronroos, C. (1990). Relationship approach to marketing in service contexts: The marketing and organizational behavior interface. *Journal of Business Research* , 20(1), 3. Retrieved from <https://search.proquest.com/docview/196322046?accountid=172344>
- Hanaysha, J. (2016). The importance of social media advertisements in enhancing brand equity: A study on fast food restaurant industry in Malaysia. *International Journal of Innovation, Management and Technology*, 7(2), 46-51. doi: <http://dx.doi.org/10.18178/ijimt.2016.7.2.643>
- Herstein, R., & Gamliel, E. (2006). The role of private branding in improving service quality. *Managing Service Quality*, 16(3), 306-319. doi: <http://dx.doi.org/10.1108/09604520610663516>
- Herstein, R., & Gamliel, E. (2006). The role of private branding in improving service quality. *Managing Service Quality*, 16(3), 306-319. doi: <http://dx.doi.org/10.1108/09604520610663516>
- Hong Youl Ha (2009), "Effects of Two Types of Service Quality on Brand Equity in China: The Moderating Roles of Satisfaction, Brand Associations, and Brand Loyalty", *Seoul Journal of Business* Volume 15, Number 2 (Dec 2009)
- Horan, G., O'Dwyer, M., & Tiernan, S. (2011). Exploring management perspectives of branding in service SMEs. *The Journal of Services Marketing*, 25(2), 114-121. doi: <http://dx.doi.org/10.1108/08876041111119831>
- Hu, Y. (2009). Service quality as mediator of the relationship between marketing mix strategy and customer loyalty: the case of retailing stores in taiwan. *International Journal of Organizational Innovation (Online)*, 2(2), 282-293. Retrieved from <https://search.proquest.com/docview/194692421?Accountid=172344>
- Hu, Y. (2011). How brand equity, marketing mix strategy and service quality affect customer loyalty: the case of retail chain stores in taiwan. *International Journal of Organizational Innovation (Online)*, 4(1), 59-73. Retrieved from <https://search.proquest.com/docview/905852281?Accountid=172344>
- Islam, M., Yang, Y., Hu, Y., & Hsu, C. (2013). Marketing mix, service quality and loyalty-in perspective of customer-centric view of balanced scorecard approach. *Accounting, Accountability & Performance*, 18(1), 1-17. Retrieved from <https://search.proquest.com/docview/1506894212?Accountid=172344>

ISSN: 2222-6990"

- Jalal Hanaysha (2016), Testing the Effect of Service Quality on Brand Equity of Automotive Industry: Empirical Insights from Malaysia, *Global Business Review*, Vol 17, Issue 5, pp. 1060 - 1072
- Jandaghi, G., Razieh, N. M., Mahdi, N. S., & Mokhles, A. (2011). Studying the effect of brand loyalty on customer service in Kerman Asia insurance company. *Australian Journal of Business and Management Research*, 1(7), 152. Retrieved from <https://search.proquest.com/docview/1503229386?accountid=172344>
- Jarrell, C. M. (2012). An examination of possible relationships between service quality and brand equity in online higher education (Order No. 3529670). Available from *ProQuest Central; ProQuest Dissertations & Theses Global*. (1102800518). Retrieved from <https://search.proquest.com/docview/1102800518?accountid=172344>
- Kara, A., Kaynak, E., & Kucukemiroglu, O. (1995). Marketing strategies for fast-food restaurants: A customer view. *International Journal of Contemporary Hospitality Management*, 7(4), 16. Retrieved from <https://search.proquest.com/docview/228332356?accountid=172344>
- Kress, G. (1992). Business, management & labor — relationship marketing: Bringing quality, customer service and marketing together by martin christopher, adrian payne and david ballantyne. *Choice*, 30(1), 174. Retrieved from <https://search.proquest.com/docview/225938895?accountid=172344>
- Malcolm H.B. McDonald, Leslie de Chernatony, Fiona Harris, (2001) “Corporate marketing and service brands Moving beyond the fast moving consumer goods model”, *European Journal of Marketing*, Vol. 35 Issue: 3/4, pp.335-352, doi: 10.1108/03090560110382057
- Malik, M. E., Naeem, B., & Nasir, A. M. (2011). Impact of service quality on brand image: Empirical evidence from hotel industry. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 630-636. Retrieved from <https://search.proquest.com/docview/928449994?accountid=172344>
- Mehri Etemadifard, Azar Kafashpoor, Ahmad Zendehtdel (2013), The Effect of Brand Communication and Service Quality in the Creation of Brand Loyalty through Brand Trust (Case Study: Samsung’s Representatives Company in Mashhad City). *International Journal of Advanced Studies in Humanities and Social Science*, Volume 1, Issue 8, 2013: 1067-1077
- Michael K. Brady, Brian L. Bourdeau, Julia Heskell, (2005) “The importance of brand cues in intangible service industries: an application to investment services”, *Journal of Services Marketing*, Vol. 19 Issue: 6, pp.401-410, doi: 10.1108/08876040510620175
- Mohammad Aghaie, Elham Vahedib, Mohammad Safari Kahrehc, Mahdi Piroozd, (2013) “An examination of the relationship between Services Marketing Mix and Brand Equity Dimensions”,
- Morteza Soltani, Mohammad Rahim Esfidani, Gholamreza Jandaghi, “Mula Nazar Khan, Zain-ul-Aabdean, Muhammad Salman, Babar Nadeem, Muhammad Rizwan, (2016). The Impact of Product and Service Quality on Brand Loyalty: Evidence from Quick Service Restaurants. *American Journal of Marketing Research*
- Muhammad Waseem (2016), The impact of service quality on brand loyalty; A descriptive study of Smartphone users in higher educational institutions of district Vehari, Punjab, Pakistan. *Global Advanced Research Journal of Management and Business Studies* (ISSN: 2315-5086) Vol. 5(1) pp. 026-030, January, 2016
- Munusamy, J., Chelliah, S., & Mun, H. W. (2010). Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International Journal of Innovation, Management and Technology*, 1(4), 398. doi: <http://dx.doi.org/10.7763/IJIMT.2010.V1.71>
- Nima Soltaninejad (2016), The effect of service quality on private brand image and purchase intention in the chain stores of ETKA. *WSN* 47(2) (2016) 202-216 EISSN 2392-2192"
- Nitin Seth and S.G. Deshmukh (2005), Service quality models: a review, *International Journal of Quality & Reliability Management* · December 2005
- Novikova, K. (2009). A study of customer satisfaction factors and employee satisfaction in the hospitality industry (Order No. 1464981). Available from ProQuest Central; *ProQuest Dissertations & Theses Global*. (305000386). Retrieved from <https://search.proquest.com/docview/305000386?accountid=172344> October 2011, Vol. 1, No. 3
- Parasuraman, Anantharanthan, Leonard L. Berry, and Valarie A. Zeithaml. “Perceived service quality as a customer based performance measure: An empirical examination of organizational barriers using an extended service quality model.” *Human Resource Management* 30.3 (1991): 335-364.
- Paul, J., Mittal, A., & Srivastav, G. (2016). Impact of service quality on customer satisfaction in private and public sector banks. *The International Journal of Bank Marketing*, 34(5), 606-622. Retrieved from <https://search.proquest.com/docview/1795936866?accountid=172344>

- Pinar, M., Girard, T., Trapp, P., & Eser, Z. (2016). Services branding triangle. *The International Journal of Bank Marketing*, 34(4), 529-549. Retrieved from <https://search.proquest.com/docview/1789384674?accountid=172344>
- Ren-Fang Chao, Tai-Chi Wu, Wei-Ti Yen (2015). The Influence of Service Quality, Brand Image, and Customer Satisfaction on Customer Loyalty for Private Karaoke Rooms in Taiwan. *The Journal of Global Business Management* Volume 11* Number 1 * April 2015 Issue Retail Banking Sector in Bangladesh. *International Journal of Business and Management*, Vol. 6, No. 3; March 2011."
- Richard Chinomona, Donald Mahlangu, David Pooe (2013). Brand Service Quality, Satisfaction, Trust and Preference as Predictors of
- Sadia Jahanzeb, Tasneem Fatima, Muhammad Mohsin Butt (2013), How service quality influences brand equity: The dual mediating role of perceived value and corporate credibility. *International Journal of Bank Marketing*
- Sajeeb Kumar Shrestha, Ms. Roshee Lamichhane, (2013), Impact of service quality on brand equity of commercial banks in nepal, *National Seminar on Operations Research* [Proceeding Book], 1 2 February, 2013, P.101 111
- Sichtmann, C., Schoefer, K., Blut, M., & Kemp, C. J. (2017). Extending service brands into products versus services. *European Journal of Marketing* , 51(1), 200 -218 . Retrieved from <https://search.proquest.com/docview/1862659550?accountid=172344>
- Skaalsvik, H., & Olsen, B. (2014). Service branding: Suggesting an interactive model of service brand development. *Kybernetes*, 43(8), 1209-1223. Retrieved from <https://search.proquest.com/docview/1650889759?accountid=172344>
- Skaalsvik, H., & Olsen, B. (2014). Service branding: Suggesting an interactive model of service brand development. *Kybernetes*, 43(8), 1209-1223. Retrieved from <https://search.proquest.com/docview/1650889759?accountid=172344>
- Suzana Markovic, Sanja Raspor, Jelena Dorc (2011), "What are the key dimensions of restaurant service quality? An empirical study in the city restaurant settings", *Sustainable Tourism: Socio-Cultural, Environmental and Economic Impact*, pp. 235-249, 2011
- Tung, F. (2013). Customer satisfaction, perceived value and customer loyalty: The mobile services industry in china. *African Journal of Business Management*, 7(18), 1730-1737. doi: <http://dx.doi.org/10.5897/AJBM10.383>
- Vatjanasaregagul, L. (2007). The relationship of service quality, consumer decision factors and brand equity (Order No. 3269304). Available from ProQuest Central; *ProQuest Dissertations & Theses Global*. (304716770). Retrieved from <https://search.proquest.com/docview/304716770?accountid=172344> Vol. 2, No. 3, 2016, pp. 84-94"
- Wei-Tsong, W., & Hui-Min, L. (2012). Factors influencing mobile services adoption: A brand-equity perspective. *Internet Research*, 22(2), 142-179. doi: <http://dx.doi.org/10.1108/10662241211214548>
- Wu, C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873-4882. doi: <http://dx.doi.org/10.5897/AJBM10.1347>
- Wu, C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873-4882. doi: <http://dx.doi.org/10.5897/AJBM10.1347>
- Yelkur, R. (2000). Customer satisfaction and the services marketing mix. *Journal of Professional Services Marketing*, 21(1), 105-115. Retrieved from <https://search.proquest.com/docview/200221768?accountid=172344>
- Yu-Jia, H. (2012). The moderating effect of brand equity and the mediating effect of marketing mix strategy on the relationship between service quality and customer loyalty: the case of retail chain stores in Taiwan. *International Journal of Organizational Innovation (Online)*, 5 (1), 155-162. Retrieved from <https://search.proquest.com/docview/1030258221?Accountid=172344>
- Zohaib Ahmed, Muhammad Rizwan, Mukhtar Ahmad, Misbahul Haq (2014), Effect of brand trust and customer satisfaction on brand loyalty in Bahawalpur. *Journal of Sociological Research*, ISSN 1948-5468, 2014, Vol. 5, No. 1

FACTORS AFFECTING CONSUMER PERCEPTION TOWARDS ONLINE GREEN MARKETING: AN EMPIRICAL INVESTIGATION

ANAND GOUDO

Abstract :

In the present scenario it is a hefty challenge for the industries to satisfy the wants of the consumer and keep the environmental issues under control. People are aware about the impact of environment related issues such as pollution, chemicals, and industrial gases that damage the ecological environment and human being health. As a result, the consumer shifting their interest towards eco-friendly products and services. Manufacturing organic products i.e., grow natural by employing the limited resource by the firm is a big task. A large number of populations support the movement adopted by the government to protect our environment. Adoption of non-hazard methods in producing the goods is crucial in making the planet as conservation of natural resources and sustainable development. The present paper examines the factor or/ factors are responsible to bring change in the attitude among the customers to the green marketing products. To achieve the objectives of the study primary data have been collected through a structure questionnaire. The relevant conclusion and recommendation have been drawn after analyzing the data.

Keywords:Green Marketing, Consumer perception, Impact of e-green products, new marketing strategy, Eco-friendly products,Factor Analytic approach, ANOVA

Introduction

The term “Green marketing” has been gaining attention to the manufacturers and consumers in the present day since its inception in 1990’s. Comparing earlier public concern about environmental protection with the present has been rising consistently. As government and other non-government organizations have put efforts in keeping our environment safe from all environmental issues or problems such as pollution, chemicals, and industrial gases. “Go Green” is one of the important social movement so far initiated by the government. Adverse effect of traditional products on the environment and human being health that led to switch the behaviour of the consumers towards the eco-friendly products and services having features like clothes made from recycle fabric, energy efficient and durable electrical appliances, rechargeable batteries, reusable water bottles etc.

In simple words, green marketing covers a wide range of activities that includes change in the production process, packaging, and advertising that cause less damage to the environment. Gifted or natural resources are limited whereas the human wants are unlimited, keeping this in mind the industries shall produce the green products to satisfy the want so that the business activities do not harm the environment. Now a days, consumers and marketers are more concern about ecological balance, demand eco-friendly products to keep the environment issues under control. This increase in the interest to save the natural resources and environment for the next generation gives rise to understand the consumer's perception towards online green marketing. Therefore, this study has been undertaken to provide an insight and relevant information related to the factors that influence the attitude of consumers towards online green products.

Review of Literature

Mahapatra (2013) made an enquiry to come out with the factors that influences the Indian consumer behavior about the green products by doing a survey and collecting the primary data from total 162 respondents in India. A 5 point Likert scale was used to measure the respondent's frequency to pay for certified green products. The result of the study indicates that the most significant determinants as personal benefit, price, and convenience of use, performance, availability, environment, and health concern affecting the insight of Indian consumers to purchase the green products. The author also concluded that the promotion of green products among the consumers shall be done by educational campaigns.

Bhatia and Jain (2013) highlighted the consumers' perception and preference towards green marketing products and practices by collecting primary data through questionnaire survey from 106 respondents. Collected data was analyzed by multiple regression analysis; the result of the analysis shows that perception about the green products and practices, and the ingenuities taken by the companies for green products have a positive and significant effect on the consumer persuasion towards purchasing or preferring the eco-friendly products.

Hundal and Kumar (2015) studied the customer perception towards eco-friendly products and services by taking into account the factors as desire, preference, social welfare, trustworthiness, and ethical. The authors found that as a new concept i.e., "Go Green" where in the products and services shall be certified by a regulatory body to declare it as an organic one. More awareness about the green marketing need to be build among the customer and corporate to make the planet as safe.

Patel and Chugan (2015) probe a study on the influence of consumer perception towards green advertising and green products. The study's aim is to analyze the influence of the consumer behavior about the eco-friendly goods. Primary data collected from 203 respondents via questionnaire. Statistical methods Factor analysis and multiple regression analysis used to analyze the collected data. The results of the study show that the selected variables (environment knowledge, company's image, products features improved and ethical impact) have a positive and significant impact on the consumer mindset towards green products.

Parthiban (2016) conducted a study on consumer perception towards green marketing with the main objective is to find out the factor and/ or factors that enhance the green products attractiveness

to the consumers in the selected city Chennai. To achieve the purpose of the study, primary data collected through a well-structured and close ended questionnaire from 188 consumers residing in Chennai. The collected data was analyzed with the well-known statistical methods as Chi-square test, Friedman test, and percentage analysis. The researcher found that the green marketing act as a tool to save our environment from the hazardous activities. Adopting green marketing and practices bring change in the business world as it saves environment from pollution for the future generation.

Choshaly(2017) investigated the customer's intention towards the purchase of green products, the objective of the study is to find the factor or factors significantly affecting the consumer attitude to buy the green products and usage of recycle bags. Primary data collected from 170 university students in Malaysia. Multiple regression analysis and correlation analysis have been used to analyze the collected data. The researcher identified the drivers influencing the customer attitude as perceived environmental responsibility is a top predictor, social influence, and concern for self-image as second and third factors affecting the customer green purchasing intention respectively. The study reflected that the usage of recycle is a positively related with Environmental Concern, Social Influence, Purchasing Intention, Affective Commitment, Perceived Environmental Concern, and Concern for self-image.

N.P (2017) undertaken a study on consumer's awareness towards eco-friendly products with the objectives of the significance of green marketing and the remedial methods to solve its challenge. To attain the objectives primary data collected through questionnaire asked from 80 respondents in Palakkad district as well as secondary data poised from journals, books and various published reports. The author found that there is an absence of standardization in green products. Consumers purchased eco-friendly products previously are satisfied with the same and willing to buy again.

Shuba (2019) conducts a descriptive study on consumer perception towards green marketing. The objective of the study is to know the preference and awareness of Indian consumers about green products; also to find the determinants that persuade the customer's behavior with regard to green goods. The author collected the primary data through questionnaire survey from 45 respondents or consumers living in the city Bangalore. The study revealed that 75 percent of the respondents confirm that the green product price is higher than the traditional products. More awareness about green marketing and practices need to be spread among the customers.

Research Gap

Despite of several studies conducted by eminent academicians and authors on the consumer's perception towards Green Marketing, no previous or little work on the consumer mindset towards online green marketing has been conducted. Therefore, this paper has been undertaken to attain the purposes of the study and objectives as stated below.

Purpose of the Study:

The research may benefit the marketers, strategy makers, and the startup entrepreneurs by offering a better understanding of customers' perceptions towards online buying attitude on Green marketing. The purposes of the study are as follows:

- (a) To find out the factors responsible for the adoption of online buying green products.

- (b) To evaluate whether the specific demographic characteristics play a role for the buying attitude of the green products.

Objectives:

The main objective of the research is to come out with the factors that influence the consumer preference or mindset towards the online green marketing; split in to two specific objectives are as follows.

- (i) To identify the factor and/ or factors that influences the consumer to purchase the green marketing products through online.
- (ii) To find out the significant relation among customer inclinations near online buying perspective with mention to demographic contours (Like Gender, Age, Income, and Profession) in Kolkata District.

Research Methodology

A. Study Settings and Designs:

This examination is pragmatic in nature. The data have been collected from online green product buyers of various sub-divisions of Kolkata district under West Bengal, India. The consumers who purchase the green products through online are taken as the respondents. For this investigation, population is those who consume the green products through online across all demographic appearance and sample size was determined according to the size of proportionality. The respondents are chosen from the random number generated from the excel sheet. Sampling method have been used for this investigation is 'Simple convenience sampling'.

B. Questionnaire Design and Pilot Testing

The study has discovered secondary bases of data in order to explore the online green products buying system followed by the seller. Moreover a qualitative approach has been conducted with face to face interviews. For this investigation a structured questionnaire has been framed with the summated rating scale. The 5 point Likert Scales have been used with 25 questions where 1 referred to as strongly agree, 2 referred as agree, 3 as neutral, 4 as disagree and the last one 5 referred to as strongly disagree. The questionnaire was translated into one local language like Bengali and again translated back to English in order to achieve semantic reliability. The whole output have been an effective instrument to design questionnaire. For the test of originality, reliability of the questionnaire was measured by the experts and pilot tested have been done to confirm its construct validity. The questionnaire have broken in two parts: i) The demographic details of the online green product consumer b) Reflective statements to find out the positive factors influence to online green product consumers in relation with demographic variables to change their buying behaviour.

C. Empirical Design:

After collected all the data through questionnaire were coded in the table form in SPSS 21 software. The exploratory factor analysis (EFA) has been used in order to obtain the purpose of data dismissal. The Principal Component Method has been used to extract the scopes. The adequacy of the sample was verified through KMO test by Factor analysis and Bartlett's test. Analysis of variance

(ANOVA) has been used to check the association among factors(like On time Delivery, Flexible payment option, Reasonable price with discount , Company Branding , Availability of products and lastly Rating and Review with demographic variables (like Gender, Age, Income and Profession).

D. Types of data used:

For this investigation authors were collected 100 samples out of 140 questionnaires which are distributed in the online green products consumer. Primary data have been collected from the well-structured close ended questionnaire either coded qualitatively and quantitatively. For the better outcome researcher had collected few data from different secondary sources through books, magazines, journals, reports, research studies, internet sources, case studies etc.

Hypothesis:

H0₁: There is no significant relationship in between **Gender** and **buying attitude towards e-green products** with respect to outlining factors.

H0₂: There is no significant relationship in between **Age** and **buying attitude towards e-green products** with respect to outlining factors.

H0₃: There is no significant association in between **Income** and **buying attitude towards e-green products** with respect to outlining factors.

H0₄: There is no significant relationship in between **Profession** and **buying attitude towards e-green products** with respect to outlining factors.

Analysis and Findings

Factor Analysis: The Principal Component Analysis has been conducted through Extraction, Rotation, and Interpretation. During extraction, maximum likelihood and Eigen value greater than one is set for further proceeding. The Exploratory Factor analysis has been done with VARIMAX procedure which implies to orthogonal rotation. The output components like on time Delivery, Flexible payment option, Reasonable price with discount, Company Branding, Availability of products and Rating and Review have been extracted through Principal Component Analysis (PCM).

Table I: Reliability statistics of 25 items.

Reliability Statistics

Cronbach's Alpha	N of Items
.875	25

From the above table, it is visible that the value of the Cronbach's Alpha for reliability checking on the total sample size is >.60. So it is concluding that the sample is reliable for this research.

Table II : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.779
Bartlett's Test of Sphericity	Approx. Chi-Square	789.938
	Df	190
	Sig.	.000

Notes: Principal components factor analysis with varimax rotation; KMO measure of sampling adequacy: 0.779; Bartlett test of sphericity. 190; p<0.000.

Table III: Factors identified by the Principal component analysis

Factor	Variable names	Factor Loadings	% of variance explained	Cronbach's alpha
On time Delivery	Privacy_home	.637	15.241	.789
	Convenience	.649		
	Delivery_time	.919		
Flexible payment option	COD_facility	.924	14.818	.878
	Money_back	.657		
	Credit_card	.924		
Reasonable price with discount	Easy_price	.810	14.345	.825
	Shopping_needs	.686		
	Seasonal_Discount	.910		
Company Branding	Broader_product	.749	11.390	.795
	Company_reputation	.869		
	frills or strings	.549		
Availability of products	Life_style	.607	15.669	.724
	Easy_use	.720		
	Choice of products	.611		
Rating and Review	Review_product	.754	13.667	.885
	time_consuming	.673		
	Highly_technical	.561		

ANOVA: Predicting the impact of demographic variables on buying attitude towards e-green products

The ANOVA tool is used to compare the samples based on their mean value. It is a statistical technique which is used to determine whether the two or more groups are significantly different or not. The ANOVA tool compares the mean of more than one factor on the basis of their mean values. The P-value is chosen as the benchmark value for choosing the significant level. If the P-value which obtained have >0.05 , then the null hypothesis is accepted. The P-value greater than 0.05 have been obtained from this investigation in case of demographic variable like Age (Null hypothesis is supported). In case of Gender, Income and Profession are significantly associated with the outlining factors like Reasonable price with discount, Availability of products, Flexible payment option, Company Branding, Rating and Review where Null hypothesis is not accepted. The detailed tabulation of ANOVA analysis has been depicted in table IV.

Table IV: Summary of ANOVA analysis tool based on the Demographic Details

Variable	Significance value along with factors	Significant value(positive association)
Gender	On time Delivery(0.140),Flexible payment option (0.406), Reasonable price with discount(0.021), Company Branding(0.165), Availability of products (0.012), Rating and Review(0.421)	Gender is Significantly associated with Reasonable price with discount(0.02) and Availability of products (0.01)
Age	On time Delivery(0.510), Flexible payment option (0.406), Reasonable price with discount(0.220), Company Branding (0.163), Availability of products (0.112), Rating and Review(0.402)	No significant association
Income	On time Delivery(0.310),Flexible payment option (0.006),Reasonable price with discount(0.210),Company Branding (0.013), Availability of products (0.121),Rating and Review(0.032)	Income is significantly associated with Flexible payment option (0.006), Company Branding (0.013) and Rating and Review (0.032)
Profession	On time Delivery(0.560),Flexible payment option (0.036),Reasonable price with discount(0.031),Company Branding (0.043), Availability of products (0.121),Rating and Review(0.022)	Profession is significantly associated with Flexible payment option (0.036), Reasonable price with discount (0.031), Company Branding (0.043) and Rating and Review(0.022)

Conclusion:

After investigation it has been found that there is significant association between the demographic variable **Gender** and **buying attitude towards e-green products** with the respect to outlining factors like **Reasonable price with discount** and **Availability of products**. However proposed first hypothesis (H_{01}) didn't support for the first investigation. **Age** is another one which supported proposed NULL hypothesis (H_{02}). Here it is found that there is no significant association between the variable **Age** and **buying attitude towards e-green products** with respect to outlining variables because Age is neutral technological application and assumption. Likewise Income is another variable which didn't support the NULL hypothesis (H_{03}). Here it has been observed that Income is significantly associated with few outlining factors like **Flexible payment option, Company Branding** and **Rating and Review**. In the same way it has been observed that Profession didn't support the NULL hypothesis (H_{04}), it accepted the alternate hypothesis because it seems there is a significant association in between the demographic variable Profession and **buying attitude towards e-green products** with respect to outlining factors **Flexible payment option, Reasonable price with discount, Company Branding** and **Rating and Review**.

Managerial Implications

The findings of this investigation will boost the awareness of green products to the contemporary diversified range of consumer. This research will also help marketer, policy maker, strategy maker to improve the online business and change the pattern of buying and selling system of online green

products in the nation. Mainly marketer will focus on those factors which extracted from the analysis that influence the customers to buy the e-green products frequently. The implied findings will infuse the wellness concept with scalability of business operations.

Limitation of the study

- (a) The survey has been performed only in Kolkata district; it may not reveal the public view regard to online green marketing at large.
- (b) Sample size in this paper is small i.e., 100 respondents living in the Kolkata district.
- (c) Cost and Time constraints.

REFERENCES

Mahapatra, Dr. Sabita,(2013), "A Study on Consumer's Perception for Green Products: An Empirical Study from India",*International Journal of Management and Information Technology*, ISSN:2278-5612,vol.7,no.1,Issue November,Pp.924-933.

Bhatia, Mayank and Jain, Amit,(2013), "Green Marketing: A Study of Consumer Perception and Reference and Preferences in India", *Electronic Green Journal*, ISSN:1076-7975, vol.1(36), Pp.1-19.

Hundal, Dr. Bikramjit Singh, and Kumar,Vikash,(2015), "Consumer Perception towards Green Products: A Factor Analytic Approach",*Pacific Business Review International*,vol.7,Issue 10, April,Pp.01-07.

Choshaly, SaharHosseinikhah, (2017), "Consumer Perception of Green Issues and Intention to Purchase Green Products", *International Journal of Management, Accounting and Economics*, ISSN: 2383-2126, vol.4, no.1, Issue January, Pp.66- 79.

N.,Shubha,(2019), " A Study on Consumer Perception towards Green Marketing with reference to Bangalore city", *International Journal of Basic and Applied Research*, ISSN: 2249-3352(print),vol.9,no.1, Pp.475-485.

N.P., Fasla,(2017), "Green Marketing: A Study of Consumer's Perception towards Environment Friendly Products", *International Journal of Research Science and Management*, ISSN: 2349-5197,vol.4 (4), Issue April, Pp.48-52.

Patel, Chitral P. and Chugan, Dr. Pawan K.,(2015), " The influence of Consumer Perception towards Green Advertising on Green Purchase Intention",*International Journal of Entrepreneurship and Business Environment Perspectives*, ISSN: 2279-0926 (online),vol.4,no.3, Issue July-September,Pp.1865-1873.

Parthiban, V.N., (2016) "Consumer Perception towards the Green Marketing: A Study with special reference to Chennai City", *International Journal of Management and Development Studies*, ISSN: 2320-0685(online), vol.5 (4), Pp.52-60.



E-Money and E-Finance: As Financial Category

BIJAY KUMAR KINTALI

ABSTRACT:

Industrialization is one of the important means to answer in economic and social transformation in the developing countries. In the Indian Economy, Small and Medium-scale enterprises (SMEs) have a significant role to play and have grown in importance during the last couple of decades. Electronic commerce i.e. e-commerce today is exploding and the number of users on the internet is growing rapidly. However, one of the greatest challenges in Orissa is to convince small and medium enterprise (SME) that both their survival and prosperity depends on adopting e-commerce. This research found out that most of the SME do not appreciate the implication of the major changes taking place around them. It is evident in this research that there is resistance to e-commerce adoption. Therefore the transition to e-commerce is hoped to open up a vast array of business opportunities for those who are willing to take advantage of the new technology. Despite the enormous attention given to encourage SMEs to adopt e-commerce by governments still SMEs in orissa lag far behind in terms of adopting this technology. The proposed study tries to examine the relationship between IT investments and creating value for the business. Further the study tries to examine the factors which affect the adoption of e-commerce in business and to develop a framework how e-commerce adoption should be carried out from a strategic perspective.

Keywords : [E-Commerce, ICT, Internet]

1. INTRODUCTION

The emergence of the Internet has allowed Small and Medium-sized Enterprises (SMEs) to compete effectively and efficiently in both domestic and international markets. It is a well-known fact that e-commerce and Internet technologies can benefit an organisation. Developing countries have the potential to achieve rapid and sustainable economic and social development by building an economy based upon an ICT enabled and networked SME sector capable of applying affordable yet effective ICT solutions. Information and Communication Technologies (ICT) play a prominent role in the field of commerce and trade nowadays. While the developed world forges ahead with transformation of businesses, the developing world struggles to keep pace with emerging technologies. In a challenging global society, effective use of ICT is critical for the success of businesses especially SMEs. SMEs, vital to the economy in any country, are very often recognized as an economy growth engine. They often occupy strategic positions in the economy, whereas large companies lack their flexibility. The

SME sector plays a significant role in its contribution to the national economy in terms of the wealth created and the number of people employed. With the development of ICT and the shift to a knowledge-based economy transformation and the introduction of ICT is becoming an increasingly important tool for SMEs both to reinvigorate corporate management and promote growth of the national economy. Despite advances in IT and the acceptance by large organizations of such technologies, the same level of adoption is not evident among SMEs. This also suggests that SMEs face significant and unique challenges in adopting ICT and e-commerce. This low level of adoption particularly impedes SMEs in developing countries. E-commerce is defined as business activities conducted using electronic data transmission via the Internet and the WWW. E-commerce provides many benefits to both buyers and sellers. E-commerce reduces costs and improves product quality. Among the studies focused on technology adoption, only a small number were devoted to the adoption and use of e-commerce in small and medium sized enterprises (SMEs). SMEs play an important role in the economies of both developing and developed countries. For example, in the United States, SMEs represent 99 percent of businesses; employ more than half of the work. Specifically, Orissa represents a good case study for India because it offers many demographics that should make e-commerce a success. Another important demographic is that Orissa is relatively advanced in terms of telecommunications infrastructure. For many emerging markets, telecommunications, or the lack of, is a significant obstacle preventing Internet and e-commerce adoption. E-commerce denotes a seamless application of information and communication technology from its point of origin to its endpoint along the entire value chain of business processes conducted electronically and designed to enable the accomplishment of a business goal. E-commerce is an environment that facilitates business and organizational transaction over networks. It enhances the relationship between organisation and customers, financial institutions, managers and the public at large by using the ICT in sharing business information and conducting business transaction.

2. SMALL AND MEDIUM ENTERPRISES IN ORISSA

Middle-sized industrial units and Small-sized business houses also play an important role in developing and sustaining good economic progress. The development of Small-scale and Medium-sized industries has been one of the most significant and characteristics features of industrial development in India. One of the distinctive characteristics of Small-scale and Medium-scale sector is that, the development of these industries would create broader employment opportunities, assist in entrepreneurship and skills development, and appropriate technology. Furthermore, they can play a main role in the achievement of national economic and Socio-political objectives.

In the Indian Economy, Small and Medium-scale enterprises have a significant role to play. With increasing pace of industrialization and sophistication of the large-scale industries, a new orientation is inevitable in the relationship of the Small and Medium-scale enterprises. This relationship calls not only for integration of the production methods, up-gradation of the qualities of production, ability meet stringent delivery schedules and many other problems, but also developing right kind of organization culture and leadership behaviour to have positive impact on organizational commitment, job satisfaction and job performance is a dynamic and changing environment.

Small & Medium Enterprises: the focus shall be on

- Undertaking a special drive for modernization of SMEs.
- Facilitating greater flow of institutional credit, including revival of the Orissa State Financial Corporation (OSFC).
- Providing marketing support under Government purchase programme.
- Rehabilitation of potentially viable sick industries.

- Development of Special Industrial Parks for ancillary and downstream industries.
- Cluster development approach for enhancing the competitiveness of potential sectors. Industry Associations shall be encouraged to set up Common Facility Centres and Testing

Small and Medium enterprises constitute the backbone of national economy. These sectors hold tremendous potential of employment opportunities and economic growth due to their low capital base, low gestation period, high value addition and high export potential. Therefore, emphasis has been laid for revival, modernizing and reorientation of the small and medium enterprises towards open market economy through "Cluster Approach". Value addition is the key to employment generation and economic growth. Optimization of value addition through ancillary and downstream industrialization, especially in the steel and aluminium sectors, is now the focus of industrial strategy of the Government.

TABLE – 1

LARGE AND MEDIUM INDUSTRIES PROMOTED BY IPICOL

Sl. No	Year	No. of units gone into production	Project Cost (Rs. In crore)	Employment generated
1	2	3	4	5
1	By the end of 8 th plan (1996-97)	237	1283.56	30,903
2.	By the end of 9 th plan (2001-02)	267	2931.70	34,294
During the year				
3.	2002-03	6	34.08	408
4.	2003-04	3	12.15	107
5.	2004-05	1	3.35	42
6.	2005-06	1	2.16	27

Source: Industrial Promotion and Investment Corporation Ltd, Bhubaneswar

IPICOL is acting as single window contact for all information related to setting up large and medium industries in the State. 43 large and medium projects are under implementation as on 31.3.2005. Total investment envisaged for these proposals is about Rs.84,000 crore. Steel sector has the major chunk of projects under implementation. 27 companies have signed memorandum of understanding for setting up steel / aluminum projects with the State Government as on 31st March, 2005.

TABLE – 2

SMALL SCALE INDUSTRIES IN ORISSA

Year	SSI units setup (cumulative)	SSI units setup during the year	Investment made (Rs. In Cr.)	Employment generated (persons)
1995-96	49589	2507	74.82	13019
2000-01	66206	3676	153.18	18115
2001-02	70125	3919	165.23	16582
2002-03	74133	4008	155.14	16320
2003-04	78568	4435	170.13	20547
2004-05	83075	4507	245.59	21898
2005-06	87861	4786	270.44	25142

Source: Directorate of Industries, Orissa

3.0 LITERATURE REVIEW:

Mirchandani and Motwani [2001] investigated factors that differentiate adopters from nonadopters of e-commerce in small businesses. The relevant factors included enthusiasm of top management, compatibility of e-commerce with the work of the company, relative advantage perceived from e-commerce, and knowledge of the company's employees about computers. The degree of dependence of the company on information, managerial time required to plan and implement the e-commerce application, the nature of the company's competition, and the financial cost of implementing and operating the e-commerce application did not influence adoption. These results are quite different from those found by Ryan and Prybutock [2001] and Riemenschneider and McKinney [2001-2002]. Ryan and Prybutock found that the organizations that have previously installed user-centric technologies are more inclined to adopt new technologies. This suggests that implementation costs are important when deciding to adopt or not to adopt e-commerce. By using the theory of planned behavior [Ajzen, 1991], Riemenschneider and McKinney [2001-2002] found that cost is an important factor in the decision to adopt Web-based e-commerce. Subramanian and Nosek [2001] provided a foundation to determine the factors that differentiate between adopters and non-adopters of e-commerce. These authors created an instrument to validate the perceptions of strategic value that an information system (IS) may provide. Through an empirical study of 73 firms, Subramanian and Nosek [2001] tested three factors that were thought to create strategic value in Information Systems: operational support, managerial productivity, and strategic decision aids. In each of these constructs, they used items found to have high convergent validity and reliability. Kuan and Chau [2001] identified the factors influencing the adoption of EDI in small businesses using a technology, organization, and environment framework. Lacovou et al. [1995] studied factors influencing the adoption of electronic data interchange (EDI). They considered seven organizations in different industries pursuing EDI initiatives. Among the factors included were perceived benefits, organizational readiness, and external pressure. To measure perceived benefits, they used awareness of direct and indirect benefits. Variables measuring organizational readiness were financial and technological resources. To measure external pressure, they considered competitive pressure and imposition by partners. They found that both perceived benefits and organizational readiness moderated adoption and that a strong relationship existed between external pressure and adoption of EDI. Chin and Gopal [1995] determined the relative importance of beliefs to adopt group support systems (GSS). They examined how relative advantage, ease of use, compatibility, and enjoyment influenced the intention to adopt GSS. In an interesting study by Chang and Cheung [2001], the determinants of the intention to use the Internet/WWW were established. Instead of determining factors affecting adoption, they studied those affecting the intention to use the Internet/WWW. Among the factors considered were near and long-term consequences, complexity, affect, social factors, and facilitation conditions. Complexity and long-term consequences did not significantly influence the intention to adopt the Internet/WWW. Beatty et al. [2001] also studied the factors influencing corporate Web site adoption. They found that the factors involved in the adoption process differed depending on the time of adoption. In their empirical study of 286 medium-to-large US firms, they found that early adopters placed significantly more emphasis than late adopters did on perceived benefits for having a Web site. The early adopters viewed using the Web as being compatible with their current organizational processes and their existing technological infrastructures. Firms that adopted corporate Web sites later appear to place less emphasis on benefits, and adopted them in spite of the lack of compatibility between the Web and their existing technology. This finding suggests that external pressure of peers, industry, or government may play a role in the adoption of information technology at least for later adopters. Also in the area of web-site adoption, Riemenschneider et al. [2003] combined the theory of planned behavior [Ajzen, 1991] and the technology acceptance model (TAM) [Davis, 1989] into one model. This combined model was better at predicting the adoption of

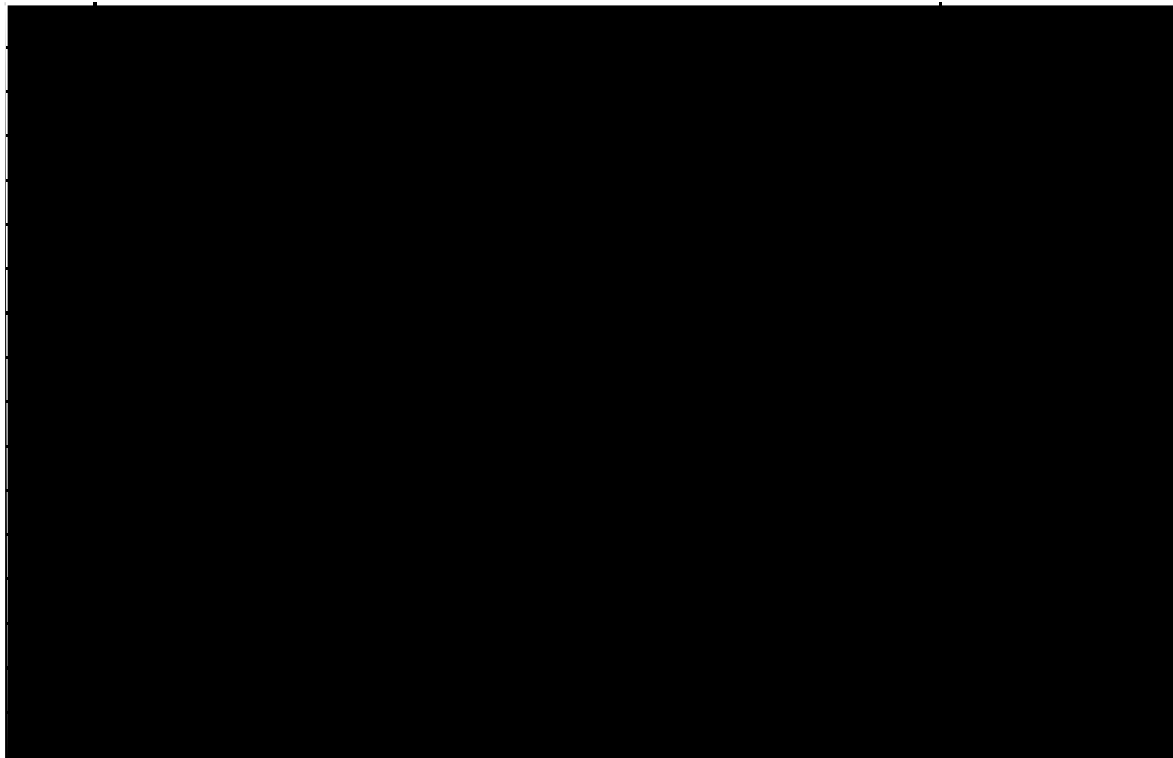
web sites by executives of SMEs. By incorporating perceived ease of use and perceived usefulness (the two direct causal antecedents of technology acceptance in the TAM), they were able to improve the fit of their theoretical model.

4.0 RESEARCH OBJECTIVES:

1. To find the factors associated with SMEs perception towards the adoption of e-commerce.
2. To find the internal and external barrier associated with the adoption of e-commerce.

5.0 RESEARCH METHODOLOGY :

This study aims to determine the factors the SMEs keep in their mind for adoption of ecommerce .A specifically designed questionnaire was used as a tool for collecting the data. Seven point scale was used to measure all the statements (1 = Strongly agree to 7 = Strongly disagree). Respondents were asked to express the level of their agreement/disagreement with attributes identified. The total sample size was 100. The statements covered various attributes of adoption of ecommerce in SMEs and the responses given by the respondents were based on their perceptions about some attributes of adoption of ecommerce. Data were analyzed using factor analysis for identifying SMEs perception about adoption of ecommerce using SPSS 16.0 software. The respondents were requested to rank the statements on a 7-point scale basis (1=Strongly agree, 4=Neutral, 7=Strongly disagree).The 16 statements are as follows:



KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.578
Bartlett’s Test of Sphericity	Approx. Chi-Square	301.896
	df	120
	Sig.	.000

The adequacy of the data is evaluated on the basis of the results of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity. The KMO measure of sampling adequacy is .578 indicating that the present data are suitable for factor analysis. Bartlett's Test of Sphericity is significant ($p < .001$), indicating sufficient correlation exists, between variables for the factor analysis. The Bartlett's Test statistics is approximately distributed and is accepted.

Rotated Component Matrix (a)

	Component					
	1	2	3	4	5	6
Q4		.910				
Q5		.927				
Q6		.685				
Q1	.941					
Q2	.954					
Q3	.957					
Q7			.613			
Q8			.766			
Q9	-.513		-.659			
Q14					.811	
Q15				.594		.413
Q16						.807
Q12	-.355	-.702		.305		
Q13		-.792		.422		
Q10		.863			.359	
Q11		.812			.367	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 9 iterations.

From the above table, the attributes like Q1, Q2, Q3 have loading factor .941, .954, .957 on Factor 1. This concludes that Factor 1 is a combination of these 3 variables. Therefore the factor can be interpreted as e-commerce should help organizational support. Factor 1 alone contributed 24% variations in SMEs perception about adoption of ecommerce. The attributes like Q4, Q5, and Q6 have a high loading i.e. .910, .927, .685 indicating that Factor 2 is a combination of these variables. These variables are combined into a factor called perceived managerial productivity. Factor 2 i.e. perceived managerial productivity alone contributed 16% variations in SMEs perception about adoption of ecommerce. The attributes like Q7, Q8, Q9 have a high loading i.e. .613, .766 indicating that Factor 3 is a combination of these variables. These variables are combined into a factor called perceived decision aid tool. Factor 3 i.e. perceived decision aid tool alone contributed 14% variations in SMEs perception about adoption of ecommerce. The attributes like Q10, Q11 have a high loading i.e. .305, .422 indicating that Factor 4 is a combination of these variables. These variables are combined into a

factor called perceived for organizational readiness. Factor 4 i.e. perceived organizational readiness alone contributed 10% variations in SMEs perception about adoption of ecommerce. The attributes like Q12, Q13 have a high loading i.e. .359, .367 indicating that Factor 5 is a combination of these variables. These variables are combined into a factor called perceived for external pressure. Factor 5 i.e. perceived for external pressure alone contributed 8% variations in SMEs perception about adoption of ecommerce. The attributes like Q14, Q15 have a high loading i.e. .413, .807 indicating that Factor 6 is a combination of these variables. These variables are combined into a factor called perceived for compatibility. Factor 6 i.e. perceived for compatibility alone contributed 6% variations in SMEs perception about adoption of ecommerce.

Table-1

What Are the Main Barriers (Internal) to use e-commerce technologies?

Reasons	N	Mean	%
E-Commerce cannot give a financial gain	17	3.38	59.6
Employees lack required skills	13	3.24	44.4
E-Commerce not suited to products & Services	14	3.07	51.6
E-Commerce not suited to way business is conducted	13	3.02	44.5
E-Commerce not suited to our customers and suppliers	12	3.03	41.3
Security concerns with payments over the Internet	14	3.01	49.8
Valid N (list wise) No of Organisations			

Table-2

What are the Main Barriers (External) to use e-commerce technologies?

Reasons	N	Mean	%
Lack of popularity for online marketing and sales	17	3.38	59.6
CULTURAL BARRIER			
Inadequate speed and quality of infrastructure	13	3.24	44.4
Low Internet penetration in the State	14	3.07	51.6
INFRASTRUCTURE BARRIER			
Little Support and policies for SMEs from Govt	13	3.02	44.5
Inadequate Legal framework	12	3.03	41.3
No Simple procedures and Standards	12	3.03	41.3
LEGAL AND REGULATORY			
Valid N (list wise) No of Organisations			

6.0 FINDINGS AND DISCUSSION

- *E-commerce is not the way to deal with customers in our line of business*-Some SMEs recognize the importance of e-commerce to procure online goods and manufacturing materials and components, particularly in the case for businesses that rely heavily on personal face-to-face contact for their business success. Some examples identified in the research are financial planning, legal and accounting services.

- E-commerce means we will lose things we like about the way we now do business-Most SME are concerned that they would be losing by engaging in e-commerce. They are concerned about changing existing purchase and supply arrangements, particularly with their business partners that have served them well. It is particular evidence in the retail industry.
- ***Our customers won't want to buy from us on the internet***-Many SMEs across all industry sectors believe that their customers may not want to buy their goods or services through the internet. Two main reasons being: i) *Security concerns*. Businesses believe customers are not willing to provide their credit card details over the internet. ii)*Customer preference*. Businesses felt that their customers had a preference for being able to actually touch, see or sample products they wanted to buy.
- ***Many SMEs still have reservations about their own purchasing of goods and services*** on the internet due to the following reasons, among others: i) *Concerns about payments* even though there is confidence with the use of electronic funds transfer and the automatic crediting of funds to nominated Bank accounts. ii) *Concerns about the quality*, reliability and prompt delivery of goods and services ordered over the Internet.
- ***Concerned About the Transition to e-commerce***-These concerns are expressed by businesses from all industry sectors that revolved around three main issues: Cost and time issues, Lack of skills, Lack of control over the process of migrating from conventional to e-commerce.

INFLUENCED FOR ADOPTION OF E-COMMERCE

- ***Business Size*** -Major adopters of e-commerce tend to be larger SMEs, who are more likely to have specialist employees and dedicated to work on ICT and e-commerce. They are also more likely to have employees who are exclusively devoted to the development of business strategies. These larger SMEs are also more likely to have greater financial resources to devote to e-commerce solutions.
- ***Business Requirement*** -There is evidence that SME businesses dealing with ICT customers or suppliers are more likely to adopt or incline to e-commerce. Some ICT companies set a requirement that encourage communication among suppliers through e-mail. Therefore it has encouraged businesses to have Internet connection and move into online transactions such as online ordering, Internet banking transactions, bill payment and other type of transactions.
- ***Business Organization*** -It appears that computer technology and e-commerce are adopted by businesses due to their strong influence of business structure and organization. This means that each individual industry characteristics do not influence business to go into e-commerce.
- ***Technology Experience*** -Businesses that already using e-commerce generally had a vast and significant experience in using computer technology before. Previous positive encouraging experiences with Electronic Data Interchange (EDI) has led these businesses to be generally more positive perception towards e-commerce. Similarly, a business that has a high level of comfort with their current stage of e-commerce adoption is more likely to progress further stage of e-commerce implementation.
- ***Accesses to Skills*** -Businesses that have access to sophisticated computer technology skills are more likely to adopt e-commerce. This is either because they have been prepared to spend by purchasing external necessary expertise, or develop the skills required internally. They also tend to be more resourceful on how to obtain such skills.

7.0 CONCLUSION:

Initiatives to heighten awareness and understanding about the benefits to business of adopting e-commerce which address their concerns and anxieties are required. Such initiatives could target, at

businesses that already have an appreciation of the general benefits to business from e-commerce. Seminar programs targeted at business owners/managers with some experience in using technology and the internet, to provide information and background about how to manage the establishment of websites and a platform for e-commerce. Seminar programs would be a useful way of businesses gaining the necessary information and confidence needed to move their businesses online. The seminar should emphasize the programs as constructive, credible, highly relevant and with a strong practical rather than theoretical focus. Registers of experienced commercial website/e-commerce providers, that are industry specific or with proven credentials of successfully implementing e-commerce solutions in selected industries. These registers should be used by businesses looking to employ external consultants to design and build their websites and/or e-commerce platforms. Promoting the e-commerce successes of local businesses in moving their businesses online and in the benefits gained for their businesses. This would require businesses that have been early adopters of e-commerce in their regions, industries or business-type to act as e-commerce champions. Availability of programs at times, and locations, convenient to business managers/owners. This may be a significant challenge. Many small business owners/managers said they had little spare time to attend external programs. Some businesses may be reluctant to attend during the day due to potential loss of trade, combined with skepticism about the benefits of attending. Follow up and support whether in the form of mentoring programs or other ongoing follow-up is essential. This is crucial to help businesses maintain their momentum or manage problems they encounter when seeking to adopt e-commerce. Lack of trust in electronic systems especially when dealing with credit cards is a big impediment of using e-commerce. Organizational readiness, managerial productivity, external pressure, decision aids, compatibility, and perceived usefulness were factors found to discriminate, in that order, between adopters and non-adopters of e-commerce. Closer investigation of the significant items that make up the respective factors gave us a better understanding of the perceptions and beliefs of SME managers/owners in Orissa.

REFERENCES :

1. Amor, Daniel (2000). *The E-business (R) Evolution*. USA: Prentice Hall PTR.
2. Lindsay Doig (July 2000). *Making E-Commerce Affordable*. Australian CPA.
3. Poon, S. & P.M.C (1997), *Determinants of Small Business Internet Usage: A Multi Method Investigation of Perceived Benefit*. 10th International Electronic Commerce Conference, Bled, Slovenia, June 9 – 11. Rancangan Malaysia Ke-7 (1996-2000).
4. Wendy Lee, (2000). "Trade Portal Offers Value – Added E-Commerce Services For SMEs Malaysia", Cnet.com, October 5.
5. T, Efraim, et.al. (2000). *Electronic Commerce: A Managerial Perspective* New Jersey: Prentice Hall International, Inc.
6. Davis, F. D. (September 1989) "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, pp. 319-340
7. Davis, F. D., R. P. Bagozzi, and P. R. Warshaw (1992) "Extrinsic and intrinsic motivation to use computers in the workplace", *Journal of Applied Social Psychology*, (22), pp. 1111-1132
8. Pearson (2003) "Perceived strategic value and adoption of electronic commerce: An empirical study of small and medium sized businesses", *Proceedings of the Hawaii International Conference on System Sciences (HICSS36)*, Hawaii, pp. 1-10.
9. Grover, V. and M. D. Goslar (Summer 1993) "The initiation, adoption, and implementation of telecommunications technologies in US", *Journal of Management Information Systems*, (10)1, pp. 141-164
10. Iacovou, A. L., I. Benbasat, and A. Dexter (December 1995) "Electronic data interchange and small organizations: adoption and impact of technology", *MIS Quarterly*, pp. 465-485
11. Igarria, M., Zinatelli, N., Cragg, P., and A. Cavaye (September 1997) "Personal computing acceptance factors in small firms: A structural equation model," *MIS Quarterly*, pp. 279- 302
12. Szajna, B. (September 1994) "Software evaluation and choice: predictive validation of the technology acceptance instrument", *MIS Quarterly*, pp. 319-324

CONSUMER PERCEPTION TOWARDS AUTOMOBILE INDUSTRY: A STUDY ON TWO WHEELERS

BIKASH SARANGI

Abstract:

In its current form, the Internet is primarily a source of communication, information and entertainment but increasingly also a vehicle for commercial transactions. This paper examines the key consumer behavior attribute and the relation among them in E-commerce perspective. An attempt has been made to study the acceptance of e-commerce among the Bhavnagar district consumers and its impact on their purchase decision particularly focusing on some of the factors influencing their online purchasing behavior. It also focuses on the role of privacy and security concerns in influencing actual purchase behavior. This paper supports the research questions that include recent trends and various issues in online shopping. Results of a survey study are further analyzed and followed by a conclusion.

Keywords: Consumer, Behaviors, E-Commerce, online shopping

A STUDY ON CONSUMER BEHAVIOR TOWARDS ONLINE SHOPPING THROUGH E-COMMERCE IN BHAVNAGAR DISTRICT

Introduction

With the rapid development of network and communication technology, electronic commerce has been formed and developed gradually. The impact of e-commerce on consumer buying decision and also business perspective regarding improvement in customer service, reducing delivery time and many more such benefits have come upon because of the gradual development of E-Commerce. Now-a-days, due to globalization, there is a close competition among all the businesses worldwide. Due to this reason business diverts them into e-commerce with the benefit to expand worldwide with low cost. Using the internet to shop online has become one of the primary reasons to search for products and find information about them. It also helps the consumer to take his decision on his own rather than relying on supplier's opinion. In short, the main focus of research is the major applications of E-Commerce, the issues related to its successful implementation and to its failures, and what services are necessary for its support.

Objective of the study:

The objective of this study to know consumer behavior towards online shopping over e-commerce. The main purpose of this study is to find out the relationship between different variables such as online shopping related to customer beliefs, their satisfaction with online shopping and various obstacles for online shopping. The study attempts to analyze the effect of the demographic, socioeconomic and psychological factor on the buying behavior of the customer.

Research Methodology:

A. Source of data

The present study is based on the Primary data which has been collected through questionnaire from the people of Bhavnagar district in Gujarat. The Questionnaire has been filled up by the respondents who have purchased at least one time on Electronic Commerce.

B. Sampling**I. Sample Size:**

The information is collected through structured questionnaire. Total 500 respondents filled up the provided questionnaire during the survey. The study was conducted in the Bhavnagar district only.

ii. Period of Survey:

The said survey is for a period October to December 2019.

iii. Sampling Technique:

The researcher has adopted convenience sampling technique for the study.

Limitations of the Study

1. The researcher has taken the samples of size 500 only. Therefore, the result of the study cannot be considered as universal.
2. Findings of the research are based on the assumption that the respondents have given correct information.
3. It limits the area of Bhavnagar district only.
4. The said survey is only for a period of three months only.

ANALYSIS AND INTERPRETATION:**Table No: 1 (A).Demographic Profile of the Respondents based on Age**

Sr.No	Age	NO.	%
1	18 to 25 Years	158	31.60%
2	26 to 40 years	154	30.80%
3	40 to 50 Years	104	20.80%
4	Above 50 years	84	16.80%
	Total	500	100%

From the above table no. 1(A) it can be inferred that most of the respondents (31.60%) belong to the age group of 18-25, 30.80 % of the respondents belong to the age group of 26-40 and 20.80% belong to the age group of 40-50 and the rest 16.80% of the respondents are above 60 ages.

Table No: 1 (B).Demographic Profile of the Respondents based Education

Sr.No	Education	No.	%
1	SSC	46	9.20
2	HSC	82	16.40
3	Under Graduate	102	20.40
4	Graduate	162	32.40
5	Post Graduate	84	16.80
6	Other	24	4.80
	Total	500	100%

Table no: 1 (b) shows that most of the respondents are graduate people (32.40%), then after under graduate (20.40%), Post Graduate (16.80%) and HSC respondents (16.40%) and remaining SSC (9.20%) and other people (4.80%).

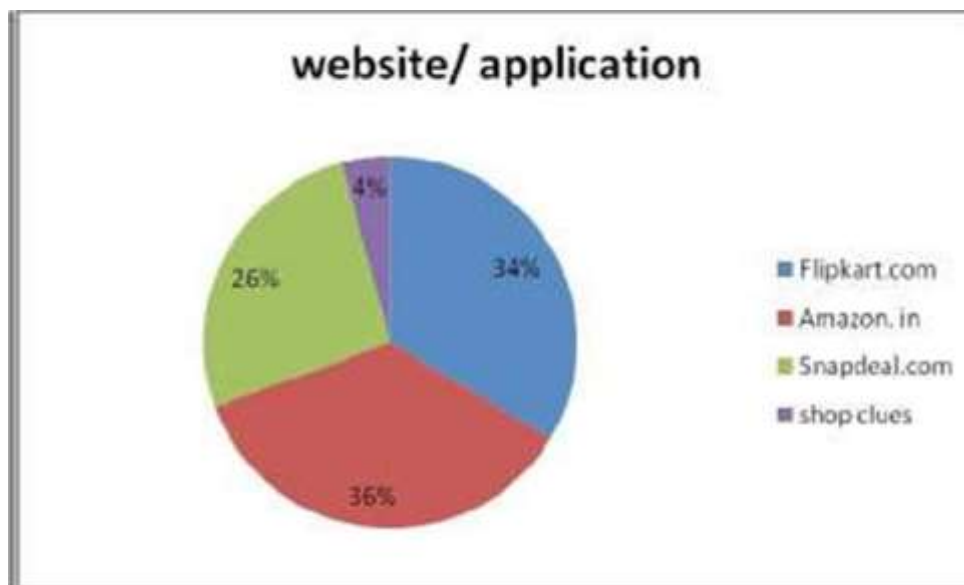
Table No: 2. GENDER OF THE RESPONDENTS

Sr.No	Gender	No.	%
1	Male	265	53%
2	Female	235	47%
	Total	500	100%

From the above table it can be observed that 53% of the respondents are male and the rest 47% of the respondents are female.

Table No: 3. WEBSITE / APPLICATION PREFERENCE AMONG PEOPLE

Sr.No	Preference	No.	%
1	Flipkart.com	168	33.60%
2	Amazon. in	179	35.80%
3	Snapdeal.com	132	26.40%
4	shop clues	21	4.20%
	Total	500	100%



From the above table/chart we can conclude that Flipchart and Amazon both are most preferable and used for online shopping by selected respondent. Due to the reason better quality goods, reach delivery as fast as possible, availability of product, goods return process etc.26.40% people are using snapdeal.com and remaining 4.20% people are using shop clues website.

Table No: 4. PREFERRED PRODUCT CATEGORY

Sr.No	Preference	No.	%
1	Electronic item	189	37.80
2	Cutlery and Hosiery Goods	109	21.80
3	Clothes	89	17.80
4	Stationary Items	76	15.20
5	Other	37	7.40
	Total	100	100%



The above table shows that 38% people are buying an electronic item and when it comes to electronics, the clear winner would be “mobile phones” then after laptops, power banks, pen drive, digital cameras, etc. As long as the usage of technology improves, the demand for consumer electronics comes along the way and it’s quite unstoppable! Remaining people (out of 62%), 22% people are preferred to buy goods like cutlery and Hosiery items, 18 % consumer purchased cloths and footwear, 15% purchased books and Stationary item and 7% people preferred to buy any other items.

Table No: 5 - PREFERRED MODE OF PAYEMENT

Sr.No	Preference	No.	%
1	Cash on delivery	202	40.40
2	Debit card	102	20.40
3	Credit card	56	11.20
4	Net banking	89	17.80
5	Gift voucher and other	15	3.00
6	E- vaulet	36	7.20
	Total	100	100%



The above table / chart show that 41 % of people choose to take the goods from cash on delivery. Rest of them prefers to buy from debit card, credit card, Net banking, gift voucher and E-Vault. Customers with credit card mostly they are salaried person who prefer to buy from a credit card.

Table No: 6 - SATISFACTION WITH QUALITY LEVEL OF PRODUCT

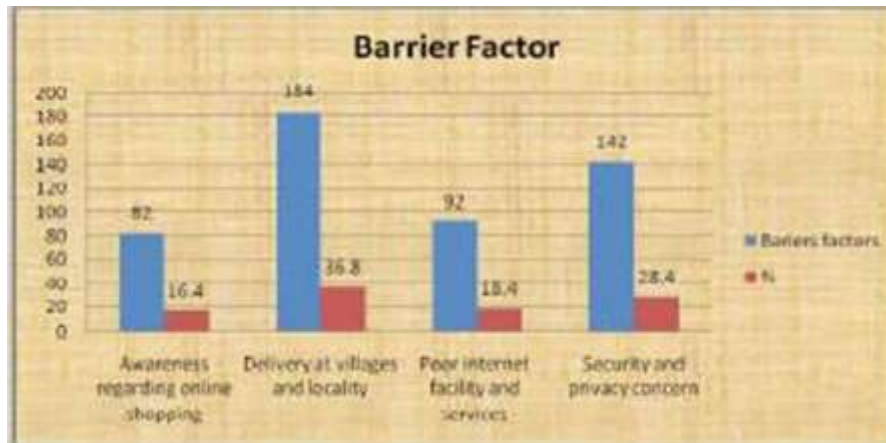
Sr.No	Satisfied	No.	%
1	Yes	353	70.60
2	No	134	26.80
3	Can't say	13	2.60
	Total	500	100%



The above table has proved that 70% people have satisfied about the quality of the product while 27% people do not have satisfied and the remaining three percent of the people are not able to give their opinion, meaning that it is neutral.

Table No: 7 -Barriers in online shopping

Sr.No.	Barriers factors	No.	%
1	Awareness regarding online shopping	82	16.40
2	Delivery at Cities and locality	184	36.80
3	Poor internet facility and services	92	18.40
4	Security and privacy concern	142	28.40
	Total	500	100%



The above table and chart prove that 36.80% of respondents avoid online shopping due to the delayed delivery in the inside areas of Bhavnagar city, When 28.40 % people avoid online shopping due to security and privacy concern, remaining 18.40% respondents considering that the poor internet facility and services and 16.40% lack of information about online shopping, these are the online shopping barriers.

CONCLUSION:

E-commerce consumer behavior as shown in the research is a very important aspect. At present people feel that there are major security concerns in online transactions. By using electronic technology through the internet, it achieved more competitions, more marketplaces, faster transactions, and more advanced technologies to make activities between customers and producers more active. We as customers and internet users are responsible to keep our E-commerce healthy and safe so that e-business can be more reliable in the future. The above research proves that most people of Bhavnagar district use Flipkart and Amazon on website for online purchase. People buy electronic items more using this website; especially they do buy mobile phones that are not easily available in the local market. In addition due to the problem of anonymity and repudiation of the contract, most of the people prefer to buy goods from cash on delivery because money is provided only if goods are available in it. 70 % respondents satisfied with e-commerce online shopping services and remaining 30 % respondents not satisfied or Neutral Due to some of the barriers on online shopping like such as awareness of online shopping, bad internet facility, security and privacy etc., Thus, due to the above obstacles people in India prefer to shop product in the mall. And looking, touching various items before purchasing them. They are not quite willing to give up on shopping physically so even if they have access to the internet.

REFERENCES :

- <https://research-methodology.net/the-impact-of-e-commerce-on-consumer-behaviour/>
- https://en.wikipedia.org/wiki/Buyer_decision_process
- http://digilib.k.utb.cz/bitstream/handle/10563/41516/oshchepkova_2017_dp.pdf?sequence=1
- <http://data.conferenceworld.in/ESHM3/P246-251.pdf>
- Philip K., "Marketing Management, 12th ed. (1990)

AN EMPIRICAL STUDY ON THE EFFECT OF DIGITAL MARKETING ON ONLINE SHOPPING AMONG YOUNGER GENERATIONS IN BHUBANESWAR, ODISHA

DWIPANITA MISHRA

Abstract :

Digital marketing is act as the new media of communication. Now marketing have undergone a sea change over last few decades. Due to revolutionary change on technologies has widened its opportunities. To grab such opportunities digital marketing has extended its hand to focuses not only targeted customers but also mass markets. Here, this article highlights of young generation and effect of an online marketing over their buying behavior. Beside that this article is also emphasized on changing behavior of youth on online buying. This paper is based on empirical work which identifies effect on digitalization on buying goods or services. A questionnaire was designed to collect the data from younger group which belongs to age group 18 years to 35 years which is based upon convenience sampling. The sample sizes of the respondents were 100. The primary data analyzed by using frequency and total weight age method. The finding of the research would help to wider scope for market their products with the help of digitalization.

Key words : Digital marketing, Buying Behaviors, customer value.

Digital marketing and its effect in buying behavior of young generation

Introduction

The implementation of digital marketing into businesses has added new value to traditional marketing. Marketer tries to save time and efforts by offering new types of offering marketing that is digitalization. In today's scenario, the consumer has scrubble digital marketing into spaces that create value for online customers. It helps the consumer to be united with the product, price, place, and promotion in a unified way. This is a saying where the market creates value but now through digital marketing creates delighters for the customer.

Marketing is all about creating value for the customer. To create that value to the customers, marketing tries to links customers through different electronically using interactive technologies like emails, websites, online forums, and newsgroups, etc. today customers can find information about products, place, and activities by image, voice and gesture and other participate transactions. With the help of new opportunities via devices that augment into reality. So, the companies need to

understand and use such types of digital channels to engage customers and also major decisions customers make are influenced by the quality of their experiences all along their journey.

Objective of the study

1. To examine the factors which has influence on the changing buying behavior of the young
2. To identify the changing buying behavior of the youth and their impact on digital marketing.

Thought of digital marketing

Digital marketing is growing rapidly spread throughout the market. All seem dramatic but consumers' needs and wants are indeed changing with time. So, digital marketing is to act as a key driver for product development and pricing through publicity and public relation.

Commonly, digital marketing is confused with online marketing. Digital marketing is a form of direct marketing that links with consumers to sellers with the help of electronically using interactive devices. To common interactive devices are like email, database, websites, newsgroups, etc. The email is very commonplace for electronic devices where people are allowing managing their business fairly and easily. Another electronic device is like databases which have been rapidly used to maintain customer relationship management system. Sometimes companies are using banners on websites with an alike as to press advertising. The search engine mechanism is also a common strategy adopted by various companies.

Internet is acting as a model of a channel in digital marketing where text messaging, electronic billboards, mobile instant messaging, mobile apps, digital television, radio channels, etc. are confined within a device either television or laptop or personal computer or mobile. The overall this digital marketing has created new platforms and new generation interaction, use, execution and control of marketing and better plan to satisfy and make delight to their customers.

Need of the study

Digital marketing is brought attention to how consumer changes their buying behavior in the current market. The consumer s would like to get all kinds of information easily and quickly by observing. Digital marketing helps to create a new and different way to market their products at the fastest rate. When buying behaviors is concerned an individual influence various factors and their impact on buying behavior. The marketer tries to find directly or indirectly variables which influence the buying of their product through attractive mode. Therefore there is a need to study digital marketing and its impact on the buying behavior of the young generation.

Statement of the problem

Digital marketing is all about confronting that consumers have got any information at any place and at any time. Digital marketing is a fast and quickly growing source of information about entertainment, news, shopping, and social interaction. Consumers have required to a wide range of information about companies and their brand .it gives overall information about the brand which they can trust and have familiar with a company offers. Digital marketing is widely acceptable by different companies due to it is cheaper, quicker, easier and widely acceptable by the young generation. In the digitalization era the marketers are finding it difficult to cope with the changing need of the youth customers .Today's advance form of technology becomes obsolete tomorrow. As a marketersone needs to understand the changing need of the customers and make them satisfied for the goods and services that they need's, it's very difficult to understand the behavior of online buyers which are changing at a rapid rate. So through digitalization the marketers have to be focused to the need and want of the customers.

Data Analysis and interpretation

Table -1 Convenience

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total weight
Convenience			Frequency			
On time delivery	20(100)	15(60)	20(60)	30 (60)	15 (15)	295
Availability of information	25 (125)	20 (80)	15 (45)	25 (50)	15 (15)	315
24x7 services	40 (200)	25 (100)	20 (60)	10 (20)	05 (05)	385
Easy comparison while online shopping	30 (150)	25 (100)	20 (60)	5 (10)	20 (20)	340
Reliable pricing policies	29 (145)	20 (80)	18 (54)	18 (36)	15(15)	330

From above table represent the information about convenience module which focused on 24X7 services having highest total weight (385) as compare to the other variables. On time delivery show that low label of total weight that is 295. The study reveals about the majority of the respondent feels that they can purchase at anytime, anywhere and anyplace which is convenient to them.

Table-2 Website design/ Features

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total weight
Website design/ Features			Frequency			
Attractive homepage design helps in searching the products easily	20 (100)	10 (40)	30 (90)	30 (60)	10 (10)	300
I prefer to that website that provides safety and quick navigation of order	15 (75)	20 (30)	25 (75)	24(48)	16 (16)	294
The layout design of website	30 (150)	25 (100)	30 (90)	10 (20)	05 (05)	365
Familiarity with the website reduce the risk of shopping online	20 (100)	25 (100)	20 (60)	15 (30)	20 (20)	310
I prefer to buy from website that provides reliable quality information	27 (135)	22(84)	18 (54)	18 (36)	15 (15)	324

From the above table revealed about the website and features. The survey focused that the layout of the website help in searching and selecting the right products with highest total weight of 365 and lowest level of total weight is 294 for safety and quick navigation. The research focused that the youth are more concern to the design of the website.

Table -3 Time saving

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total weight
Time saving			Frequency			
Less time consuming	35 (175)	20 (80)	30 (90)	10 (20)	05(05)	370
Less time takes to evaluating and selecting a product.	32 (160)	17 (68)	18(54)	16 (32)	17 (17)	331

The table show about the time saving module which focuses on less time does not waste time to evaluate. The respondents feel that they took very less time to purchase with total weight of (370) and does not waste time with total weight (330) .

Table – 4 securities

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total weight
Security			Frequency			
Safe and secure while shopping online	10 (50)	20 (80)	30 (90)	30 (60)	10 (10)	290
I preferred to shop online from reliable and truth worthy websites	12 (60)	20(80)	25 (75)	30 (60)	13 (13)	288

The above table focused on security module. It is identified that the respondents are having highest total weight on safe and secure and while total weight of low level reliable and trust worthy websites.

SUGGESTIONS OF THE STUDY:

This study suggests that marketers should focus on market survey i.e. pre and post to identify the need of the consumers and create value for the consumers. They need to understand, implement and promote the ease access of digital facilities and aware of digital marketing to the consumers.. Digital marketing through online is highly associated with risk and hence they need to be taught how to handle risk to the online buyers.

Conclusion

To conclude, the youth spend more time on digital media. The transformation of buying habits has been changed. Above all organizations tried to focus on young generation people through digital ways. It is a sine qua non for the marketers to focus on the service delivery online shopping, secure and protective websites, authentication of websites, easy navigations and quick searching of the product which will help the youth to access easily. Digital marketing has revolutionized the traditional marketing method and creates a new path for marketed to link consumers with the seller through electronic devices. The marketer needs to understand the accessibility of the digital facilities to the youth segment.

REFERENCES:

1. Gibson, C (2018), the most effective digital marketing strategies and approaches: A review of Literature, International Journal of scientific and Research Publications, Vol.- 8, issue- 2, Pp.-12-16.
2. Sivasankaran , S., (2017) Digital Marketing and its impact on buying behavior of youth (Special Reference to Kanyakumari district), Internal Journal of Research in management and Business studies, Vol.- 4, issue-3, Pp.-35-39
3. Eryigit, C. (2017). Marketing models: A review of the literature. International Journal of Market Research, 59(3), 355-381. doi:10.2501/IJMR-2017-028
4. González Romo, Z. F., García-Medina, I., & Plaza Romero, N. (2017). Storytelling and social networking as tools for digital and mobile marketing of luxury fashion brands. International Journal of Interactive Mobile Technologies, 11(6), 136-149. doi:10.3991/ijim.v11i6.7511
5. Yasmin, A., Tasneen S. and Fatema K. (2015), Effectiveness of digital marketing in the challenging Age: An Empirical study, Internal Journal of Management science and Business Administration, Vol.- 1, Issue- 5, Pp.- 69-80
6. Roberts, S. D., & Micken, K. S. (2015). Marketing digital offerings is different: Strategies for teaching about digital offerings in the marketing classroom. Journal of Education for Business, vol.-90, issue -2, 96-102.
7. Swaminathan, T.H. and Kumar Karthik (2019), Digital Marketing from fundamentals to Future, Cengage Learning India Pvt. Ltd.
8. https://go.forrester.com/blogs/16-07-12-the_date_digest_introducing_forresters_empowered_customer_segmentation/.
9. [https://en.wikipedia.org/wiki/AIDA_\(marketing\)](https://en.wikipedia.org/wiki/AIDA_(marketing)).
10. Mallik, D. M. & Rao S. N. (2017), Impact of Digital Marketing on young buying behavior at Big Bazar in Udupi, International Journal for Innovation Research in Science and Technology, Vol.- 3, Issue-08, Pp.-78-87.



COMPARATIVE STUDY OF AMAZON EC2 AND MICROSOFT AZURE CLOUD ARCHITECTURE

JYOSHNA PANDA

INTRODUCTION

In this paper author will try to analyse the relation between Digital Branding and the consumer experience through varied methods of consumer behaviour and through primary and secondary data collection and their analysis in various ways.

In this paper author will be taking digital branding frontier for marketing in tier 2 cities like BHUBANESWAR. Here in author will analyse the Digital branding of HOT MEALS, in Bhubaneswar, and cite examples of various digital branding campaigns of companies around India. In this paper author will also be suggesting the various branding opportunities which small businesses and cottage industries miss out on.

In this digital era, author have come across a wide variety of change, in terms of technology and have upgraded ourselves from typing out the name to voice operated artificial intelligence operation. Though the traditional method of marketing still persist, digital branding is a better way to reach out to a larger audience in a very short span of time.

OBJECTIVE

This paper objectives are based on:

1. To determine the development of brand through digital branding using scientific methods
2. To analyse the consumer experience through tested methods and analogy.

In this paper author will try to analyse the various methods that are used to brand a particular product, service, company, etc. the various method that are used to determine development of a brand are examined using scientific methods and tested variations. We will also analyse how digital branding works in two tier cities by taking Bhubaneswar as a pilot.

We will also find tested and trailed method to implement on small scale or start-ups in two tier cities across India. Herein author will also identify the various ways to determine consumer experience through digital branding and how to evaluate them.

DIGITAL MARKETING:

Digital marketing / branding is the use of the internet, mobile devices, social media, search engines, and other channels to reach consumers. Some marketing experts consider digital marketing to be an entirely new endeavour that requires a new way of approaching customers and new ways of understanding how customers behave compared to traditional marketing.

In commerce, consumer experience is the product of an interaction between an organization and a consumer over the duration of their relationship.

Digital marketing can be classified into various aspects out of which digital branding can be used as the best way to express our paper.

DIGITAL BRANDING:

Digital branding is the use of digital means, as like social media, television, social media, etc. to market/ brand a product, service or company as the best of the best available in the market.

In an umbrella term of digital branding author need to make sure of a few technicalities where in author need to understand the ways to create our digital footprint. We will analyse the different methods used in:

**Google AdWords:**

Google Ads is an online platform developed by google, where advertisers pay to display brief advertisements, to get the wanted and desired results for their search.

Ad pop-ups:

Ad pop-ups are the advertisement platform by google where the advertiser can show their advertisements on particular selected games or platform.

Recommendation reviews:

Recommendation review suggestion system is one of the newest and most trending system which youtube has come up with in which they suggest related videos based on your search keywords.

Sponsored advertisement:

Sponsored advertisement are the pay per view and pay per click advertisement that are trending and gives higher view point and landing for a customer.

Google footprints:

Google footprints are directed to the various ways that are intended to market a particular company, product or brand through the tools available by google, viz; google translate, google navigation, google key words.

METHODOLOGY / TOOLS OF DIGITAL MARKETING:

The tools used in digital marketing are some of the specific tools used on specific platforms. We will try to show as many as tools used in the tier 2 cities like Bhubaneswar, Odisha, and analyse the results that author are getting out of it.

A very good and innovative way of branding ourselves digitally is through social media platforms, viz Facebook, Instagram, Twitter and influencer marketing.

INFLUENCER MARKETING:

At a fundamental level, influencer marketing is a type of social media marketing that uses endorsements and product mentions from influencers—individuals who have a dedicated social following and are viewed as experts within their niche. Influencer marketing works because of the high amount of trust that influencers have built up with their following, and recommendations from them serve as a form of **social proof** to your brand's potential customers.

The influencers of social media have created a fan base which many of the young generations and get influenced or biased by the individual performing a particular stunt or act.

In the recent trends various applications were ranked as the best influential applications as the makers of the social trend gives them a top-level crowd for engagement.

At times companies pay a huge amount of money to the influencers to get the product or services get to the direct target audience.

In most of the cases, the prices for influencer marketing goes as high as \$300,000.

Few of the later social media stars/ influencers are listed below as a reference to the various markets.

- ❖ Kanan Gill: 364k followers
Kanan Gill is a stand-up comedian who charges a huge lot of money to add the company's name and their products in their set.
- ❖ Bhuvam Bam: Bhuvan Bam is the winner of the Golden Youtuber award and has the largest fan base for a single act play. He charges the company per product.
- ❖ Anchor Pinkie: Pinkie is an anchor hailing from Jharkhand and established in Odisha. She charges for post and photographs.
- ❖ Sobhna: Sobhna is a newly-wed working professional who is also an influencer charging a very minimal amount, her service can be used by companies working locally in Bhubaneswar.

Benefits of influencer marketing:

- ❖ Builds trust and shows authority:
There is a simple ideology associated with the practice of influencer endorsements. When a celebrity, industry expert, or social media personality shares content about a brand, it produces instant credibility to the company they are promoting, plain and simple. The idea is, if a company can get an authoritative person to notice and recognize its brand, it creates a perception that the brand is an industry leader and trustworthy company, based on the endorsement and sentiment provided by the influencer. The recognition is even more effective in niche marketing when an authority in your industry shares your content. Credibility produced in this facet can substantially accelerate the time frame in which brands can build and establish trust and authority with consumers.
- ❖ Improves brand awareness: Social users will begin to know more about your brand, your story, who you are, and the solutions you offer. The contributions that influencers can make in terms of brand awareness are some of the most powerful benefits of social media marketing.

The key factor in maximizing influencer strategy is making sure you provide valuable content that adds to *the influencers'* social media presence as well, ensuring there is value in the partnership for both parties.

Influencers are often the driving force behind new trends and movements (which author will discuss further later on in this article). They frequently introduce audiences to new ideas, brands, products, etc. So being seen as a hot new concept is one of the many benefits of influencer marketing. Aligning your brand with an influencer who moves the needle in the trends department shows people that your company is an innovative leader in your industry.

- ❖ Effectively reaches your target audience: We can not overstate the importance of this particular benefit. Relevant influencers place your content in front of social media users who are already interested in your niche. There's no additional budget necessary for testing and finding your audience - the influencer has already established this audience on social media for themselves.

In addition, influencers who mention your brand actually drive sales. Consumers are looking to influencers more and more for advice on what products and services to buy. In a study conducted in 2016, roughly 40 percent of respondents said they made a purchase after seeing a social media

influencer use the product or service. Three years later, those numbers have surely increased as the prominence of social media has grown. If one of your marketing objectives is increasing sales - and let's be honest, what company isn't looking for a sales boost - influencer marketing can help you accomplish that objective.

❖ Access to netizens:

The TV has been left behind for the younger audience, who has increasingly favored and contributed to the popularity of digital media. This is why Influencer marketing is now a mandatory channel for reaching Millennials and Gen Z'ers. Attracting consumers from these audiences brings immense value to your brand.

❖ Influencers are trend setters:

As author touched on earlier, Influencers are go-to sources of information as it pertains to new products within their industry (beauty, fashion, tech, fitness, gaming etc.). Influencers' followers deeply respect and often times even idolize their opinions within their categories of expertise. This is what makes influencer marketing so powerful.

❖ Long-term Influencer relationship:

Influencer marketing campaigns aren't just about metrics—it's about building relationships. So establishing rapport with influencers creates strong and lasting partnerships that drive long-term results for both the brand and the influencer. Nearly half of marketers engage in influencer partnerships lasting six months or longer, while 37% of influencers say they're working with brands for longer periods as opposed to one-off campaigns. This is also an ample strategy for Instagram influencers in building their own brand and resume.

❖ Immense reach and visibility:

Many social media influencers boast audience counts in the millions, with the 50 most followed Instagram influencer accounts totalling more than 2.5 billion followers. Marketers can build highly effective campaigns that reach millions of consumers by properly vetting influencers based on both qualitative and quantitative factors, and selecting the ideal candidates based on that information.

❖ Manage brand reputation:

It doesn't matter whether you're starting the conversation, or just simply involved in the dialogue, people talk about your brand. Whether that sentiment is positive or negative is something brands are increasing their focus on, as it pertains to their social media presence. When your organization effectively focuses on developing an active social listening plan, it allows you to track and discover where and when these conversations about your brand are happening. In 2019, it's beyond imperative that you join these conversations - not simply as an observer, but as an active, engaged member of each and every community. What if you find that people are spreading false information about your company? This is an opportunity to share your side of the story in a polite and professional manner. By addressing the issue in a public forum in a professional manner, you assert a sense of control over your brand voice in the marketplace. On the other side of the coin, when consumers are praising your brand, come up with ways to thank them and show your appreciation, both publicly and personally. This is also a way to build a pool of brand ambassadors, which also bring great value to a brand's social presence.

❖ Lead generation:

Lead generation is an incredibly important benefit of social media for business. Notably, most social networks now offer advertising formats specifically designed to collect leads and help brands generate both website and social media traffic.

Social media provides a simple way for potential customers to express interest in your business and your products or services. Lead generation has substantially evolved over the past decade, as

social media has played a far greater role in connecting brands with customers and clients than ever before. Leveraging this medium to drive lead generation is essential in the modern market place.

❖ Long-term benefits:

Don't expect to see a big increase in your sales with a single influencer IG story post. You should view investing in influencer marketing as a long-term relationship, and not just a one-off partnership. In the same way, it takes time to build trust between your brand and your consumers, the same philosophy applies to influencers and influencer marketing as a whole.

Return on investment for social media influencer:



While **Instagram influencer marketing** is a well-known strategy, there are many other networks that are growing for influencers. According to **Adweek**, the industry is set to reach \$10 billion in worth by 2020. Other networks like **Snapchat**, **YouTube** and **TikTok** have their own set of influencers with different demographics.

Influencer marketing agency **Mediakix** surveyed marketers at the end of 2018 to see what their feelings on influencers were for the new year.

Of those surveyed, 89% said ROI from influencer marketing was comparable to or better than other networks. The same survey noted that 65% of marketers plan on increasing their budgets for 2019.

BENEFITS OF A STRONG CONTENT:

❖ Content marketing drives conversions:

Perhaps one of the greatest benefits of content marketing is that it helps your company drive more conversions over time. Research shows that companies who create consistent marketing content experience conversion rates that are nearly 6 times higher than their competitors who don't focus on content marketing. This shows that tough content marketing often requires a significant investment of time, money, and resources, it eventually pays off by leading to more conversions.

❖ Engage target customers:

Let's face it. There are consumers out there who are a perfect fit for your products or services, but they haven't yet gotten the opportunity to learn about your brand. By creating useful content that provides value for your target buyers, you can work to engage these leads and help build awareness for your brand. Brand awareness is one of the most important benefits of content marketing.

❖ Educate your customers.

Your customers and leads have a problem that your brand can solve. What better way to educate them about their challenges and your solution than to provide them with engaging content? Be sure to develop content topics around your customers' biggest pain points to help them better understand what steps they need to take to solve their problems.

❖ Build target customers:

The more that you educate and provide value for your target audience, the more trust you can build over time. By educating and informing your target audience about their biggest challenges and pain points through blog posts and other types of content, you start to establish a relationship with customers and work to build trust based on the value that your content provides.

❖ Helps build credibility:

As you start to create quality content that provides value for your leads and customers, you work to build credibility and authority with your target audience. For instance, writing blog posts about common challenges that your customers face or issues that pertain to your industry helps show site visitors that you really know your stuff. This will encourage them to trust your advice and guidance when it comes to products and services that can add value to their lives. Valuable content will help you leverage all of the benefits of content marketing.

Building on the returns of digital marketing it has much higher return as compared to traditional marketing.

Where is a traditional marketing takes a lot of effort to get it in place, digital marketing takes less labour as compared to the traditional way.

The rate of return for digital marketing:

Average Order Value by Category	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016
Direct	\$118.21	\$129.15	\$131.42	\$135.01	\$125.06
Email	\$108.38	\$102.69	\$109.38	\$103.88	\$102.47
Search	\$110.71	\$121.72	\$115.88	\$125.19	\$114.56
Social	\$96.09	\$105.42	\$98.39	\$89.75	\$91.08
Unknown	\$119.73	\$130.11	\$131.12	\$142.56	\$139.43

This is an estimation based on a minimal transaction of \$100.

Primary Data Collection:

Through an interaction and survey done, author have collected major primary data which says that the whole of the companies that are investing in traditional as well as digital marketing now are trying to shift to digital platform to get maximum rate of return on their investment.

Through a particular survey that has been conducted by our team, on a wide speculation of academicians, students, entrepreneurs, teachers and aspiring business man, author have made an estimation and a graph stating the number of people aspiring to take their business online.

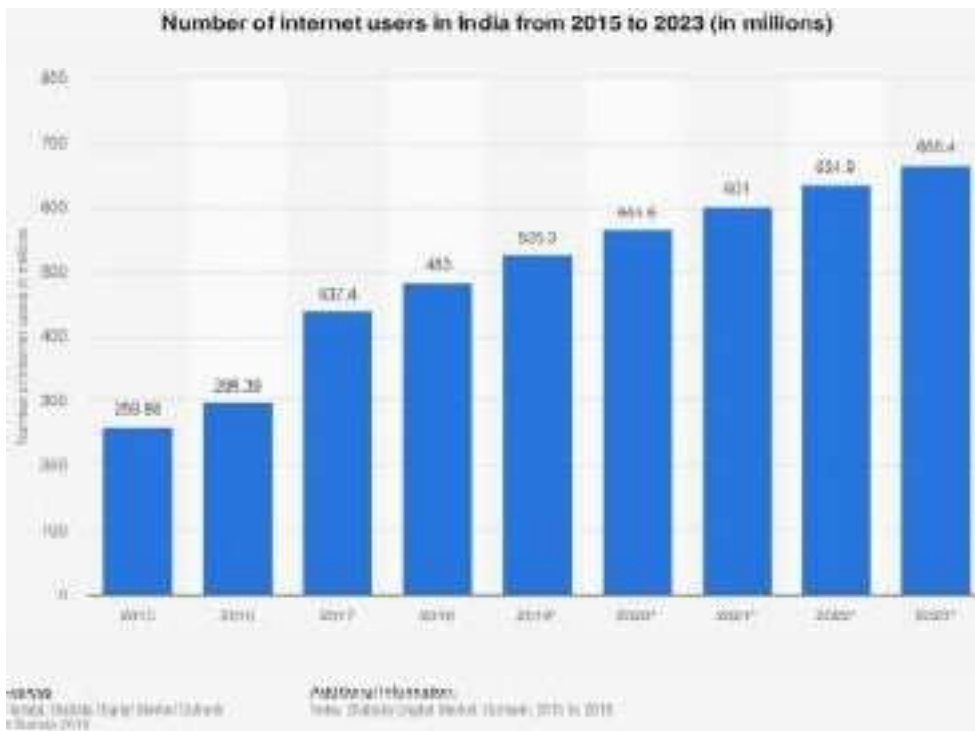
Why should author choose digital platform rather than the general marketing pla By June 2014, Indians might outnumber American internet users to become the world’s second-largest online community after China, said a report released by the Internet and Mobile Association of India (IAMAI) and market research firm IMRB International.

According to the report, released on Wednesday, India is expected to have 213 million internet users by December and 243 million by June 2014. Its netizen strength stood at 205 million in October and 190 million in June this year.

At present, China is at the top with a little over 300 million internet users, while the US (an estimated 207 million) is a distant second.

“The internet user base in India took more than a decade to move from 10 million to 100 million but only three years to double from there to 200 million. From here on, author can hope to develop a robust internet ecosystem, with a multitude of local and global players and a thriving internet economy. Internet is now, clearly, mainstream in India,” said IAMAI Chairman RajanAnandan.

According to IAMAI President Subho Ray, internet penetration in India, given its population, is still low. That’s the reason for the growth rate here to be much higher than that in the US.



Conclusion:

After this paper we have found out that the normal consumer and the customers of every company are tending to buy the products of companies that have digital footprint.

Suggestions:

As per our investigation and interaction with the general crowd and our pilot sample, author have come to give the following suggestions:



Digital branding platforms are cheaper to market on.

Digital branding platforms are easier to reach for a larger market.

With the growth in the market of netizens it is highly recommended to shift your shaft to the digital platform.

It is easier to monitor the key factors affecting your business.

Accessible at your finger tip.

In the coming years it is a possibility that the digital platforms are the only way of representation.

Bibliography:

- ❖ Investopedia
- ❖ Sprout social
- ❖ Talk walker
- ❖ Lyfe marketing
- ❖ Business standard
- ❖ Social samosa



DIGITAL TRANSFORMATION: AN ADVENT OF THE NEW TOMORROW IN AGILE MARKETING

KENGUA ASHOK KUMAR

Abstract :

Digital transformation is the new beginning to the future that awaits us. The beginning into the wider, bigger and a magnificent tomorrow.

Our moments are already being managed by the technology. From our morning wake up calls from Alexa to the night sign outs by our Twitter and Instagram commitments we are being constantly immersed in the lap of the vast digital disruptions and transformations. Our lives have been in a way controlled by the technologies that we believe we control much to the contrary. Technology has contracted our lives and efforts as well.

Digital transformation has given a midas touch to all the fields of the business from the financial nit grits to the hr manuals and practices and from the logistics strategies to the marvels of the marketing mantras. All the activities around us are being governed by the digitisation.

This paper aims at finding out the future of this huge digital transformation that is taking our generation of marketing by storm. . It majorly aims at finding out the relationship between digital transformation and a form of marketing known as agile marketing. It aims to study the digital touch points that connect the spectrum of marketing engagements with the customers thereby creating new marketing experiences and offerings.

Introduction

The disruptions that digital transformation has caused have its own pros and cons and come with its own tags attached. At this point it also becomes important to find out the understanding of some of the basic concepts related to digital era.

Digital transformation is said to take place when an organization changes its business process to digital technologies through ways like social media, mobile applications , analytics and embedded devices to enhance and increase the overall customer experiences by streamlining the business processes or by creating new and more user friendly business models . Digital transformation is not only digitizing resources of business but is creating wealth and generating revenues through the digital assets. Digital technology, digital innovation, and digitalization are fundamentally altering business processes, products, services, and relationships (Karimi and Walter, 2015), The process of combining digital and physical components to create novel devices, services or business models,

bundling them to constitute and enable market offerings, and embedding them in wider socio-technical environments to enable their diffusion, operation and use (Yoo et al. (2010), Fichman et al. (2014), Nambisan et al. (2017)

This is the era where the marketing experiences are revolutionised through the digital disruptions. The digital transformation aims at engaging the customers at the various touch points to attract them by delighting them through the unparalleled services and experiences and thereby retain them and also create new customers from the existing and satisfied ones. The digital transformation that interchangeably can also be referred to as digitalization is changing the ways of the traditional marketing. It is bringing forth the amalgamation of marketing, technology management, and exuberant experiences all into a single click.

This fast changing marketing is also paving a way to the new marketing concepts and practices like, agile marketing. One of the characteristic feature that defines agile marketing is its nature to be swiftly responsive to the need of the hour in the most effective and efficient manner. Agile marketing is flexible marketing that adapts to new practices as per the needs of the changing business needs rather than following the traditional set of marketing plans and practices.

Digital transformation and agile marketing are complementary to one another, as the nature of one constitutes the practices of the other.

The juxtaposition of digital transformation and agile marketing is the outcome of various reasons.

Literature Review

The dynamics of marketing as well as consumers are changing. The processes are changing and so the plans. This paradigm shift has resulted in an advent of a digital era, where technology governs the activities.

The entire market is on the palm and shopping on our fingertips. We are into market and its activities while at work, or on the walk, or in our drawing rooms. We are accessing plethora of opportunities from the innumerable digitally enabled business enterprises.

The digital transformation paves a strong way for digital innovation. Digital innovation regardless of being seen as a process or outcome is enabled by the digital transformation of the society (Skog, Wimelius, & Sandberg, 2018). The digital transformation includes a strong digitization of processes and the way business is carried out. Digital transformation is a larger process of change that consist of digital disruptions and digital innovation (Skog et al., 2018) .

As given a conceptual model by (Skog et al., 2018) he explains that digital transformation is carried out in four steps and those steps gives rise to digital innovation. The steps that digital transformation goes through according to the given model starts with discovery, where the potential idea for transformation is thought about, the next step is development phase where the idea is developed for the ecosystem ,the next step is diffusion ,where the idea or the technological innovation is made compatible with governance and technological structures and the subsequent step is impact where the technological transformation is adopted among the end users and the same holds an impact on the society by deviating them from the traditional ways rapidly.

Another research paper gives a model that says that digital transformation is build on digitization and digital innovation (Osmundsen, Iden, & Bygstad, 2018).

There has been a huge impact of digital transformation on marketing and its activities and processes. Digital transformation has changed the traditional marketing and its ways to a great extent. This transformation of business and activities are increasing need for agility and innovation in

multitudes. According to one of the corporate giant Nick Fawbert, the founder of Mutiny Asia, the very goal of digital transformation in marketing is to reduce expenditure and retain the customers by exposing them to the use of digital channels. The digital transformation changes the business through digital content, business strategy, effective structures, talent development and industry engagement. Digital transformation is an intensive exercise that requires intervention of all the areas from data analytics professionals to IT intellectuals and HR as well. It calls for a strong commitment from everyone who is connected with it and has to face the challenges that each will have during the transformation. The digital transformation changes the way marketing has worked in the past years altogether. As the marketing becomes digitally armoured it tends to make the strategy for the consumer. The digital marketers guides the consumers through the various stages of buyers journey by raising awareness through broadcast channels ,by satisfying interests through the contents , by building desires through communicating high end values and by driving through attractive offers. All these activities create a new marketing experience that we call it as the agile marketing. Following the digital transformation the marketers should not only rethink the strategy but also the whole marketing model. The new agile marketers must observe the behaviour of the buyers through their unique customer's journeys and react accordingly. The giants like amazon, flipkart and many more are already tracking each move of the consumers and are acting swiftly. This new age marketing stalks the consumers at each move they make.

Digital transformation has created the platform for the new age marketing that are called under the nomenclature such as digital marketing, web marketing, internet marketing, web marketing. Digital transformation has radically changed the traditional marketing where now the consumers use the digital devices instead of going physically to the market place. We are now more into the market space. A study carried out by (Deekshith & Kinslin, 2016) shows that consumers are more satisfied using the digital platform and it also keeps them more informed and they as well feel safe and convenient using the digital platform. Digital transformation stands to be effective for both the marketers as well as the end users. Digital transformation is helping the marketers to bring the brands more closer to the end consumers (Yasmin, Tasneem, & Fatema, 2015) . Digitally transformed E marketing began in the nineteenth century

Key Drivers In Digital Transformation

✓ **Digitally cultured People :**

This era is dominated by the digital furore and everyone around us are guided by the technology seamlessly. The people are more digitally enabled and it has become a cult amongst everyone disregard of age, gender and other demographic factors. Digital transformations around us have created a space where it becomes necessary for all the businesses to transform into a more digitally evolved entity. Any business which is unable to transform falls prey to the digital rage. A digital culture is here to stay with people, so one need to encourage a digital transformation of business and also a workforce that is comfortable with disruption.

✓ **Data driven strategy:**

The current market is highly data driven market, where the data decides the strategy for the future activities. Most of the major decisions that the companies are taking is based upon the data that is collected and worked upon on. Data is one of the biggest drivers of the digital practices and a lot depends on the proper collection and utilization of data. If at any point the data is miscalculated it will become difficult to know where the consumers are in the buying process.

✓ **Swift response to the need:**

Another major driver that is driving the digital era is the ability of it to respond quickly to the need of the consumers. The digital transformation of the marketing businesses has given the companies the core strength of being agile, so that the decisions can be taken quickly and smartly. Agile marketing is a clear answer to all the digital business transformations.

✓ **AI the nerve of the hour**

Artificial Intelligence is the backbone of the current digital disruptions that the industries are going through. AI helps the marketers to design exclusive customer centric experiences by using various software's that understands the need of the consumers and provides them their personalised solutions. Chatbots can be on the best examples of the same.

✓ **Affordability, Accessibility and Adaptability of the consumers :**

The way in which the consumers have adapted to the technology changes around them also provides a strong support to digital transformations of business. The consumers today are more exposed to the digital platform and can access the same with comfort and convenience. They have adapted to the change and the digitization and internet accessibility is also attractively affordable. All these factors also acts as a strong driver for digital transformation.

Vital Reasons Behind The Digital Transformation And Advent Of Agile Marketing

➤ **Expectations of the consumers are changing rapidly:**

The major reason as to why the businesses are adopting the technology and changing their processes and practices by digitisation is due to the increasing expectations of the consumers. The consumers today have sky high refined and specific expectations regarding the offerings that will satisfy their needs, the competitive landscape is changing rapidly around (Osmundsen et al., 2018)

➤ **The consumers are more informed and active:**

All thanks to the technological advancements and affordability of internet the consumers today are more informed and active than the earlier days. This very fact keeps the companies on the toes to fight the competition war and also requires them to be agile in methods to deliver the right product as desired and expected by the consumers at the right time, place and price.

➤ **The dynamics of the business are changing each seconds**

The dynamics of the businesses are changing each second due to the changing needs and demands of the consumers. To keep up in the changing scenario where technology plays a vital role, transforming the businesses digitally remains as the only available best option and there is no other way than to be agile in order to grab the opportunity that can be missed if not taken at the right time. Dynamic capabilities allow a firm to identify and respond to opportunities by transforming the organization, reconfiguring resources, and building digital platform capabilities, and thus, respond to industry changes and digital disruptions (Karimi and Walter, 2015; Leischnig, Wöfl, Ivens, and Hein, 2017).

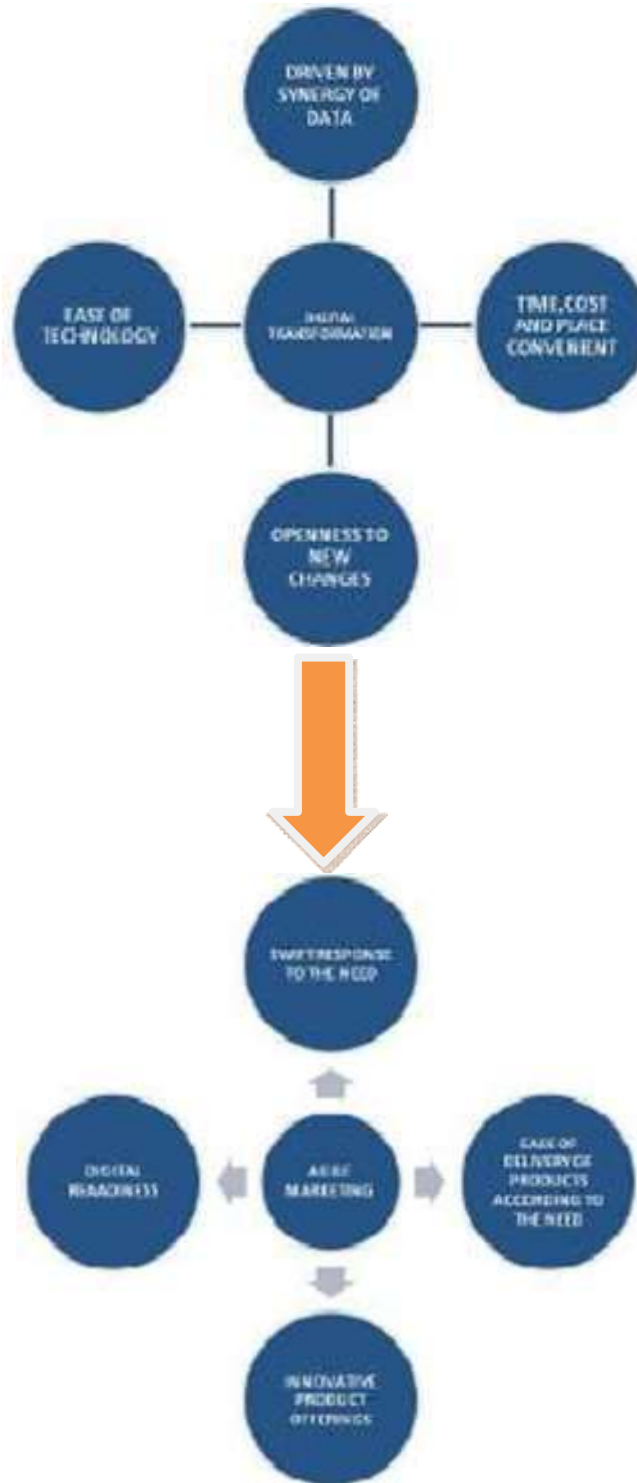
➤ **Industry 4.0 ,a revolutionised future**

Speed defines the success of the business in this technically advanced environment. Digital Transformation has always had a strong connection to the industry, and is

currently re-experiencing huge changes with speed, as the industry 4.0 represents the coming fourth industrial revolution. It focuses on the end-to-end digitization of all physical assets and integration into digital ecosystems with value chain partners.

Amalgamation Of Digital Transformation And Agile Marketing (Model And Explanation)

Model 1



Conceptual Framework Model

The above conceptual model (model 1) shows the relationship between digital transformation and the way it relates to agile marketing. It shows that digital transformation is characterised by synergy of data, ease of technology, it also provides time, place and cost convenience to the consumers. Digital transformation also is characterised by openness to new changes.

The digital transformation directly gives birth to agile marketing. Agile marketing is the new age marketing where the marketers responds at the drop of the hat to the consumers needs and offers them with innovative offerings, the marketers are more flexible and acts and formulates and changes strategies as per the situation demands.

Agile marketing is characterised by swift response to needs which is possible because of the digital transformation where the synergy of strong data gives the companies the power to predict the consumer's needs and demands and accordingly helps them to respond to the same.

Agile marketing is also characterised by ease of delivery of the products as per the need of the consumer and this is also backed by the digital transformation and its feature where it provides ease of place, time and cost efficient services to the consumers. Agile marketing makes the marketing experiences an experience of convenience.

Agile marketing also ensures to provide innovative product offerings as it is driven by the digital transformation that adopts openness to new change as its driving force.

Agile marketing is characterised by digital readiness that means it is equipped with the ability to adapt to any new change that is powered by digitisation as digital transformation provides one with ease of technology that makes tasks easier and more efficient.

The above model has a strong scope for further research in the future.

Challenges in Digital Transformation

➤ **Insufficient technical skill**

Digital transformation of businesses requires the human capital to be technically sound so that they can understand, apply and work on a digitally transformed platform. Most of the times due to insufficient technical skills of the employees most of the digitally transformed businesses run into losses.

➤ **Resistance to change**

Many consumers and companies resist the technology and prefer the traditional way of work this may pose as a challenge for digital transformation of businesses.

➤ **Lack of a clear vision for a digital journey**

To succeed in transforming the businesses digitally it becomes necessary that one understands the fundamentals of the digital journey and must have sufficient knowledge about the future and should be aware of the technical implications associated with it.

➤ **Lack of budget**

Financial challenges are also a constraint in the journey of digital transformation and many businesses either cannot digitize or keep it updated by maintain it due to the lack of financial fuels that are required at the beginning and thereby at the regular intervals.

➤ **Security issues**

Security reasons poses as a major threat in the digital transformation. Security of data is a major concern and requires a strong check and interventions.

➤ **Ineffective gathering and leveraging of data**

Digital transformation works on data. The data gathered are not always effective and correct, sometimes among the heap of data the chances of wrong and inappropriate data also remains and leveraging on those data may result in a wrong outcome.

➤ **Cannibalization of a previously successful business**

Many a times the huge digitally transformed businesses cannibalizes small but profitable businesses entirely and one might not even knew and a profitable business might run into losses for not being technology oriented.

➤ **Fluctuating consumer behaviour**

As the digitisation is giving consumers a lot of options to choose from, the consumers are becoming increasingly volatile in their decision making. It is becoming more difficult to understand the consumer behaviour due to this fluctuating nature.

Conclusion

The paper concludes that digital transformation has radically changed the way businesses used to work a decade back. It has changed the traditional of marketing and has given birth to many new types of marketing forms and one of them is agile marketing. Agile marketing is not only the need of the hour but definitely the future course as well because in this digitally transformed industry one needs to be super swift to grab the opportunity and answer the needs of the consumers on time and effectively.

References :

- <https://econsultancy.com/how-digital-transformation-can-revolutionise-marketing/>
https://www.researchgate.net/publication/323994364_Digital_Transformation_A_Literature_Review_and_Guidelines_for_Future_Research
<https://www.pwc.co.uk/services/consulting/accelerate-digital/retail-digital-transformation.html>
<https://digitalmarketinginstitute.com/en-us/blog/how-to-build-an-agile-workforce-in-a-digital-world>
 Karimi, J., & Walter, Z. (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the newspaper industry. *Journal of Management Information Systems*, 32(1), 39–81. <https://doi.org/10.1080/07421222.2015.1029380>
 Karimi, J., & Walter, Z. (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the newspaper industry. *Journal of Management Information Systems*, 32(1), 39–81. <https://doi.org/10.1080/07421222.2015.1029380>
 Yoo Y, Henfridsson O, Lyytinen K (2010) Research commentary— the new organizing logic of digital innovation: an agenda for information systems research. *Inf Syst Res* 21(4):724–735
 Deekshith, D., & Kinslin, D. (2016). A study on digital marketing and its impact. *Journal of Chemical and Pharmaceutical Sciences*, 9(4), 2059–2062.
 Osmundsen, K., Iden, J., & Bygstad, B. (2018). Digital Transformation: Drivers, Success Factors, and Implications. *Mediterranean Conference on Information Systems (MCIS)*, (September), 1–15.
 Skog, D. A., Wimelius, H., & Sandberg, J. (2018). Digital Disruption. *Business and Information Systems Engineering*, 60(5), 431–437. <https://doi.org/10.1007/s12599-018-0550-4>
 Yasmin, A., Tasneem, S., & Fatema, K. (2015). Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study. *The International Journal of Management Science and Business Administration*, 1(5), 69–80. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.15.1006>

GREEN MARKETING AS WEAPON FOR SUCCESS

LAXMIPRIYA DASH

Green marketing, environmental marketing and ecological marketing are different terms emphasizing and establishing relationship between marketing and environment. The activities which come under green marketing are product modification, change in packaging, and change in the production process and modification in advertisement. Defining green marketing is a challenging task. Green marketing has become the need of the hour to satisfy the unlimited wants, using the limited resources available. Apart from Government pressure and competitive pressure, it has been also adopted by companies owing to their corporate social responsibility and as an opportunity to en-cash the current trend and mindset of the customers .Green marketing has been adopted as a strategy by various successful companies in their advertisement .This paper will analyse few such success stories where green marketing has been adopted to create a competitive advantage in the target segment. It also analyses the awareness of consumers in the Bhubaneswar market regarding “Green Marketing”.

Key words: *Green marketing, strategy, and marketing.*

Introduction

Now in this era people are more concerned of their environment. According to Dunlap and Jones (Dunlap,2012), environmental concern denotes “the degree to which people are aware of problems regarding the environment and support efforts to solve them or indicate the willingness to contribute personally to their solution” (p. 482). In general, consumers who are concerned about the environment tend to develop positive environmental attitudes, express willingness to pay more for eco-friendly products and exhibit pro-environmental behaviour (Dunlap,2012;Albayrak et.al ,2013;Nguyen,2016)

Marketing with an environmental perspective has been referred to as ‘green marketing’ ‘environmental marketing’, ‘socially responsible marketing’ and ‘sustainable marketing’ (Chamorro et.al,2009; Mostafa ,2007).It has been widely acknowledged that green marketing practices significantly affect consumers’ choice of eco-friendly products (Maniatis ,2016).

Few successful companies with green marketing

Repercussion on Environment due to massive industrialization has been a serious concern for many environmentalist .The companies themselves are now more aware about the ways in which their factories often affect the ecosystem and have taken a greener path to success. Many companies

are showing the path of sustainability and are contributing to greener environment by innovating products which are more eco-friendly.

LG India has been a pioneer in making electronic gadgets that are eco-friendly. Recently, it has launched a LED E60 and E90 series monitor for the Indian market. Its USP is that it consumes 40% less energy than conventional LED monitors. Also, they hardly use halogen or mercury, trying to keep down the use of hazardous materials in their products. Similarly Haier has launched Eco-life series. Samsung has come up with eco-friendly LED backlight which is free from mercury and lead and even consumes less than 40% electricity. Among all TCS has taken initiatives for creating technology for agriculture and community benefit. It is globally recognized for its sustainable practices. Banks like IndusInd Bank one of the first banks in India to discourage the use of paper for the counterfoils in ATMs, and sending electronic messages, it has contributed a lot towards saving paper and reducing deforestation. Similarly ITC has adopted a Low Carbon Growth Path and a Cleaner Environment approach and has already introduced ozone treated elemental chlorine free bleaching technology that has improved the lives of millions worldwide.

Literature Review

Marketers also have the responsibility to make the consumers understand the need for and benefits of green products as compared to non-green ones. In green marketing, consumers are willing to pay more to maintain a cleaner and greener environment. Green marketing assumes even more importance and relevance in developing countries (Kapoor .P 2014). As environmental issues continue to affect human activities, society is now regards them with much concern. Most firms have started using sustainable development framework which is known as green marketing and most of the organizations have acknowledged green products which are environmentally friendly. Marketing managers can use green marketing to earn profits. In addition, green marketing is able to preserve the environment while satisfying customers' needs. Therefore, green marketing is a tool now used by many companies to increase their competitive advantage as people are presently very concerned about environmental issues. In the time applying green marketing, the companies have to comply with the consumers' needs and wants. Consumers want to recognize themselves with companies that are green compliant and are willing to pay more for a greener life style. For this reason, green marketing is not only an environmental protection tool but also a marketing strategy (Yazdanifard, 2011). Other than that, marketers can provide training to their employees, especially sales representative. This is to give them knowledge on how to promote the green product effectively by clearly presenting the main message to the consumers. Green marketing covers a wide range of business activities and it is similar to marketing mix. Therefore, marketers should adopt a suitable single green marketing mix and strategy corresponding to company in which they conduct and target consumers' demands and personality. In addition, companies that carry out green marketing in the right place and on the right person may support the company to achieve their competitive advantage.

Green Consumer

The green consumer is generally defined as one who adopts environmentally friendly behaviors and/or who purchases green products over the standard alternatives. Green consumers are more internally-controlled as they believe that an individual consumer can be effective in environmental

protection. Thus, they feel that the job of environmental protection should not be left to the government, business, environmentalists and scientists only; they as consumers can also play a part. They are also less dogmatic and more open-minded or tolerant toward new products and ideas. Their open-mindedness helps them to accept green products and behaviors, more readily (Shamdasani et al. 1993). According to the consumption report of the EU (Consumers in Europe), it is found that ten percent of the consumers recognize the ecological product labels or green energy labels on the products sold in the supermarkets

Making an environmentally friendly product is not enough by itself for a sustainable world. Environmental awareness is also needed in matters regarding consuming. Consumers also have important tasks in this matter as well as the people managing the marketing operations of the businesses. Consumers have started to support the environment by using their purchasing power and with their post consuming responsibilities. The trend to use environmentally friendly products containing materials which are not harmful to environment and human health (i.e. green products) has become popular among consumers thanks to this environmental awareness. Within this context, the people who aim to protect themselves and the environment with their purchasing power are identified as “green consumers”.

Hypothesis

People get more aware and concern about the environment through education system, which indirectly and directly lead to further exposure. Moreover they will be more aware of the labeling and believes that green product can minimize the harmful impact on the environment . (Grailresearch, 2010). Tilikidou ve Delistavrou (2001) conducted a survey in Greece with 420 household. As a result of this study, it is concluded that citizens who more frequently adopt pro-environmental non-purchasing behaviors are all highly educated people

H1: There is a significant relationship between education and awareness about green marketing

When people will have a choice of purchase with a good range of spendable income, they may opt to look for green products .As in the basic need category thinking about the environment will not be possible. In case the price of the green product is higher, importance should be given to promotion of differentiated green product and also there should be consumers ready to overpay for the product. (Emgin and Turk, 2004).

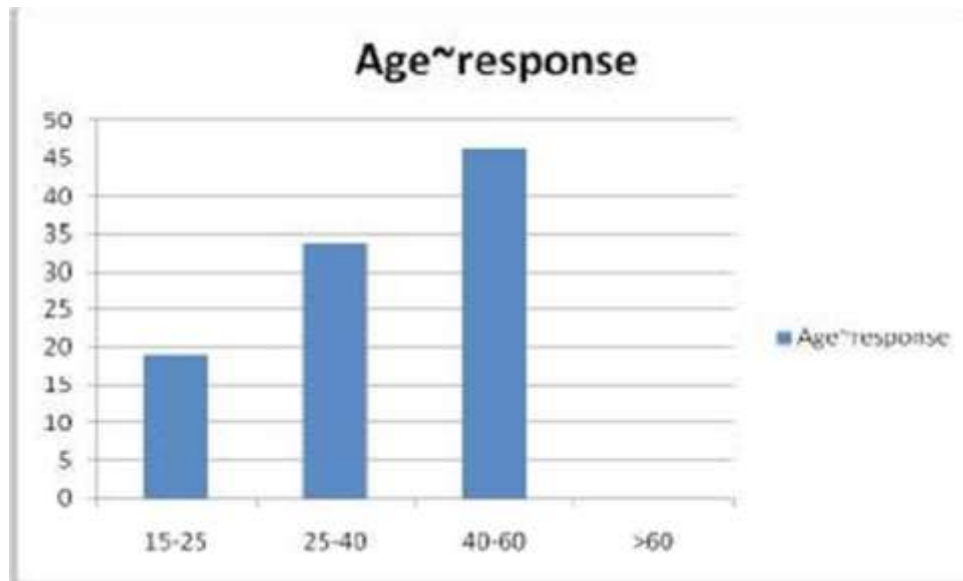
H2: There is a significant and positive relationship between Income and awareness about green marketing

Age has a moderate impact on the awareness regarding green marketing. (Boztepe,2012)

H3: There is a moderate relationship between age and awareness regarding green marketing

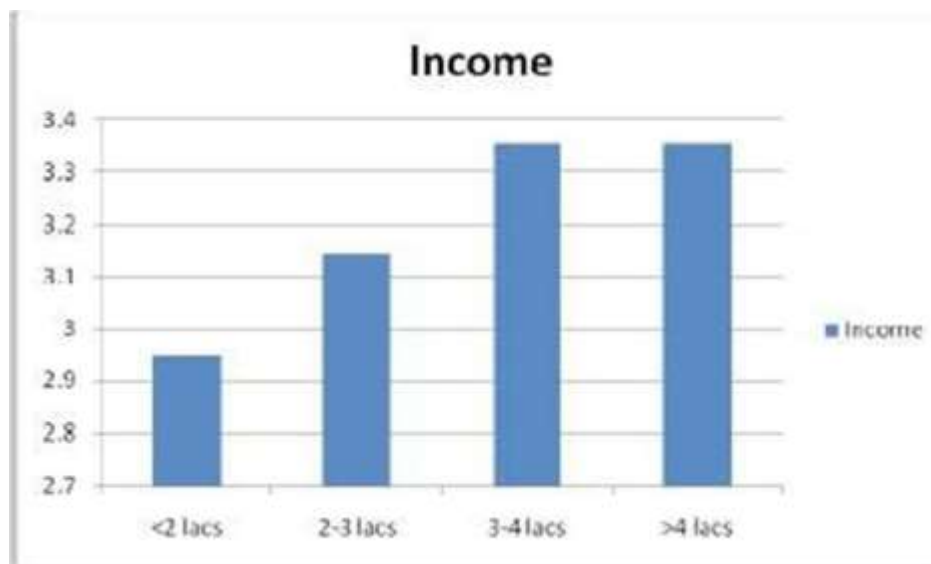
Findings and Analysis

A sample size of hundred people were randomly collected from Bhubnaeswar . A Questionnaire containing 10 questions were designed to find out the awareness level of consumers about green marketing .



Consumers in the age bracket of (40-60) are more aware about the green marketing as their concern for environment is quite high.

Column 1	Column 2
Column	
1	1
Column	
2	0.015533 1



It was quite obvious that people having a choice and affordability to buy gets more exposed to various products including green products. So their awareness about green marketing is more.

	<i>Column 1</i>	<i>Column 2</i>
Column		
1	1	
Column		
2	0.238477	1



Education has a positive impact .More the consumers are qualified ,more is their awareness regarding green marketing.

	<i>Column 1</i>	<i>Column 2</i>
Column		
1	1	
Column		
2	0.921934	1

Conclusion

As result of the study, education, income, and age has a direct and positive relationship with the consumer awareness.As environment consciousness, green promotion and green price increase, green purchasing behavior increases as well. Unlike in previous studies where there was a negative relationship between high green product prices and purchasing behavior, people are now willing to pay extra penny for safeguarding their environment. But it was found that many people are still not aware about the “green marketing” concept , so marketers must take further steps in creating awareness among consumers regarding “green product”.

Bibliography

1. Dunlap, R.; Jones, R. Environmental concern: Conceptual and measurement issues. In Handbook of Environmental Sociology; Dunlap, R.E., Michelson, W.,Eds.; Greenwook Press: London, UK, 2012; pp.482–542.
2. Albayrak, T.; Aksoy, S.; Caber, M. The effect of environmental concern and scepticism on green purchase behaviour. Mark. Intell. Plan. 2013, 31, 27–39. [CrossRef] 47.

3. Nguyen, T.N.; Lobo, A.; Nguyen, H.L.; Phan, T.T.H.; Cao, T.K. Determinants influencing conservation behaviour: Perceptions of Vietnamese consumers. *J. Consum. Behav.* 2016, 15, 560–570.
4. Chamorro, A.; Rubio, S.; Miranda, F.J. Characteristics of research on green marketing. *Bus. Strategy Environ.* 2009, 18, 223–239.
5. Mostafa, M.M. A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychol. Mark.* 2007, 24, 445–473.
6. Maniatis, P. Investigating factors influencing consumer decision-making while choosing green products. *J. Clean. Prod.* 2016, 132, 215–228.
7. <http://www.greenmarketing.net/strategic.html> 2.http://www.epa.qld.gov.au/sustainable_industries
8. Mishra p. and Sharma p, “green marketing in India: emerging opportunities and challenges, journals of engineering science and management education”, vol 3. 2010/9-14.
9. J.A. Ottoman. Et al, “Avoiding green marketing myopia”, *environment*, vol -48, june-2006
10. “Green Marketing” (2010, March 29). *Journal: Business Practices.*
11. Kapoor P. “Emerging trends of green marketing” , Vol-5 ,2014,CASIRJ
12. Peattie, K. Towards sustainability: The third age of green marketing. *Mark. Rev.* 2001, 2, 129–146.
13. Tilikidou, Irene, Antonia, Delistavrou .2008. “Types And Influential Factors Of Consumers’ Non-Purchasing Ecological Behaviors,Business Strategy and the Environment”61-76
14. Emgin, Ovgu, Turk, Zehra 2004. “Yesil Pazarlama” *Mevzuat Dergisi*, (7), 7
15. Boztepe.A , “Green Marketing and its Impact on consumer buying behavior” *European Journal of Economic and Political Studies* . 2012.
16. <http://www.grailresearch.com/pdf/ContentPodsPdf/TheGreenRevolution.pdf>, (Accessed in 10 December 2010)

Questionnaire

Name :

1. Age group
(15-25) (25 -40) (40-65) (65 and above)
2. Educational Qualification.
(Graduate) (Post graduate) (professional Qualified) (others)
3. Your Annual Income.
(Below 300000) (300000-1000000) (1000000-2000000) (200000 and above)
4. Your degree of awareness about green marketing? (Highly aware) (aware) (less aware) (not at all aware)
5. Do you believe that companies should abide to our environmental law? (agree)(strongly agree) (Disagree)(strongly disagree)
6. Are you aware about the organizations polluting our environment ?
(highly aware) (aware) (low awareness) (unaware)
7. Do agree that all the organizations should adopt green marketing strategy ?
(agree)(highly agree) (disagree) (highly disagree)
8. Would you pay an extra price for green product ? (agree)
(highly agree) (disagree) (strongly disagree)
9. Are you aware of the product as “green” before making a purchase decision ? (highly aware) (aware) (unaware) (low awareness)
10. How often do you deliberately purchase green marketing products (Durable like ac /fridge , organic foods , eco friendly gadgets etc) ?
(Most often) (Often) (Seldom) (Never)



A study on marketing and distribution of huli's rural orientation in Uttar Pradesh

NIRANJAN BIDIKA

ABSTRACT :

Government of India had launched Digital India program with the aim of transforming the entire nation into a digitally empowered society and knowledge economy. Cashless, paperless economy is one of the perceived roles of Digital India movement. Different digital modes for financial payments are available still India continues to be driven by the utilization of money. Reason being there's nothing truly compete with the pliability of money. Government of India has taken initiatives to drive card transactions and cashless payments which posted healthy growth over the last couple of years subsequent to the government's demonetization initiative in November 2016. Although the expansion in mobile payments, card transactions continue to be the hugest driver of cashless payment transactions. In this article, an attempt has been made to study about digital transactions with cashless economy and expansion of digital transactions in India.

Keywords: Cashless, Payment, Digital Transactions, Demonetization.

1.0 INTRODUCTION

India being a cash-intensive economy has a large percentage of transactions being carried out in cash due to poor digital literacy in the country. The last few years had been the year of major changes by Government of India through 'Digital India Campaign'. 'The Digital India program' is a flagship program of the Govt. of India with a vision to rework India into a digitally empowered society and knowledge economy. Faceless, Paperless, Cashless is one among professed role of 'Digital India'. With the announcement of prime minister of India, on 8th November 2016, two of the largest denominations of currency notes of INR 500 and INR 1000 were demonetized with an immediate effect. The main aim behind this step was aimed to attack on black money, currency used for terrorist financing, black money and corruption. Demonetization decision is a major driver for making India a cashless economy. Demonetization decision coupled with government's initiative to make India a cashless economy is expected to bring a phenomenal transformation in the way people make payments and expected to increase inclination towards online payment. Post demonetization, people gradually initiated embracing digital transactions and at the same time small business merchants and shop owners started receiving payments by means of digital mode. It was found that there is an increase in usage of digital transactions such as more credit and debit card transactions and mobile - wallets to make payments, after the implementation of demonetization In this research article we will have a detailed study about the upward trends of digital transactions with cashless economy, various types of digital payments in India and the prospects of cashless economy in India.

A study on marketing and distribution of huli's rural orientation in Uttar Pradesh

2.0 REVIEW OF LITERATURE

Mr. Bharat Khurana (2015), Dream of cashless India: Benefits and challenges. The paper studies the benefits and challenges associated with India after becoming a cashless nation. It also helps in assessing the meaning of digital India and steps taken by government towards achieving the dream of cashless India. After the study no matter how much the government had done for fulfilling the dream of digital India but there is still a lot more that can be done to achieve that dream.

K. C. Balaji and K. Balaji (2016) "A Study on Demonetization and Its Impact on Cashless Transactions" considered that the development of the cashless exchange framework is achieving new statures. Individuals tend to move to cashless exchanges. It is on the right track to state that the cashless framework is a prerequisite as well as a requirement for the general public. However, then again, the danger of digital wrongdoing is especially higher as all the cashless exchanges are done over web. So appropriate and finish mindfulness must be made to the general population to keep their charge and Mastercards safe and to utilize the web saving money and the advanced wallet in a most secure manner. So as to rebuff the digital lawbreakers, the legitimately organized digital police compel with top of the line criminological labs and innovation must be made.

Mr. Pradeep H. Tawade (2017), "Future and scope of cashless economy in India." This paper helps to assess the long run trends and therefore the after effect of going cashless within the Indian economic. It was seen that the Government of India should consider some more steps in digitalizing India by making the payment method secure and risk free.

3.0 OBJECTIVES OF THE STUDY

1. To study the different methods of digital payments in India.
2. To identify the factors promoting digital transaction System.
3. To study the upward trend of Cashless and Digital transactions in India.

4.0 METHODOLOGY

Research methodology involves specific techniques that are adopted in research process to collect assemble and evaluate data. It defines those tools that are used to gather relevant information in a specific research study.

This paper is a conceptual paper based on descriptive analysis using various secondary data and includes different literature reviews, published sources of data collected from various research papers and data from RBI website.

5.0 METHODS OF DIGITAL PAYMENTS IN INDIA:

- **Cards:** These includes the use of all types of plastic cards such as credit card, debit card, cash card, travel card etc. they provide 2 factor authentications for a secure transaction.
- **USSD:** Unstructured Supplementary Service Data is an innovative of making payments without the use of internet and smart phone. The payments can be made by a feature phone by dialing *99#.AEPS:
- **Aadhar Enabled Payment System** is a means by which a person can make payments at the point of sale by Aadhar authentication.
- **UPI:** Unified Payment Interface allows the user to link multiple bank accounts into a single mobile application, merging all or some of the banking services.
- **Mobile Wallets:** It is a means of carrying cash in digital format. Credit card or debit card can be linked to the mobile wallet for making payments or some money can be loaded into the mobile wallet.

- **Internet Banking:** It is a medium through which various banking services like NEFT, RTGS, ECS, IMPS etc. can be availed over the institution's website
- **Mobile Banking:** It is a service provided by banks providing its customers a platform to conduct various banking services by use of their mobile phones or tablets through the apps provided by the bank.

6.0 FACTORS PROMOTING CASHLESS TRANSACTION SYSTEM IN INDIA:

- **Faster, convenient & ease of accessibility:** Customers need no longer to carry cash or visit an ATM. In fact, they don't even got to be physically present to pay Customers pays anytime from any a part of the planet. Digital, banking services are going to be available to customers on a 24/7 basis and on all days of a year, including bank holidays
- **Lower risk:** Digital transactions are far more secure than traditional transactions because they're processed by secure gateways which are hard to tamper with.
- **Easily traceable:** Details of payments are easily traceable in merchant-specific databases. Both merchants and customers have quick access to payment information. This avoids ambiguity and confusion while tracking payments.
- **Economical and fewer transaction fee:** There are many payment apps and mobile wallets that don't charge any quite service charge or processing fee for the service provided. The UPI interface is one such example, where the customer utilize the services free of cost. Various digital payments systems are bringing down costs.
- **Rewards, discounts and cash backs:** There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. Attractive cash back, offers are given by many digital payment banks which comes as boon to customers and also acts an important factor to go cashless.
- **One stop solution for paying bills:** Many digital wallets and payment apps became a convenient platform for paying utility bills. Be it mobile bills, internet or electricity bills, all such utility bills are often paid through one app with none hassle.
- **Helps keep black money under control:** Digital transactions will help the govt keep a track of things and it'll help eliminate the circulation of black money and counterfeit notes in the long run. Apart from this, this might also provide a boost to the economy because the cost of minting currency.

7.0 UPWARD TREND OF CASHLESS AND DIGITAL TRANSACTIONS IN INDIA

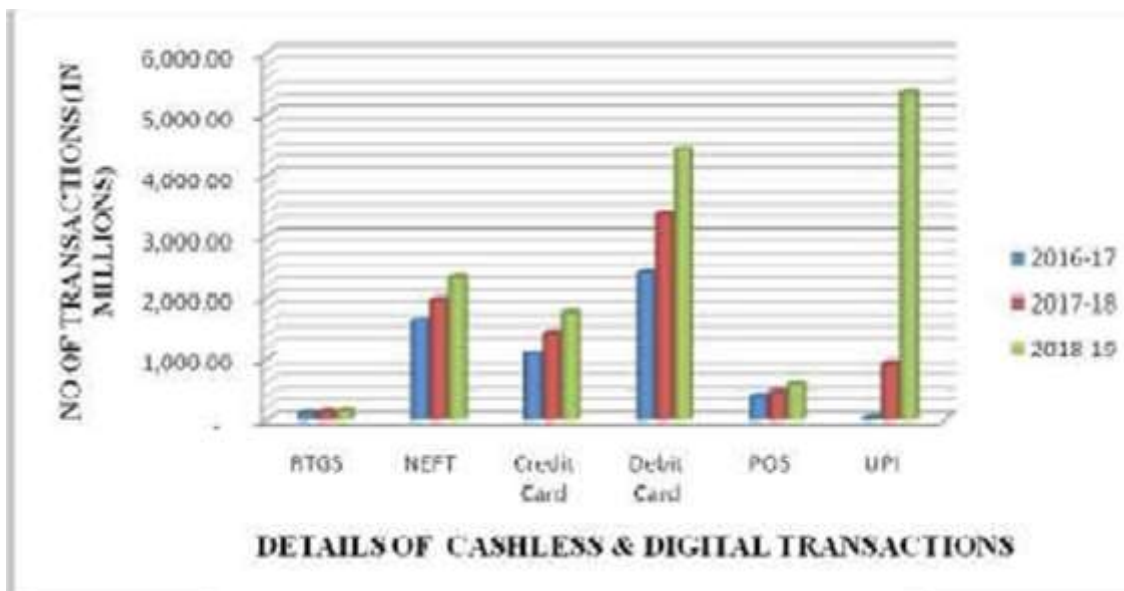
Digital payments are slowly gaining popularity in India and there are many apps that are being launched in this sector. It has become a hassle-free and secure way to make payments. The table below shows numbers of transactions through different digital platforms in India over past 3 financial years.

TABLE-1

YearNo. of transactions (in Millions)

	RTGS	NEFT	Credit Card	Debit Card	POS	UPI
2016-17	107.80	1,622.10	1,087.10	2,399.30	378.78	17.90
2017-18	124.40	1,946.40	1,405.20	3,343.40	446.19	915.20
2018-19	136.60	2,318.90	1,762.60	4,414.30	569.98	5,353.40

FIG-1



From the above table and chart it is inferred that there is a gradual increase in the usage of cashless and digital platform for making transactions by the people of India.

8.0 CONCLUSION

It can be predicted that in forthcoming years there will be a sharp and unexpected rise in the number of digital payment transactions in India. The digital payments sector i.e., cashless payments transactions will cross 1 trillion in succeeding 5 years. UPI and Aadhaar will help increase digital penetration, consistent with sources. UPI fund transfer money can be sent using a virtual address without providing IFSC code or account number. The usage of UPI continues to grow exponentially touching 5 billion in the coming years.

There is still a lack of trust and confidence among people while using digital payment methods. A lot of development in the field of infrastructure is required to make the dream of Digital India a reality. There are a lot of challenges in fulfilling the dream of digital India but in the long run cashless economy will help in growth and will bring a lot of benefits and opportunities with it.

REFERENCES :

1. Mr. Bharat Khurana (2015), Dream of cashless India: Benefits and challenges.
2. K. C. Balaji and K. Balaji(2017), A Study On Demonetization And Its Impact On Cashless Transactions, International Journal of Advanced Scientific Research & Development Vol. 04, Iss. 03,Ver. I, Mar' 2017, pp. 58 -64, e-ISSN: 2395-6089 p-ISSN: 2394-8906
3. Mr. Pradeep H. Tawade (2017), Future and scope of cashless economy in India
4. <https://www.rbi.org.in>



AN EMPIRICAL ASSESSMENT OF THE IMPACT OF TRAINING AND DEVELOPMENT ON EMPLOYEES' JOB PERFORMANCE

NIRANJAN NAIK

Keywords: Online Reputation Management, Social media strategy, Customer Acquisition, Customer Retention

ABSTRACT:

The entire world is in the trend of adopting the changes to attain the sustainability in today's highly technical environment. The transformation from the traditional era to digital era is tremendous in today's scenario. Netizens in this millennial age are quite challenging for the companies to acquire and to retain them. Many giant companies are putting their best effort and adopting various long-term strategy for safeguarding the brand value of a company.

In this article the main emphasis is given on the Online Reputation Management (ORM) which is about monitoring reviews of the customers on social media platforms as well as on the search engine results page. With the help of ORM the digital marketers analyze the customer's sentiment and handle the queries of the customers and simultaneously adopt a very logical approach to make the customers delightful and also loyal to the company from which the customer acquisition and retention increases.

Introduction

Online Reputation Management (ORM) means a strategy to change the perception of customer in regard to the companies brand for the benefit of the company by keeping an eye on the excellent product service to be delivered, and also by reviewing the customer sentiment through their post and comment in the social media which is to be tackled in a very successful manner to make the customer feel delight and to be loyal to the company.

From this effort a company can build a strong bonding with the customer and can also acquire more customer with the help of word of mouth, advocacy etc. To grow a strong online reputation the companies need to have good communication with their valuable customers. ORM also relates to the Omni-channel customer experience in which many industry started to support the customer by opting the customer service outsourcing. ORM also deliver quick response to the customer reply, as well as their conversation in e-mail to sustain their brand image. Many customer get dissatisfied with the product what they have purchased from online and sometimes they get annoyed and writes the negativity about the brand which is enough to destroy the brand image. So handling this situation with prudent and smart responses with realistic interest to solve the customer issue.

It's always best to be proactive! When expanding the online marketing campaign, and social media marketing, it is important to be able to highlight positive reviews online. Doing it right will increase the company brand image while ensuring the same is read by millions of users who are likely to flow with the ripple of customer centricity. Researchers found that when we read and respond to reviews, unsatisfied consumers become more hesitant to leave unsubstantiated complaints, directly leading to higher ratings.

Common mistakes the company does is not responding or ignoring the criticism and not being transparent about their shortcomings. Sometimes customers want that the company should reply to their review and complaint. Meticulous Social media Engagement ensures response to criticism is set off with the notion of owning the pitfalls and being transparent about it.

The negative reviews that businesses receive, although longer, can provide valuable feedback to take to heart and improve operations. And in the end, that kind of communication, if acted on, will only improve the guest experience that drives revenue and more positive reviews in turn. So Online reputation can be a major chunk to acquire and retain the customer.

Literature Review

Online Reputation Management is the way by which companies can deal with content of people on Social Media effectively, in order to defend their reputation from which the ultimate customer acquisition and retention takes place. A lot of companies do not know how they can efficiently organize and execute online reputation management. According to (Kaplan & Haenlein, 2010); one reason behind this incapability is a lack of understanding regarding what Social Media include, and how it can influence companies. Hence, companies need to be aware and understand the fundamental change first, if they want to acquire and retain the customer for their sustainability.

Due to the rise of social media the previously called reputation management has changed into online reputation management. Earlier the companies used to handle the information shared by the customers by placing press announcements and good public relation managers. In today's scenario firms have been increasingly relegated to the sidelines as mere observers, having neither the knowledge nor the chance- or, sometimes, even the right – to alter publicly posted comments provided by their customers' (Kaplan & Haenlein, 2010).

For now, the important role of the Social Media for the life of many people is one of the main reasons for companies to pay attention to this relatively new phenomenon (Kaplan & Haenlein, 2010). However, companies have to recognize that the consequences of the rise of Social Media are significant, especially for the reputation of companies as well as to acquire and retain back the customer. According to (Kietzmann et al, 2011); 'with the rise of Social Media, it appears that corporate communication has been democratized. The power has been taken from those in marketing and public relations by the individuals and communities that create, share, and consume blogs, tweets, Facebook entries, movies, pictures, and so forth'. This process is accelerated by mobile devices, which are of great importance for accessing these Social Media platforms (Anderson & Wolff, 2010). Now, almost everyone with a proper connection to the Internet has access to all kinds of information by the use of the World Wide Web; the international market becomes almost completely transparent. Negative content in the Social Media can lead to an oil slick of negative publicity, which is difficult to handle, and may lead to reputation damage. (Gillin & Gianforte, 2012) Therefore, it is necessary to deal with content of people on Social Media effectively, called online reputation management, in order to defend companies of reputation damage.

From the Customer acquisition and retention point of view, access to more information about the consumer is complemented by larger choice sets due to the global reach of the internet, by the

ability to exchange the opinion through reviews (Morrissey, 2005). The reviews by the customers use to send through traditional media, but it spread all over the world when it come on social media.

Online Reputation Management Strategies

In order to do a critical literature review about the knowledge in this area, a classification of existing online reputation management literature will be carried out by a concept-centric approach. The concepts will be determined in order to organize the framework of the review. In dealing with customer attacks; online reputation management can be divided in three strategies.

- Strategy one: before a customer attack; prevention against a possible customer attack (Prevention).
- Strategy two: during a customer attack; the reaction of the company on a customer attack (Reaction).
- Strategy three: after a customer attack; the learning and evaluation part after a customer attack (Learning and Evaluation).

Strategy One: Prevention

Strategy one is actually the most important stage for online reputation management. ‘Social Media is a two-way street, and if a company is going to build a brand there, the company should be better ready for both best and worst situation, so for that it is always better to take prevention rather to go for a treatment. Reputation for the company is very important to maintain the brand image from which the acquisition and reputation of customer can be done. Million people are using internet in the world in which maximum people are using social media like Facebook, twitter, linked in etc. More than 60% of people from the age group above 18 years put their reviews about their experience or check the reviews before deciding (Barlow & Moller, 2008). Online reputation Management will help the company to track the negative reviews where the company can build up various strategy to overcome that by pursuing engagement activities like communicating with the customers regarding their problem and the company should put the best effort to resolve the issue as soon as possible. So that the customer will be delight and will also be loyal to the company from which the customer retention can be done. The best way to prevent a company of customer attacks is by building a loyal customer base that heads off attacks before they begin. Loyal customers give a company the benefit of the doubt when a problem occurs, and are more likely to reach out to the company first, instead of attacking it on for example twitter or Facebook. Building a loyal customer base can be realized by increasing customer experience; this is the sum total of all interactions that customers have with a brand and the perceptions they form as a result. A high quality service can be achieved by continuous innovation and dedication to customer service. Customer service also includes dealing with all problems and questions of customers on Social Media. By solving problems and answering customer questions adequately, companies increase customer service, which has a positive outcome on the value that companies deliver and can pull the customer towards its company and can maintain a longer relationship with the customers.

The company need to obtain a social media policy with clear rules and regulation to deal with the bad reviews, Social media trainings should be implemented in HR education program. If the company is facing the customer negative feedback the company with a social media presence should face on tracking that indicates brand engagement. Conversation can be tracked by screening systems. To make a speedy and numerous conversation hosted by social mediaplatforms such as twitter, need tools and capabilities that allow them to screen social media. Once the company identify the appropriate metrics for the reputation, the company can have a perfect tool forevaluation. From this evaluation the customer complaint can be addressed by analyzing the sentiment of customers and from this the negative reviews can be lessened which in future the company can be an earned media.

Strategy Two: Reaction

The first impression of every customer who goes through online search is the website. So, it is important for the company to have a well-designed website to get the right impression from the point of view of customers. The reviews of other customers could be useful which can be linked to the website. There must be unique content about the company's product and about the profile of the company so that it will be better understandable by the customers. Simultaneously having organic content is necessary to have good SEO and the information provided on that must be original. There are numerous platforms for reviews about a company such as Yellow pages, Glassdoor, Manta, Foursquare etc. which allows customers to post their reviews and other customers can read about the experiences. From these reviews the company can be placed in ranking in the search engine result page.

So, it is necessary for a company to proactively check review sites and reply to them promptly. It is better to know what competitors are doing where it can help to formulate the strategies around it and improve your practice marketing operations. The company should not forget to ask for reviews from your happy customers through mails and messages.

On Social Media, it is possible for companies to disable people from posting content at their platform and there is also various ways to delete the negative comments of customers to safeguard the company reputation which is unethical. In this way, people do not have the possibility to express their feelings. Preventing the customer from posting content makes them arrogant and sometimes they take the issue to such a high level like sharing their message through other channels and platforms which becomes uncontrollable for the company to retain them back which can damage the reputation of the companies even more. The intention of Social Media is to stay always in contact with the customers; be sure to engage in discussions and conversations. One of the worst 'reactions' of companies is to watch, without communicating and interacting with people on Social Media. When companies say nothing at all on Social Media, it looks clueless (Gillin&Gianforte, 2012). Although this is not a real reaction on a customer attack, companies have to be discouraged to deal with Social Media this way. Even if a customer attack occurs, it is in most cases wise to engage in discussions about the reason of the attack and to find a possible solution for the attack. First of all, after an attack it is of importance to show interest and listen to the content of the attack carefully. The company has to show the world that they care about the opinion of people (GainesRoss, 2010). The golden rule is to treat customers the way people would want to be treated if they were a customer (Gillin&Gianforte, 2012), even if the reason of the attack may make no sense at all.

Many a times companies need to take customer attacks in a very stringent way because from this other complainants will be influenced and there will be more possibility of attacks. According to (Gaines-Ross, 2010); 'most companies are slow moving and consensus driven. While they look for a convenient time to get together and come up with a defense that everyone agrees on, damage from the attack continues to spread'. That is why companies have to act quickly, it is an urgency to find a solution. The crisis point in most attacks occurs when the conversation jumps from social to mainstream media. Further dissemination of negative content of a person on Social Media can therefore be stopped if companies ensure that the story gets out of mainstream media as soon as possible. This can be done by driving the conversation back to a place the company controls; move the conversation from a public place to a private place, by e-mailing or private conversations for example.

Sometimes the situation could be worsened by the negative feedback of the customer. During that time the company can admit that they made a mistake, often used reactions are to apologize and to meet the customer with a compensation. Sometimes these reactions may not work at all. Apologies do no work if they do not address the failure that caused the problem (Gillin&Gianforte, 2012).

Compensation is not necessarily the answer, either. People do not want their complaints to be downplayed. Another consequence of compensation is that it could give people more than they believe that they deserve. This can actually embarrass them and make them angrier. Briefly, companies have to own up their mistakes, but have to think carefully about how to react in the most reliable and acceptable way. The company sometimes can take Counterattack it is always recommend to take the high road; sticking to the facts and resisting the urge to counterattacks. Counterattack is often the riskiest form of response. Counterattacks work only if there is incontrovertible evidence that the attacker is either lying or flagrantly disregarding the facts. To classify different customer attacks, it is more convenient to look at the one who sent the attacks; the customer attackers. The different motivations of the attackers requires different response strategies. The classification and knowledge of the different attackers is made with the help of (Gillin&Gianforte, 2012).

Customer Attackers Type 1:- These customer attackers go through a lot of bad experiences/ irritations. The customer loyalty is often very low, but because of the big deal to switch to a competitor, by for example banks, utilities and government agencies, the customers do not leave. Companies have to spend time to every complaint, but by this type it is usually not worth it. Therefore, companies have to deal with these complains by the use of policies. Empower the staff who deal directly with customers to handle common problems and can get fair responses that are crafted with customer satisfaction in mind. Another strategy to deal with these complaints is to give the attackers ultimate control; promise no questions-asked refunds, repairs or replacements. The secret of this policy is that few customers ever take advantage of the guarantees unless they really need to. In this case, customer services have to deal with less complaints (Gillin&Gianforte, 2012).

Customer Attackers Type 2:- The complaints of these attackers are purely having the intention to obtain higher rewards, like free products or high compensations. The complaints are often reasonable, but their greed demands unreasonable high rewards. From the small issues the attackers often threaten companies with negative reviews or bad blogs, in order to obtain a high compensations. Companies should handle the queries in a very effective manner for which the case to be evaluated in a very proper way, and look if the compensation is reasonable in comparison with the complaint. However, be aware that you have to react consequent, so a company comes towards an attackers with a high compensation, attackers will expect the same compensation in the future. If such an attack occurs, the company has to drive the conversation back to a place the company controls; move the conversation from a public place to a private place. Next, discover the truth behind the complaint. Respond only with facts, avoid accusations, and determine a reasonable compensation, if this seems to be justified. If the attackers will not stop, release a press statement that the company did a fair offer, and stop paying attention. (Gillin&Gianforte, 2012).

Customer Attackers Type 3:- These attackers are often the most successful and should be given more importance. The attacks have a mission, such as environmental improvements, human or animal rights, public health and customer rights. They are good in building armies of followers, which results in groups like Greenpeace and UNICEF. The attackers can be very effective, because all those united individuals have large tools available as a group. As also stated earlier, treat them with respect; the company cannot change an attacker's vision. Therefore, address the facts, do not speculate, and negotiate about a reasonable solution for both parties. If they attackers are not people who would ever buy your product, then agreeing to disagree may be the best strategy. However, if the attack is getting sympathy of the public, it may be rational to admit and change, otherwise it can have a bad influence on your business. Besides that, companies usually get positive feedback for being willing to change. In difficult situations, it can be the best method to stop negotiation with the attacker and deal with the possible damage, but that is the last decision a company has to make (Gillin&Gianforte,

2012). This set of Customers can be acquired easily if some suitable responses from the company side is given and they can be retain back for a very long time.

Customer Attackers Type 4:- Some attacks explode out of nowhere. In that case, most of the time a public figure is the attacker. This can be an actor, athlete, politician, or other public figure with a large network on Social Media. These people can generate conversations among a lot of people, in no time, regardless of whether the complaint is reasonable or not because they have lots of followers in the social domain. On the other hand, if the complaint is reasonable, the complaint can be very effective. Problems that would otherwise be locked up can also be introduced by public figures. In any case, keep calm when the situation seems to get out of control. Unless there is evidence that the complaint is reasonable and that it is a real potential damage, it is likely that the situation will blow over pretty quickly. Besides that, public figures abandon their campaigns pretty quickly if offered an explanation, apology or a reasonable compensation. However, the responses of this type of attacker should not be overlooked because the problem can be desperate and can make the situation worse. So the companies should act very smartly and in the meantime the company should be strict to their policies and never change it because of one complaint, even if the person is a public figure.

Strategy Three: Learning & Evaluation

After a customer attack, a company has to learn and evaluate what went wrong and what went right in preventing and reacting on the customer attack, companies have to change if it went wrong. Companies have to be prepared to revisit the company's preventing strategies, by searching for the gap in the prevention strategy as the cause of the attack. After recognizing a potential gap, the changes in the prevention strategy, in order to be protected in the future. Besides the prevention company should alter the strategy and also evaluate the reaction on the customer attack for weaknesses and potential improvements; demonstrate the willingness to change. If the problem is in a streamlined manner then the company should address the problem and adopt the solution in public from which the customer attack will be reduced and in a broader aspect the main mission of customer acquisition and retention will be easy. The lack of continuous improvement, when a company does not change anything at all, is one of the biggest factors that feeds customer dissatisfaction. Successful companies have learned to not only live with complaints but embrace them in the spirit of improvement. Companies always have to rethink their online reputation management and acknowledge; by changing the mindset, adopting new tools, and taking the principles of reputation warfare to heart, companies can protect their business from the worst of the snipers' attacks in the future (Gaines-Ross, 2010).

CONCLUSION

Several years ago, companies could defend their reputation by controlling the information available about the company. Today, with the rise of Social Media; reputation management has been expanded with online reputation management. Nowadays, when people launch an attack on Social Media, companies have no control, and reputation damage can be the result. Reputation damage may have significant influence on the overall results of companies in the future. Online reputation management is the way by which companies can deal with customer attacks on Social Media, that is why companies have to organize and execute an effective online reputation management. The paper classified the existing knowledge in three conceptual strategies: i) prevention, reaction and learning & evaluation. The first stage is prevention, this is the best treatment. Companies do not have to react on an attack if their prevention strategy is effective and adequate, by which reputation damage will certainly not happen and the customer acquisition and retention can be done easily. However, if a company is subject of a customer attack, the reaction is of great importance. A company has to understand the different principles of reaction, to acquire a well understanding; how to take care of customer attacks

and which reactions companies have to avoid. By the classification of different customer attacks, it is possible to see which response strategy is appropriate for which customer attack. After a customer attack, a company has to learn and evaluate what went wrong and what went right in preventing and reacting on the customer attack. Companies always has to rethink their reputation management; by changing the mind-set, adopting new tools, companies can protect their business from the worst customer attacks in the future. An effective online reputation management is of great value, because a well-performing online reputation management is necessary in order to defend companies of reputation damage on Social Media. The paper provided the management of companies of recommendations for decision-making, by which companies can effectively organize and execute their online reputation management. This is important for companies, because reputation damage on Social Media is an actual phenomenon. Overall, online reputation management is a new field of science, in which knowledge is relatively scarce. New knowledge and perspectives have to be generated, in order to obtain a more sophisticated and complete view in online reputation management. The knowledge has to be proved by empirical evidence, which have to be realized by academics in the future.

References:-

1. Anderson, C., & Wolff, M. (2010, September 20). The web is dead. Long live the Internet. *Wired Magazine*.
2. Armano, D. (2009). Six social media trends for 2010. *Harvard Business Review*
3. Barlow, J., & Moller, C. (2008). *A complaint is a gift: recovering customer loyalty when things go wrong*. San Francisco: Barrett-Koehler Publishers
4. Berthon, P., Pitt, L., McCarthy, I., & Kates, S. (2007). When customers get clever: Managerial approaches to dealing with creative consumers. pp. 39-47.
5. Constantinides, E., & Fountain, S. (2008). Web 2.0: conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice*, Vol. 9(No. 3), pp. 231-244.
6. Crowd control: handing creative to the masses. Adweek. Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundation and Trends in Information Retrieval*, Vol. 2(Nos. 1-2), pp. 1-135.
7. Gaines-Ross, L. (2010). Reputation warfare. *Harvard Business Review* 88(No. 12), pp. 70-76.
8. Gillin, P., & Gianforte, G. (2012). *Attack of the customers. Why critics assault brands online and how to avoid becoming a victim*. Washington: Createspace Independent Publishing Platform.
9. Hanna, R., Rohm, A., & Crittenden, V. (2011). We're all connected: The power of social media ecosystem. *Business Horizons*, Vol. 54, pp. 265-273.
10. Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, Vol. 53(No. 1), pp. 53, 59-68. No index entries found.
11. Karpinski, R. (2005). The next phase: bottom-up marketing. *BtoB Magazine*.
12. Kempinski, R. (2005). The next phase: bottom-up marketing. *Bob Magazine*.
13. Kietzmann, J., Hermkens, K., McCarthy, I., & Silvestre, B. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, pp. 54, 241-251.
14. Kietzmann, J., Hermkens, K., McCarthy, I., & Silvestre, B. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, pp. 54, 241-251.
15. Kioussis, S., Popescu, C., & Mitrook, M. (2007). Understanding influence on corporate reputation: an examination of public relation efforts, media coverage, public opinion, and financial performance from an agenda-building and agenda setting perspective. *Journal of Public Relations Research*, Vol. 19(No. 2).
16. McCarthy, I., Lawrence, T., Wixted, B., & Gordon, B. (2010). A multidimensional conceptualization of environmental velocity. *The Academy of Management Review*, Vol. 35(No. 4), pp. 604-626. Morrissey, B. (2005, September 26).

ROLE OF DIGITAL PAYMENT SYSTEM IN CREATING CASHLESS ECONOMY IN INDIA

PRANAB KISHORE BEHERA

ABSTRACT

Cash has been the traditional instrument of transaction in India since Independence and any move towards going cashless will entail a paradigm shift. A host of measures have been launched in the short run to deal with this barrier. For example, service providers operating in the digital payments landscape have relied significantly on discounts, cash backs and other such offers to get around the proclivity of cash use. This is particularly true of mobile wallets and UPI in India. Initiatives under the 'Cashless India' campaign are also doing well in this direction. Also, the campaign involves several measures that have subsidized the cost of using digital payments instruments, making them affordable. Although the above mentioned initiatives have yielded positive results, here is doubt whether the momentum of use of digital payments will remain once these cash backs, discounts and subsidies are rolled back. In this backdrop this paper examines the status of digital payment in India and analyzes different digital payment system prevailing in India.

(Key words: Digital Payment, Cashless Economy, High Value Payments, Retail Payments)

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1.1 INTRODUCTION:

"Digital Transaction' means a payment transaction in a seamless system effected without the need for cash at least in one of the two legs, if not in both. This includes transactions made through digital / electronic modes wherein both the originator and the beneficiary use digital / electronic medium to send or receive money." The Digital India program is an emblematic program of the Government of India with the vision of transforming India into a society and a knowledge economy with digital power. "Faceless, paperless, without cash" is one of the professors of Digital India.

1.2 LITERATURE REVIEW:

Dhanda and Arora (2017), "*Genesis of cashless society: A study on growing acceptability towards plastic money*", this paper is aimed towards studying the factors responsible for the rapid increase in acceptability of plastic card in the recent years. After the study was conducted it was seen that use of plastic cards is a matter of great pride among teenagers and is considered safe and free from any frauds.

RashmiGujrati (2017), "*India's march towards faceless, paperless, cashless economy*", the paper is aimed towards creating a sense of awareness about cashless economy, its benefits, challenges and the steps taken by government toward cashless economy. After the research conducted it was seen that cashless economy comes with various benefits but brings in a lot more challenges with it.

Dr. Asha Sharma (2017), "*Potential for cashless economy in India*", the study was conducted to find the scope of India becoming a cashless economy, challenges and opportunities related to cashless economy. The study shows that there is a significant scope of Cashless India as we can abolish various problems we face today but we must be prepared for the challenges and problems which cashless economy will bring.

Dominic, Saranya, and Rajani (2018), "*A study on transformation in behavior of individual towards cashless economy*", the study is aimed towards studying the behavioral changes in individual towards cashless economy. After the study conducted it was seen that many individuals have already moved or are moving towards a cashless nation but there is still a long way for India to become cashless.

Mr. Bharat Khurana (2015), "*Dream of cashless India: Benefits and challenges*", the paper studies the benefits and challenges India might face if it becomes a cashless nation. It also helps in assessing the meaning of digital India and steps taken by government towards achieving the dream of cashless India. After the study no matter how much the government had done for fulfilling the dream of digital India but there is still a lot more that can be done to achieve that dream.

Metri and Jindappa (2017), "*Impact of cashless economy on common man in India*", the study focusses on effect of going cashless on a common man living in India and the challenges related to going cashless. The study shows that India can never turn into a fully cashless economy as cash has been the dominating factor and always will be. Going cashless will only be feasible for a very small section of the society but not the whole nation.

Kumari and Khanna (2017), "*Cashless payment: a behavioral change to an economic growth*", the paper aims to study how a behavioral change led to an economic growth in the Indian economic scenario. After the study conducted it was seen that various factors were responsible for such a change as people were finding various benefits and opportunities by adopting such a change.

Thomas and Krishnamurthy (2017), "*Cashless rural economy-a dream or reality*", the study is focused towards understanding the impact of demonetization on rural India and to keep a check on the government initiatives to make rural market a cashless economy. The studies show that the government of India should initiate various schemes to make the dream of cashless economy a reality.

Shendge, Shelar and Kapase (2017), "*Impact and importance of Cashless Transaction in India*", the paper focuses on impact and importance of cashless transactions in India. The study shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered.

Bindra and Bindiya (2017), "*Going Cashless: stepping towards Digital India*", The study is focused to find out benefits, challenges and the growth prospects in India on the path of moving towards digital India. The study shows that digital India will bring a huge growth in the GDP of India and will also have other benefits are the society and the economy as well.

Thilagavathy and Santhi (2017), "*Impact and importance of Cashless Transaction in India*", the paper focuses on impact and importance of cashless transactions in India. The study

shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered.

SharadMalhotra (2017), "Impact of Cashless Society for the Economic Growth in India", the paper focuses on impact and importance of cashless transactions in India. The study shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered. There would be lower costs and keep a check on financial crimes and TAX frauds.

1.3 OBJECTIVES:

The study is based on the following objectives:

1. To know the status of digital payment in India
2. To analyze different digital payment system prevailing in India

1.4 STATUS OF DIGITAL PAYMENT IN INDIA

A useful metric to measure the growth of digital transactions in the country is the number of digital transactions per capita. This can be measured monthly from the RBI data as

Annualized Per Capita Transaction Volume = 12 X (Total Volume of Digital Payments for the month) / Population

Similar data is available for other countries from the Bank of International Settlements in the following table:

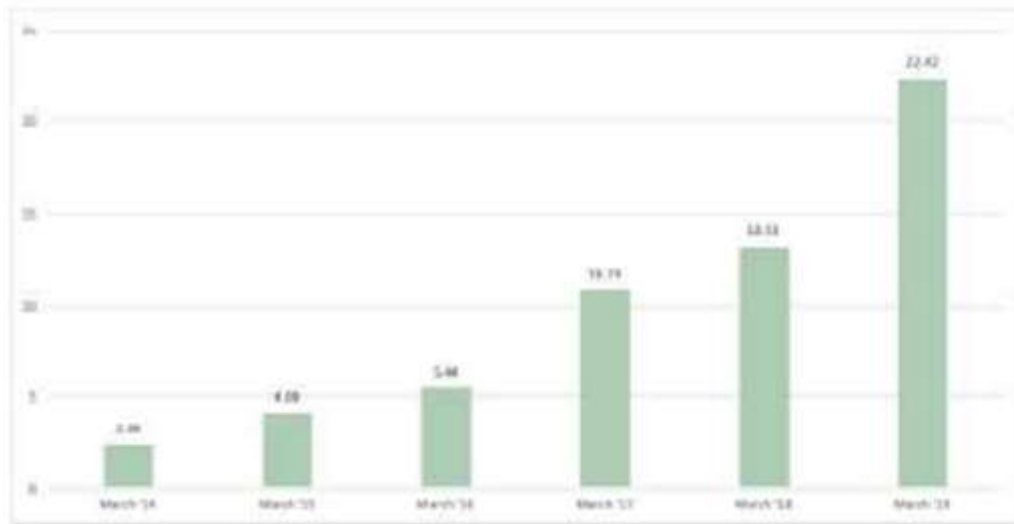
Table1: Digital Transaction per capita per Annum

Country	2015	2016	2017
Singapore	727.9	759.0	782.4
Sweden	428.8	481.4	497.9
USA	420.9	442.6	473.6
Euro Area	156.9	172.6	186.8
Russia	99.5	132.8	178.5
Brazil	137.6	139.4	148.5
China	48.9	70.4	96.7
South Africa	68.7	78.0	79.2
Indonesia	23.4	28.4	34.0

(Source: Bank for International Settlements Data Base)

For India the annualized per capita digital transaction volume can be shown in the following Figure1:

Figure1: Per Capita Digital transaction Volume in India

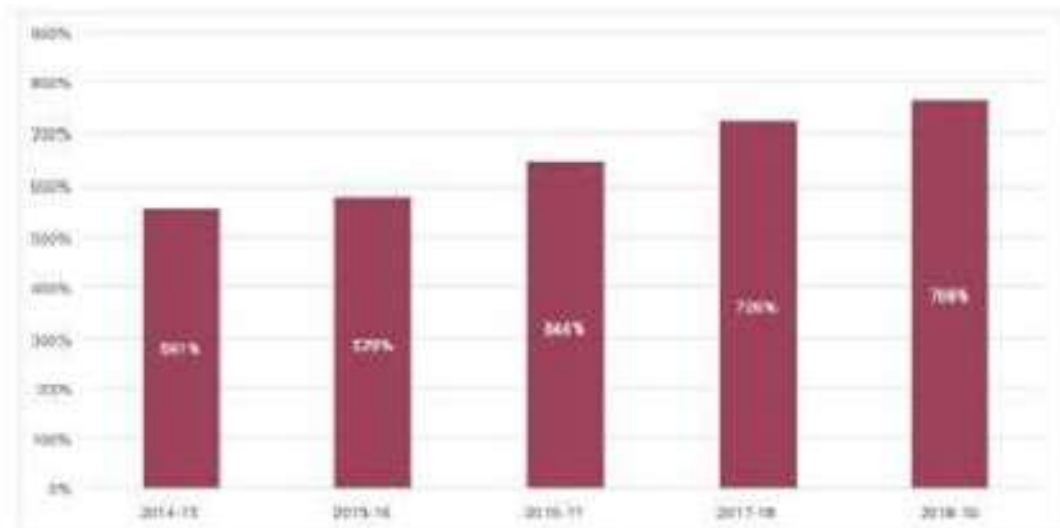


(Source: RBI Database)

For India, this metric has shown significant growth, from 2.4 digital transactions per capita per annum to about 22 in 5 years.

Another useful metric to track is the ratio of digital transactions (by value) and the GDP. More the ratio better is the digitization of the economy. The ratio computed for India is shown in the following figure:

Figure-2: Digital Payment of India as a percentage of GDP



(Source: RBI Database)

It can be seen with increased digitization; this ratio is continuing to grow.

1.5 DIGITAL PAYMENT SYSTEM IN INDIA:

As part of the promotion of cashless transactions and the conversion of India into a society with less cash, there are several modes of digital payments available. These modes are represented in table 2 as below:

Table 2: Modes of Digital Payment System in India

High Value Payment Systems	Card based Payments Systems	Non-Card Retail Payments Systems	Aadhaar Based Payments Systems	Other Payment System-I	Other Payment System-II
Real Time Gross Settlement (RTGS)	Credit and Debit Cards	Immediate Payment Service (IMPS)	Aadhaar Payment Bridge System (APBS)	Unified Payments Interface	Bharat Bill Payment System (BBPS)
National Electronic Funds Transfer (NEFT)	National Common Mobility Card (NCMC)	Electronic Clearing Service (ECS)	Aadhaar Enabled Payment System (AEPS)	Prepaid Payment Instruments (PPIs)/Wallets	BharatQR (BQR) code
Cheques	Kisan Credit Card	National Automated Clearing House (NACH)	BHIM Aadhaar Pay	National Electronic Toll Collection (NETC) System	National Unified USSD Platform (NUUP) or *99#

(Source: Author’s Own Compilation)

(1) High Value Payment Systems

(a) Real Time Gross Settlement (RTGS) system –RTGS system enables transfer of money from one bank account to another on a “real time” and on “gross” basis. The RTGS service window for customer’s transactions is available to banks from 8 am to 4:30 pm on weekdays (Monday through Friday) and on working Saturdays for settlement at the RBI’s end. RTGS is operated by RBI.

(b) National Electronic Funds Transfer (NEFT) –NEFT facilitates funds transfer across all computerized branches of banks (member / sub-member of NEFT) across the country. Presently, NEFT operates in half hourly batches –there are twenty-three settlements from 8 am to 7 pm on weekdays (Monday through Friday) and on working Saturdays. NEFT is operated by RBI.

(c) Cheques–India has a very efficient clearing house infrastructure, which is used by businesses to clear cheques, across the country, settling them on the same day, or the next day, and is the preferred mode for a lot of business transactions. Most banks do not charge retail customers for cheque clearing.

(2) Card based payment systems

Cards are well understood products at the global level, and find acceptance at stores, as well as for online payments. Cards have played an important role in the spread of digital payments. Cards are also used to withdraw money from ATMs, and hence have been issued to most account holders. India

has had the presence of international players in the payments space for many years. In the last decade, an Indian player –NPCI–has also introduced card payments through the RuPay scheme. Non-bank PPI issuers are allowed to participate as members / associate members of authorized card networks.

(a) **Credit and Debit Cards**- Credit cards have been used in India for over 40 years now. While the other digital payments have taken off, the use of cards has gone up as well. There are 3 dominant card schemes in India –RuPay, Mastercard and Visa. Over the past few years, the number of credit cards has grown, but it is overwhelmed by debit cards. India has made tremendous gains in financial inclusion, bringing in most Indians into the banking system. Many of these have been issued a debit card to access these accounts.

(b) **National Common Mobility Card (NCMC)**-The National Common Mobility Card is a new specification of cards to be used for mobility payments. The specification can be adopted by multiple schemes. The card has 2 instruments on it –a regular debit card which can be used at an ATM, and a local wallet (stored value account), which can be used for contactless payments, without the need to go back to the server or additional authentication. It is envisioned that a single card will be usable for all local travel needs across the country. In many jurisdictions around the world, such cards are also usable for low value payments at local stores (card present transactions only), making it very convenient for the user.

(c) **Kisan Credit Card**- The RuPay Kisan Credit Card was officially launched on 24th November 2012 to assist the farmers. Today there are around 1000+ RuPay Cards issuing banks some of whom have issued Kisan RuPay Cards. It appears that farmers are more comfortable withdrawing the credit amount in cash and using it for agricultural inputs, than using the card directly. In addition, there are still some legacy kisan credit cards, which are in the form of passbooks. Banks have started the process to migrate these to RuPay Kisan Cards, so that they can be used more easily.

(3) Non-Card Retail Payments Systems

(a) **Immediate Payment Service (IMPS)** –IMPS is a fast payment system operated by NPCI and is available 24x7. Under this, beneficiary gets funds on a real time basis with the settlement between banks happening on a deferred net basis.

(b) **Electronic Clearing Service (ECS)** –There are two variants of ECS –ECS Credit and ECS Debit. ECS Credit facilitates one-to-many payments such as dividend, salary, interest payments, etc. and ECS Debit facilitates many-to-one payments such as utility payments and works based on customer's standing mandate. ECS is operated by RBI and banks.

(c) **National Automated Clearing House (NACH)** –NACH have the same features as ECS with a centralized mandate management system. NACH is also used for making payments related to Government benefits, for instance, subsidies. NACH is operated by NPCI. ECS / NACH provide support for pre-approved mandates for bill payments, and standing instructions. A variant of NACH called eNACH has been created, which is digital, and relies on a digital signature of the user (based on eSign with Aadhaar). This is convenient because it simplifies the process of onboarding a new customer (no issues with checking a wet signature). Recently, the RBI approved the use of other authentication methods for eNACH, including net banking, and debit card. For ECS, the average transaction size varied from Rs 9,000 to 23,000 for the past 5 years, while for NACH, it varied from Rs 2700 to 4900. However, ECS volumes are dropping rapidly, and it appears that users are moving over to newer forms (such as NACH)

(4) Aadhaar Based Payment System:

(a) **Aadhaar Payment Bridge System (APBS)** –APBS uses Aadhaar number as the unique key / parameter for electronically channelizing the Government subsidies and benefits under Direct Benefit Transfer (DBT) schemes in the Aadhaar-linked bank accounts of the intended beneficiaries. APBS is a part of NACH.

(b) **Aadhaar Enabled Payment System (AEPS)** –AEPS allows online interoperable financial inclusion transactions at Micro-ATM through the Business Correspondent (BC) of any bank using the Aadhaar authentication. Under this system, the beneficiary is identified and authenticated based on Aadhaar biometric authentication for the purpose of carrying out financial transactions from her / his account.

(c) **BHIM Aadhaar Pay**–BHIM Aadhaar Pay enables the merchants to accept payments from customers using their Aadhaar number and biometric authentication of transactions. APBS is used by the Government to provide direct benefit transfers to the user's bank account, while AEPS allows a business correspondent to assist the user in withdrawing money or depositing it. Aadhaar Pay allows a user to make a payment at a merchant with Aadhaar APBS, and Aadhaar Pay transactions are counted as digital payments, however the bulk of the AEPS transactions are like cash deposit / withdrawal (like an ATM) and are not included. The following chart shows the deposit / withdrawal transactions through AEPS.

(5) Other Payment Related System:

(a) **Unified Payments Interface (BHIM UPI Platform)** –The BHIM UPI Platform, which is application-based and usable on smartphones with internet access, has the potential to revolutionize the mobile payments arena. The customers can provide just a registered virtual address for making or receiving payments. The BHIM UPI Platform was launched in August 2016, and currently 144 banks take part in the scheme. The system enables 2 factor authentication, and instant money transfer through a simple payment address. The payment interface is enabled through a smart phone application, which could be from a service provider other than the user's bank. The system has grown rapidly since launch, nearing 800M transactions per month in Mar 2019, less than 3 years from launch.

(b) **Prepaid Payment Instruments (PPIs)/Wallets** –PPIs are payment instruments that facilitate purchase of goods and services, including funds transfer, against the value stored on such instruments. Prepaid instruments have been a useful tool to bring users into the digital payment ecosystem and have shown significant growth in the last 5 years. Interoperability between wallets and bank accounts received a boost, when they could participate in UPI.

(c) **National Electronic Toll Collection (NETC) System**–NETC system facilitates an automated and interoperable electronic toll collection structure across the country's network of highways. NETC operates under the brand name Fastag, and it allows tolls to be collected digitally, on National Highways, allowing smoother movement of vehicles. NETC operates through a linked closed loop wallet, which is funded by the user. Only bank issuers, and acquirers are permitted to operate under NETC.

(d) **Bharat Bill Payment System (BBPS)** –BBPS is an integrated bill payment system which offers "anytime anywhere" interoperable bill payment service to customers using online payments as well as through a network of physical agent locations. BBPS was introduced to increase ease of bill payments in the country. An estimated 2 to 3 Billion bills are paid per

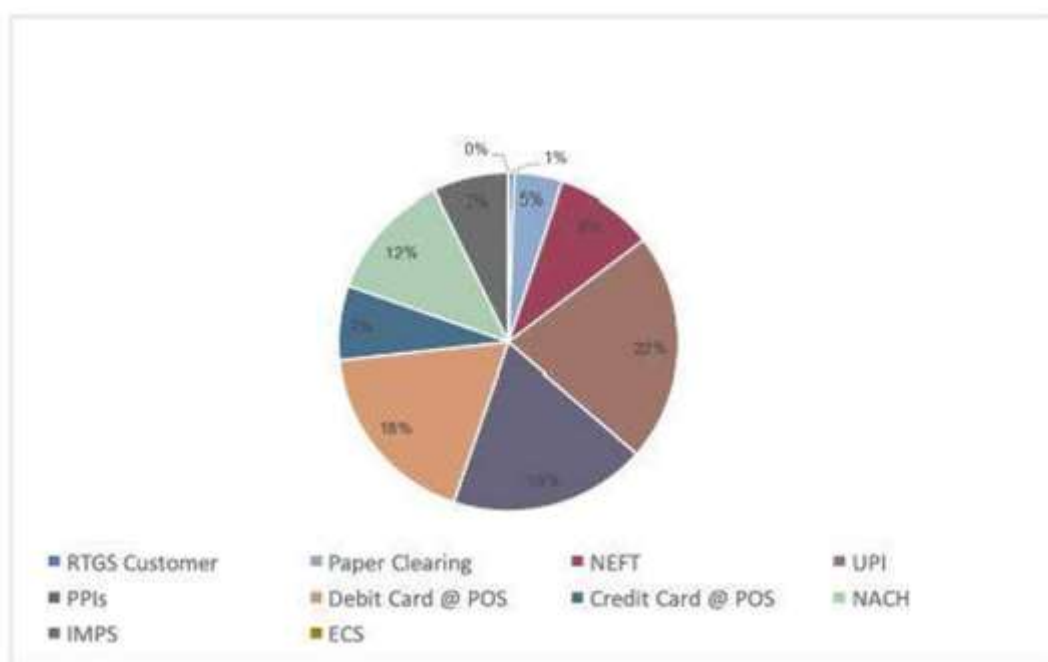
month, most of them in cash. BBPS allows users to pay in cash, or electronically, while allowing the utility to receive payment at once.

(e) **BharatQR (BQR) code**–BQR is an interoperable QR code which obviates the need to have different QR codes at a merchant location for each of the card payment network. The QR code-based payment is initiated by the card holder using his / her mobile phone. Bharat QR includes common specifications for not just card transactions but also for BHIM UPI. The volumes of digital payments using Bharat QR are still very low. Multiple stake holders have indicated that the commercial models need to be looked at, and that the code be generated dynamically.

(f) **National Unified USSD Platform (NUUP) or *99#** -With growing mobile density, banks had begun to offer mobile banking services to their customers using the USSD channel of the telecom providers. To ensure High Level Committee on Deepening of Digital Payments interoperability, a common platform offering USSD-based mobile payments services was set up. NPCI has introduced the USSD 2.0 version, which integrates BHIM UPI-based transactions for USSD users through any type of handset.

The RBI captures, and publishes data related to payment systems transaction in terms of volume, and value. A useful derived metric –Average Transaction Size (ATS) is also useful to better understand these systems. The following Figure -3 shows the share of the various payment systems by volume in India for FY 2018-19.

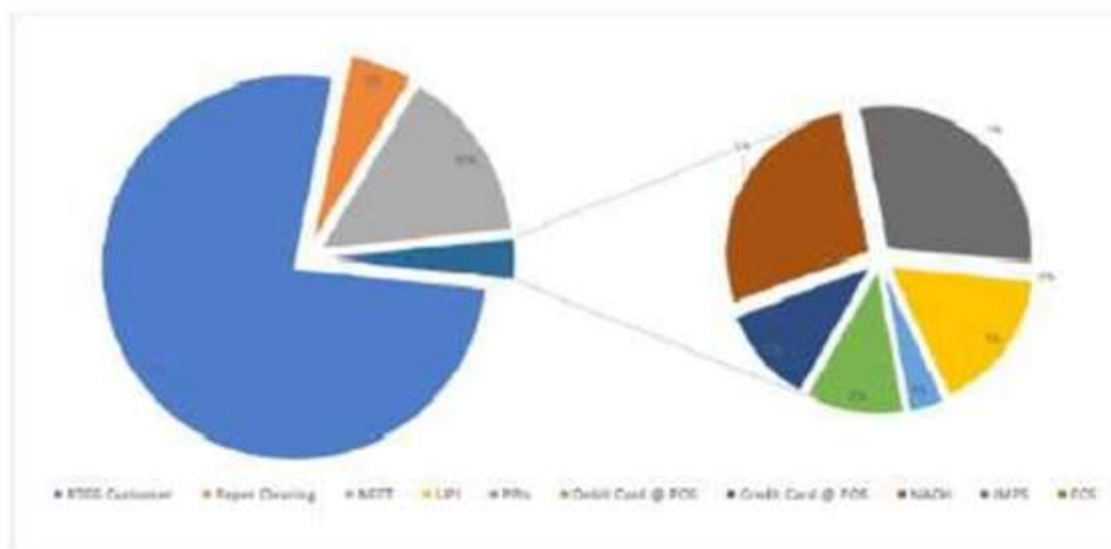
Figure-3: Payment System Share for FY 2018-19 in India by Volume



(Source: RBI Database)

However the following Figure-4 shows the distribution by value, showing just how much it is dominated by high value payment systems.

Figure-4: Payment System Share for FY 2018-19 in India by Value



(Source: RBI Data Base)

From these figures, it appears that systems such as RTGS, NEFT and Paper (Cheque) dominate in terms of value, but not volume indicating that they are used for higher value payments.

1.6 STRATEGIES FOR PROMOTING CASHLESS PAYMENT:

In this scenario, the option of intelligent and powerful advertising for promoting cashless payments and awareness campaigns about the costs and inconvenience of operating a cash-based payments system appear as effective alternatives. As previously mentioned, the adoption of mobile wallets has gained significantly from the offering of VAS such as mobile recharges, utility 90 bill payments, ticket booking, obtaining loans, and purchasing gold. Studies have also recorded the positive impact of VAS such as electronic receipts, pre-ordering products, and access to deals. An example of VAS which not only allows convenience and speed, but also allows managing money is to digitize loyalty and gift cards, and discount coupons, and manage them on a single platform so that consumers can choose their preferred payment mix of credit points, coupons and money.

Short-run measures, however successful, can only bring small increments to the process of digitalization. This is India's experience. Becoming cashless represents a paradigmatic shift and requires certain structural parameters in place. These structural parameters are the object of long-term policy-making. India is emerging as a large potential market for digital transactions. To unlock this potential, India has to address its structural deficiencies. For example, NACH is currently catering to the demand of a very small formal sector in India. The formalization of India's informal economy will make NACH ubiquitous. Financial inclusion, increased smart phone ownership supported by rising incomes, and improved digital infrastructure will boost usage of UPI, M-Wallets, and debit and credit card transactions in India.

1.7 CONCLUSION:

India has a rich diversity of digital payment options. Many of these are interoperable, and work through bank accounts, thus giving the users a lot more choice. However, the costs of digital payments are still an issue, and acceptance infrastructure is not widespread. At a broader level, the ecosystem needs to move from prioritizing issuance to acceptance. Users need to understand why a form of payment – cash, or digital is better for them, and make the right choice. The payments industry must strive to put together a product / service such that users will go with that over cash. The regulator has to orchestrate these changes through collecting and providing aggregated data, so that local decision makers can make the best choice to make progress. The RBI must rationalize the definition of digital payments and include all information that can be captured with high fidelity. This may include unregulated sources (on best effort basis) as well, as periodic surveys commissioned to help understand user experience.

REFERENCES:

1. Mr. Pradeep H. Tawade (2017), Future and scope of cashless economy in India
2. Dhanda and Arora(2017), Genesis of cashless society: A study on growing acceptability towards plastic money
3. Dr. RashmiGujrati (2017), India's march towards faceless, paperless, cashless economy
4. Dr. Asha Sharma (2017), Potential for cashless economy in India
5. Dominic, Saranya, and Rajani (2018), A study on transformation in behaviour of individual towards cashless economy
6. Mr. Bharat Khurana (2015), Dream of cashless India: Benefits and challenges
7. Metri and Jindappa (2017), Impact of cashless economy on common man in India
8. Kumari and Khanna (2017), Cashless payment: a behavioural change to an economic growth
9. Felix, Rebecca and Igbino (2015), Appraisal of the impact of e-banking and cashless society in the Nigerian economy
10. Kousalya and Shankar(2018), Cashless economy/transaction
11. Kokila and Ushadevi(2017), A study on consumer behaviour on cashless transaction in U.T. of Puducherry
12. Thomas and Krishnamurthy (2017), Cashless rural economy-a dream or reality
13. Shrikala K.K. (2017), Cashless Transaction: Opportunities and Challenges with special reference to Kodagu district of Karnataka
14. Shendge, Shelar and Kapase (2017), Impact and importance of Cashless Transaction in India
15. Garg and Panchal (2017), Study on Introduction of cashless economy in India 2016: Benefits & challenge



GREEN MARKETING FOR GREEN TOURISM IN RAMACHANDI: EXPLORING THE SUSTAINABLE DEVELOPMENT

RUPA SWETA ANAND

ABSTRACT

Tourism has become a major international industry, with many countries all over the world relying on the income it produces. Its economic advantages as a major source of finance and employment leads to its active promotion by governments and other institutions, independent of the consequences on the environment, ecology and social structure of affected regions. Today's globalised environment calls for greater awareness and spreading and enabling of leisure and tourism practices that generate sensitivity to the environment. As such tourism, a leisure activity, may become a positive factor not only in sustaining environment but making future generations more sensitive to it. For this reason tourist destinations need to develop a new model of tourism that should be based also on so-called alternative tourism. Alternative tourism is a generic concept encompassing various forms of tourism, such as eco-, soft, responsible, appropriate, small-scale, sustainable and, finally, green tourism. These are mostly defensive, nature-oriented, i.e. environmentally responsible forms of tourism. Green tourism include environmentally sustainable travel to destinations where climate impacts are minimized with the aim of respecting and preserving natural resources and adapting programs to fit the context of fragile resources. For green tourism to be successful it is essential to undertake adequate green marketing efforts. The role of green marketing in green tourism is primarily derived from the fact that green marketing has at its disposal the knowledge referring to environmental awareness, ways of enticing and raising this awareness, as well as its operationalization in terms of relevant environmentally oriented behavior. Keeping this in view, the paper attempts, to study the green tourism marketing strategy of Ramachandi, a popular tourism destination of Odisha.

Keywords: *Sustainable Development, Green Marketing, Green Tourism, Strategy, Destination*

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Introduction

In the last few decades people have developed a concern towards the environment and its quality not only for the present generations but also for the future generations. Their concerns have been manifested through environmental awareness, environmental activism, and participation in environmental governance through demanding laws and policies to overcome the environmental challenges. One of the growing concerns that have been shaping for a while is regarding the “green products” or products that are produced based on environmentally friendly methods and principles. Within this context, “green marketing” has become one of the slowly growing concepts towards upholding the demands of the consumers in one hand, and contributing to environmental ethics on another hand. As Smith (2010) stated: while there have been a variety of studies on green marketing, there has been little academic research on green marketing to Generation Y, also called Gen Y or Millennial (i.e., Generation Y is in reference to a demographic cohort born in 1980s). The so called Millennial are insisting on re-evaluation of the market behavior from being apathetic to the environment to a focus on products and marketing that respect the environmentally friendly techniques and methods in their conducts. Green marketing has also been equated with “sustainable marketing”, although this is not the only terminology that identifies the concept.

“Green Marketing” refers to holistic marketing concept wherein the production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the environment with growing awareness about the implications of global warming and other harmful pollutants. However while the shift to “green” may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous even cost-wise too, in the long run. The term green marketing is relatively new concept which came into limelight in the late 1980’s. Lionel Robinson believes that green marketing is inevitable because of limited resources and unlimited human wants, forcing companies to adapt these techniques for the effective utilization of resources. Although green marketing is of a recent origin but it has got much prominence in the last few decades because of fulfilling stricter environmental standards.

In the current scenario, Green marketing has emerged as an essential tool for the protection and promotion of environmentally friendly products. Entrepreneurs round the globe are increasingly adapting green marketing practices because of the rising demand from consumers, who prefer to use these products for multiple specifications like good quality, better performance and cost affordability, among others. So with this regard companies are striving hard to influence the consumers by changing production process and improving advertising & packaging techniques, thus modifying products as per the needs of consumers. Green marketing companies are defined as the companies which adapt several environment friendly techniques like use of biodegradable waste, minimal use of plastic material, greater use of hydroelectricity and smaller emission. There are various associations and bodies around the world called for conserving the environment to make it a safe place to live for us and for the future generations. In the second half of the eighties of the last century, there appeared a new pattern within the committed marketing, called as green marketing, which is focused on a powerful commitment to the environmental responsibility in exercising all the marketing activities, thus the business organizations adopted the conception of green marketing due to its large benefits. Green marketing is part of the social marketing concept and can be described as; Product, price, promotion, and distribution are the way to understand the customer needs and the reciprocal relationships between the planning, implementation and control policy that simultaneously meet the objectives of the organization and minimize the negative effects on the natural environment

Green Marketing in Tourism Industry

Tourism is an industry that is based on hotels, restaurants, shops and attractions, instead of factories. The quality of the environment, both natural and man-made, is essential to tourism. Areas

with high-value natural resources, like oceans, lakes, waterfalls, mountains, unique flora and fauna, and great scenic beauty attract large number of tourists who seek emotional and spiritual connections with nature. Growing number of tourists and rapidly developing tourism and accommodation activities are posing potential threats to the natural areas and leading to impacts such as: generation of wastes, increased pollutions (Air, Water and noise), deforestation, soil erosion, discharges into the lakes and rivers, loss of natural habitat, pressure on endangered species, tremendous increase in consumption levels and misuse of local resources which are already scarce and causing immense environmental and ecological destructions. Some major problems associated with tourism development are:

Depletion of Natural resources

Increased number of tourists can put pressure on natural resources because of increased consumption particularly in areas where resources are already scarce. In addition to the consumption of electricity/energy, the tourism industry generally overuses water resources for hotels, swimming pools, Golf courses and personal use of water by tourists.

Environmental Destruction

Due to the growing demand of tourism industry, unplanned construction of hotels, restaurants, lodges and Houseboats in and around lakes and rivers has increased. The sewage water of these hotels and houseboats drains into lakes and rivers, causing serious threats to the marine ecosystem.

Solid Waste and Littering

In areas with high concentrations of tourist activities and appealing natural attractions, waste disposal is a serious problem and improper disposal can be a major threat to the natural environment — rivers, scenic areas, and roadsides. Solid waste and littering can degrade the physical appearance of the water and shoreline and cause death of the marine animals. Tons of waste is produced by the tourists and other agents providing tourism related service e.g. hotels, restaurants, shops causing environmental destruction.

Deforestation

Forests play a vital role in environmental maintenance and damage to the forest may degrade an entire ecosystem. The rapid growth of tourism has led to increasing need for building material viz. Construction of hotels, restaurants, lodges, houseboats which eventually lead to the destruction of forests. The other serious problems associated with deforestation include soil erosion, loss of biodiversity, climate change and negative effect on water cycle and overall environment of the region.

Climate change

Tourism is closely linked to climate change. Climate change takes place due to increase in concentration of greenhouse gases in the atmosphere. One of the most significant of these gases is carbon dioxide, which is generated due to burning of coal, oil, and natural gas. Also, deforestation, industrial activities, electricity generation, and automobiles are also responsible for accumulation of carbon dioxide in the atmosphere. Air travel itself is a major contributor to the greenhouse effect.

The damaging impacts of tourism development in developing countries have been well discussed in past research. Recognizing the natural environment as a vital tourism resource, public and private sectors of the tourism industry are increasingly adopting and implementing environmentally compatible development measures in order to limit the negative environmental impacts associated with tourism development. Key elements of environmentally sensitive tourism development, in general, include restricting and regulating new development, preserving and protecting areas of outstanding natural beauty and biological diversity, and rehabilitating older resorts and destinations. So, Tourism marketing should not only be regarded as a tool for attracting more visitors, as it has been the case for most destinations. Instead, marketing should be used as a strategic mechanism in coordination with planning and management rather than a sales tool, to achieve strategic objectives that ensure the sustainability

of the destination. Hence green marketing comes to the scene in tourism for sustainable development of any tourism destination.

Review of Literature

Green marketing is part of the concept of sustainability (Sima, 2013). Polonsky (1999) defined green marketing as a holistic approach that involves anticipation, identification, and satisfaction of requirements for customers in an ecologically sustainable manner that utilizes optimum natural resources most effectively for the benefits of the society and also organizations. The promotion of products and services through green marketing encompasses a broad range of activities, including the environmental process of production, packaging, and distribution of products. Generally, green marketing aims to achieve the objective of waste elimination, the reinvention of product concepts, and also environmentalism profitability for firms (Pride & Ferrell, 2008). Meanwhile, Ashrafi (2014) provided another version of green marketing in the context of industry. He defined it as an organization's efforts at designing, promoting, pricing, and distributing products aligned with environmentally friendly practices. Therefore, green marketing can be used as a tool for sustainable growth.

Green marketing in the hotel industry is playing a critical role in marketing management (Han et. al., 2011). Ottman (1992) stated that environmental concepts and considerations should be incorporated into all areas of marketing if companies want to implement green marketing effectively. Tourism industry has become increasingly worried about environmental issues all over the world. It has been stated that 75% of environmental pollution caused by hotel industry is due to over-consuming energy, water, and materials while operating business (Mohammadreza, 2014). The waste water, emission, and materials discharged during the operation would cause negative impacts on our environment. Therefore, without appropriate design and strategy, environment would be subjected to unwanted effects. According to Graci and Doods (2008), hoteliers who operate in a highly competitive market need to focus on financial savings. As hotels are spending a large amount of money for energy, water and waste disposal, the resource consumption can be reduced by 20 to 40 percent without decreasing their operational performances by switching to sustainable practices — waste reduction, energy and water conservation, recycling, etc. It is quite apparent that the success of any tourism destination is considered and measured quantitatively using its financial performance in terms of contribution to GDP. However, this green marketing has all the abilities to increase the economic sense of a tourism destination unnoticeably by improving its brand image as green (Punitha and Roziah, 2013). Manalctoia and Jauhari (2007) stated that marketing a destination's environmentally friendly practices can increase its competitiveness by helping to position it differently in the competitive arena. At the same time, a green image is believed to play a critical role in customers' decisions and intentions to purchase (Lee et. al., 2010, Han et. al., 2011) in addition to other desired attributes of a destination such as service quality, security, dependability, reputation, staff behaviour, price, the appearance of facilities, and location (Chan and Wong, 2006). In the words of Meler and Ham (2012), the role of green marketing in green tourism is primarily derived from the fact that green marketing has at its disposal the knowledge referring to environmental awareness, ways of enticing and raising this awareness, as well as its operationalization in terms of relevant environmentally oriented behaviour. Such environmentally oriented behaviour refers both to the choice of destination and type of tourism, and the behaviour during one's stay and travel to the tourist destination.

Statement of the Problem

Orissa is a natural hub for tourism services due to its high quality manpower and its amenities. Many foreign tourists come to Orissa for its quality of services and availability of wide range tourism products in the region. The destination has not been actively promoted yet and comparative advantages remain under-exploited. The tourism sector is an important part of the economy especially in developing

tourist destinations like Odisha where it is seen as a major source of income. Orissa's Tourism sector operates under old-fashioned management and demonstration processes, which is mostly obsolete in recent times. Sustainable tourism development based on natural resources and on historical and cultural heritage is the basis of the future national tourism strategy that will define how tourism in Odisha is to develop and grow. Green marketing concept has attracted attention globally as a result of the increasing awareness to conserve the environment and the benefits that accrue when the consumers consume environmentally friendly products, leading to sustainable tourism development of the destinations. Hence, Odisha must implement green marketing strategy for sustainable tourism development of its destinations to offer tourist a quality tourism experience and to compete at domestic as well as international tourist market.

Scope of the study

The scope the study is limited to Ramachandi, a popular tourist destination of Odisha. The study investigates the problems concerned with the sustainable tourism development in Ramachandi. The study finds out the Green marketing strategy for sustainable development of Ramachandi in order to protect its resources along with promoting the welfare of the local community.

Objectives

Present paper is an attempt to achieve following objectives:

- To offer insights about green marketing;
- To identify the negative impact of tourism on environment;
- To offer suggestions for implementing green marketing strategies for development of Ramachandi as a sustainable tourism destination.

Methodology

Research Design

Based on the background of problem raised in the selected research approach is qualitative research. Qualitative data obtained from interviews with respondents to obtain description different practices towards the implementation of green tourism marketing for Ramachandi.

Methods of Data collection

The type of data used in this study is qualitative data comprising of primary data in the form Observation, interview and interaction with various stakeholders such as the Department of Tourism, Odisha Tourism Development Corporation, Private Sectors, local community and other relevant agencies.

Secondary data has been gathered from the brochures and departmental report of Department of Tourism and Odisha Tourism Development Corporation. . In addition to this, data has been also collected from other trusted sources like departmental websites, journals, articles and newspaper.

Tourism in Ramachandi

A nice collage of beautiful golden sands and sun-kissed waters during dawn and dusk paints a picture of lifetime for any traveller visiting Ramachandi. Though the place is mainly frequented by day-time visitors, Ramachandi's scenic beauty and its tryst with the rising and setting sun creates an altogether new feeling for any first-time traveller.

Ramachandi Temple

The temple of Ramachandi is one of the important Sakta shrines of Orissa. It is situated near the sea-shore, at a distance of 8 kms to the south of the Sun Temple of Konark. This temple is exactly located on the right side of the Marine Drive Road, which lies between Puri and Konark. It is considered by local people that Goddess Ramachandi is the presiding deity of the whole of Arkakshetra. From the architectural point of view, the temple of Ramachandi is not important but from the religious point of

view, it is one of the famous Saktapithas of Puri. The temple of Ramachandi is a small deula and it consists of two structures such as vimana and jagamohana. There is an open flat roof mandapa, recently built in front of the jagamohana. This temple is built in sand stones, laterite and bricks. It faces to north.

Ramachandi Beach

Ramachandi Beach is one of the most beautiful beaches in India and Orissa. This is a place that is characterised by the silvery sands and the serene atmosphere. It is named after the presiding deity of Konark, Goddess Ramchandi. Scenically located on the confluence of the Kusabhadra River and the Bay of Bengal this is a place that will set the perfect stage to unwind and be yourself. What makes this location unique is the pristine beach and sand where one can witness the most incredible sunrise and sunsets. Unlike most beaches in Orissa, the Ramchandi beach is one of the most scenic, very isolated, unspoilt, and the water is not turbulent like the other spots. The beach has a gradual slope due to which the high waves are not formed, and makes this beach ideal to simply laze, swim, and boating. The fact that it is so close to the Konark sun Temple makes it a very coveted location in this state and gives the opportunity to explore one of the most stunning places in the whole world. The region gained prominence when it was ruled by the rajas of Khordha Dynasty in the 16th century. It was also invaded by the Bhoi kings along with onslaughts of the Muslims and Marathas. This is one of the places that has seen a lot of history and been a part of the past that made Orissa one of the richest places in the country. Tourists can be a part of the famous Ramachandi Festival, which is celebrated in the month of September and October.

Kushabhadra River

Kushabhadra river forms the complex of river systems which form the distributaries of the Mahanadi River and branches off from the river Kuakhai, which is a tributary of the river Mahanadi, at Baliana and flows in a south western direction towards Nimapara and Gop area for 70-80 kms before sinking in to the Bay of Bengal near Ramachandi Temple, 24 km east of Puri in the Puri District of Orissa. Dhanua River is its main tributary of Kushabhadra River. The visitors who come to Ramachandi take bath in this river. The tourists can also take a boat to watch the view of Sangam of river kushabhadra and Bay of Bengal. Water scooter facilities also available for the adventure lovers.

The India Surf Festival

The India Surf Festival is known to celebrate an alternative style of travel with an emphasis being given to not having negative ecological impact on the surrounding environment. The Festival includes unique live music performances with genres ranging from digital music to organic music. Other exciting things to keep the tourists enthralled include live painting, street art, amazing art installations and projections. Thrilling events like Stand up Paddle Championship and skateboarding competitions are held with plans of a much improved half pipe ramp being installed right on the beach. Expert instructors initiate the tourists into the world of 'Yoga on Water' – an emerging Yoga lifestyle where the tourists are supported by a Yoga board on top of the ocean waves. Hungry Lens is an exciting platform in the India Surf Festival which can prove to be an immensely enriching experience for photographers.

Discussions and Findings

Tourism can be sustainable if able to meet the needs of tourists and local communities while protecting future opportunities. Green tourism offers benefits to local communities, conservation, development and experience of resource-based education. The aim of this paper was to explore the importance of green marketing in tourism industry. Green marketing enables tourism stakeholders to use such practices that are environmentally friendly for attracting and satisfying the tourists. At one end, tourism is an important contributor to the economy, at the other it contributes to the environmental

destruction significantly. So, it needs an approach that can bring further growth in this industry without any harm or less harm to the environment and its resources. The study area Ramachandi covered under is not been marketed as a green tourism destination. The destination requires a green transformation by improving its environmental health and through creation of green marketing strategy. The study in this regard, offers the following findings and suggestions:

Findings

- The local people are not aware about the environmental problems at the destination and concept of sustainable tourism development.
- The solid waste management system established by the Government is not proper. Everyday a lot of visitors visit to Ramachandi for picnic purpose and leave behind the huge amount of solid waste in the form of plastic bottle, plastic covers and the empty containers (cans and glass bottles) of alcoholic and non-alcoholic beverages.
- The spillage of oils from the motor boat and water scooter used for recreational purpose causes the water pollution, damaging the river ecosystem.
- The local people of Ramachandi depend upon fishing for their daily livelihood, but due to the smell of kerosene and diesel emitted from motorboat and water scooter, the fishes don't enter into river Kushbhadra form the sea. That reduces the fishing stock which ultimately affects the daily livelihood of the fishing community.
- Sometimes overcrowding at Ramachandi exceeds the carrying capacity of the destination leading to destruction of physical, socio-cultural and economic environment of the local community.
- There is an overconsumption of water used during picnic activities.
- The forest surrounding Ramachandi suffer from deforestation by human acts leading to loss of greenery and natural resources.

Suggestions

- First of all, tourism entrepreneurs and other policymakers must conduct a professional baseline analysis, investigating both the strengths and weaknesses of the destination and ecosystem. This analysis will be a starting point for understanding the issues they need to address immediately, as well as those that may become obstacles on the road to a complete green transformation.
- The local community must be made aware of the concept of sustainable tourism and various environmental issues concerned with the tourism development. The principles of sustainable tourism lay especial emphasis on the participation of local communities at tourism destinations. Hence, the active involvement of local people is the critical success factor in sustaining momentum. Ideally, local communities should reap direct benefits from tourism development as reflected by the expansion of local business opportunities. Training and education programmes play an important role here as it helps to educate the people about importance of environmental protection and management of natural resources
- There should be proper solid waste management system to dispose the solid waste accumulated by the visitors during picnic. The destination must be declared as no plastic zone.
- The boat operators should be educated about Eco sensitivity of the place and food items should not be allowed at time of boating on Kushabhadra River.
- The boat and the water scooter must use fuel efficient engines to reduce the water pollution through spillage of oils.
- Ramachandi requires a well established destination management system for managing the visitors in the destination because careful calculation of carrying capacity of a destination and its management is very important for ensuring the sustainability of the destination.

- A quality tourism approach must be employed to provide all required facilities and services implementing eco-friendly practices.
- Lastly, deforestation should be avoided and efforts should be made for massive forestation.

Conclusion

In striving to prevent disorderly tourism development, in order to successfully overcome the daily changes that occur in turbulent surrounding, planning of sustainable tourism development occurs as the only way to do it successfully. So, sustainable development refers to the use without exploitation of natural, cultural and all other tourist resources from the current generation, it means to preserve them for future use by future generations. Since the development of tourism in a certain area largely dependent on natural and anthropogenic attractiveness which are located in the surrounding, the practicing of sustainable development gets more and more important. In case these resources to be destroyed or degraded, the attractiveness of the destination is reduced as well, but also leads into question for development of tourism in this region, because potential tourists are interested in visiting attractive and clean destinations which offer services with high quality. However, the environment that has no attributes of a quality environment is not only unattractive to tourists, but in that environment do not feel comfortable and domestic population.

If followed properly, all the above mentioned suggestions would be good green marketing strategies for sustainable tourism development in Ramachandi. Nowadays, tourists are increasingly concerned about environmental and social issues of the destinations. They are more inclined to investigate destinations and choose those that are making a positive impact. So, as such adopting green marketing strategies would definitely bring a competitive advantage for any tourism destination.

References

- Bramwell, B., & Lane, B. (1993). Sustainable tourism: An evolving global approach. *Journal of Sustainable Tourism*, 1(1), 1–5.
- Chan, E.S.W., and Wong, S.C.K., (2006), “Hotel Selection: When Price is Not the Issue”. *Journal of Vacation Marketing*, Vol. 12(2), Pp. 142–159.
- Graci, S., And Dodds, R., (2008), “Why Go Green? The Business Case for Environmental Commitment in The Canadian Hotel Industry”. *Anatolia*, 19(2), 251-270
- Lee, J.S., Hsu, L.T., Han, H., And Kim, Y., (2010), “Understanding How Consumers View Green Hotels: How a Hotel’s Green Image Can Influence Behavioural Intentions”. *Journal of Sustainable Tourism*, Vol. 18, No. (7), Pp. 901-914.
- Mohammadreza, A., (2014), “Green Marketing In Hospitality Industry”. *Journal Of Applied Environmental and Biological Sciences*, Vol. 4, No. (4), Pp. 42-46, 2014.
- Meler, M., & Ham, M. (2012). Green Marketing for Green Tourism : Preliminary Communication, *Tourism & Hospitality Management*, (pp. 130-139).
- Ottman, J. (1998). Green marketing: Opportunity for Innovation. *J. Ottman Consulting Inc.*
- Polonsky, M. J. (1999). *An introduction to green marketing*.
- Rodriguez, F. J. G., and Cruz, Y. (2007), “Relation between Social-Environmental Responsibility and Performance in Hotel Firms”. *International Journal of Hospitality Management*, Vol. 26, No. (4), Pp. 824-839
- Sahoo R. & Pradhan J.(2009).A Journey to Odisha”, sisukalam, Bhubaneswar.
- Smith, K. T. (2010). An examination of marketing techniques that influence Millennials’ perceptions of whether a product is environmentally friendly. *Journal of Strategic Marketing*, 18(6), 437-450
- <http://orissaculture.gov.in>
- <http://www.orissatourism.org>
- www.orissatourism.gov.in
- <http://www.tourismoforissa.com>

CLEAN ENERGY PRODUCTS: AN ECOSYSTEM APPROACH

SANTOSH KUMAR BARAL

Abstract : Today there is a demand of conventional sources of energy in our daily activities. More than 80 million households across India nearly 50 percent of the country's population have little or no access to grid-based electricity and rely on kerosene as their primary source for lighting due to which they suffer from different health hazards. Hence there is a need to shift from the use of nonconventional to conventional energy. It can only be achieved when there is an ecosystem prevailing. This paper focuses on the development of the ecosystem framework with identification of actors and factors and establishing linkages between them.

Keywords: Clean Energy Products, Rural Users, Factors and Actors, VCEC

Introduction

A majority of Indian population resides in villages. Once Mahatma Gandhi has said real India lives in villages and we need to put effort to develop our villages. Key ingredient for development of any country rely on use energy (World Energy Resources, 2013). Energy is the foundation of modern industrial economy (ibid). Every economic and social sector whether agriculture, industry, transport, businesses and households consume energy to fulfil the basic needs. Access to modern energy services like electricity, natural gas, modern cooking fuel, etc. are required for improved health and agricultural productivity (UNDP, 2001). The growing consumption of energy in both quality and quantity has led to energy insecurity in many parts of the world. Over dependence on conventional fuels such as coal, petroleum and natural gas has led to environmental pollution. In the above context the role of clean energy has become important. Demand for clean energy is directly proportional to the economic development (UNDP, 2001). There is a need to shift towards the use of clean energy products without compromising the present needs. In this paper a framework has been formulated on how clean energy products can diffuse into the rural areas. The clean energy access ecosystem framework is devised and is explained with its factors, actors. These factors and actors are linked, which are presented in the form of a matrix. Finally, a clean energy products services distribution and revenue collection model for rural area is designed for successful diffusion of clean energy products and services in rural context.

1.1 Clean Energy Access Ecosystem : Factors, Actors and Linkages

“Clean energy access” is the process of transferring clean energy products and services to a household, community or a place that people require towards lighting, cooking, heating, cooling, etc.

It is the right for every people in this world. Clean energy access cannot operate in isolation. It can only be achieved when the households, community, organisations, factors and actors be in an ecosystem. All the factors, actors have to work together to achieve clean energy access. To achieve it, we need to examine these elements. Households within a community and the organisations needs to play a important role in formulating a clean energy access ecosystem. Household is a part of the community. A strong family serves as the foundation for community by having a strong family relationships, participating in social gathering and the community institutions that promote family well-being. Members in the households are the major element of the eco-system as they are the ultimate decision makers to go for adopting a product or service or not. Another aspect is the clean energy organisation. Organisations give importance on sharing of knowledge developing policy and creating an environment towards a rapid global transition towards the use clean energy and its development. They gather and disseminate knowledge about non-conventional energy, energy conservation, to households within the community. Some of the major clean energy organisations working in India are SELCO Foundation, Voluntary Integration for Education and Welfare of Society (VIEWS), Shakti Sustainable Energy Foundation, The Energy and Resources institute, Environment and Water, The Climate Group, etc. “Each member of the ecosystem has to share the fate of the network as a whole” (Iansiti and Levien, 2004). “Here it should recognises co-evolution, collaboration as well as competition as a means to achieve a healthy ecosystem for diffusion of product and services to take place” (Hackney et al., 2004). It must be ‘fittest’ where the product and services should reach the rural people as per their needs and should be willing to pay.

Diffusion of clean energy products is affected by political, economic, social, technological, environmental and other legal factors. Environment is dynamic and is complex. Political, economical, social, technological (PEST) is a tool for understanding the environment. It is required to study the macro environmental factors to understand the present and future existence of a product (Kotler, 1997). Kotler and Schlesinger (1991) found that by analyzing the macro environment factors, the concepts about product, organization and industry can be used for deriving a decision for adopting a product or not. Below are the factors described for the same. Political factors such as government policies, rules and regulations, tax, trade or reforms, bureaucracy issues etc. play an important role in diffusion. Economic conditions and policies are closely related. Factors such as GDP, per capita income, inflation, financing options, subsidy, taxes and duties, international trade agreements, etc. play a crucial role as well which are mainly governed by the government.

Social factors do play an important role in diffusion process. Consumer when buys a product or service seeks various factors. Factors such as needs, demographic conditions, education, lifestyle, income etc, influence adoption of clean energy product and service. Technology is another important element which helps in diffusion of a product. Improvement in technology helps in decreasing the price of the product and provides a better quality. Technological factors such as efficiency of the product, product quality, pricing, patents, licensing, etc. Use of any clean energy product needs to be made mandatory, it helps is reduction of reliance on imported fuels, thus improving energy security. Some of the factors include environmental protection, recycling of products, etc. Legal factors generally consist of policies, law, etc. also play an important role in diffusion process. Table 1.1 gives the technology diffusion, PEST factors being classified under marketing mix factors.

Table 1.1: Technology Diffusion-PEST-Marketing Mix Factors

Product	Price	Place	Promotion
<ul style="list-style-type: none"> • Product repair • Service and delivery, • Efficiency of the product • Quality of product • Ease of use and handling 	<ul style="list-style-type: none"> • Cost of the product • Subsidy 	<ul style="list-style-type: none"> • Access to loans 	<ul style="list-style-type: none"> • Interest of consumers • Incentive • Knowledge level of consumers, • Awareness about the product, • Education level

“Diffusion of clean energy product requires a collective, long term process and involvement of multiple actors to achieve new solutions to social challenges” (Anderson, Curtis, Wittig, 2015). In the present context actors are those without which the diffusion will not take place and they need to deliver clean energy products and services within the affordability range, not excluding the bottom of pyramid people. There is a need to identify those actors. Hancock, (2015); Ahlborg (2017) gave five actors; Government, people, markets, third sector and the traditional energy industry were responsible for clean energy diffusion. Third sector generally consist of non-government organisations (NGOs), financing by NGOs and its workforce who are a part of this ecosystem. Here the government includes both state and central govt, people agencies, politicians, policy-makers, bureaucrats, etc. Here public represents communities, households, families, neighbours, civil societies, etc. Third sector includes firms, markets, business, customers, bank and NGOs, activists, researchers, etc. respectively. Lastly the traditional sector include energy companies, coal mining industries, gas and oil companies, etc (ibid). Other actors like enterprise, institutions, households and community are also required to be a part of the eco-system in order to have a successful diffusion of clean energy products and services in rural areas.

Enterprise helps in diffusion of clean energy products and service. It is a economic unit engaged in producing and distributing goods and services. It helps in reducing poverty and economic development of the region by promoting products and services. It need to go for creation, maintaining of the supply chain and providing ease of access to service to end user. It should identify areas of potential for entrepreneurial growth. It needs to provide technical and managerial skills required for sustaining, business development, market orientation etc. among the people and its own members by collaborating with different universities, technical institutions, incubations, research institutions etc. It needs to harness local resources and create a market for flow of products and services from urban to rural areas, rural to rural and rural to urban.

Institution helps in diffusion of clean energy products and service. “An institution is a structure, which governs the behaviour of a group of individuals within a given community” (Stanford Encyclopaedia of Philosophy, 2015). The term “institution” consist of informal and metainstitutions. Informal institutions includes customs, behaviour patterns crucial to society and institutions formed by entities such as the government and public services (Huntington, 2009). Primary institutions includes family, peer groups, mass media, learning, educational institutions, research communities, medicine, military, industry, business, civil society-NGO-charitable organisations, groups like political parties, etc. also affect the diffusion of clean energy products and services. In the present context a rural institution is, which works at the local level with the participation and involvement of local people. For example gram sabha at village level, panchayat level, etc. are some of the rural institutions.

Other institutions like cooperatives, cooperative credit institutions, banks, societies, farmers service societies and large-sized agricultural multipurpose cooperative societies, regional banks, commercial banks etc. are some of the institutions which work for rural development. Financial institutions like rural banks, Micro Finance Institution (MFI), Non-Banking Financial Company (NBFC), private and public banks, NABARD, SIDBI, presence of local post offices, investors, presence of cooperative banks, grameen banks, angel investors, international funding agency like world bank etc. are some of the entities which provide financial support to the consumers by helping them to borrow the loans. Here all the above entities are required to be a part of the ecosystem in order to have a successful diffusion of clean energy products and services in rural areas. “Government and its agencies through its policies are important actors which initiates and guides to achieve present and future deployment goals towards energy transfer” (Chapman, Itaoka, 2018). “Policies are the result of interactions between government and various interest groups or actors within a society and play an important role in providing a collective strategic direction in promoting a social change” (ibid). “They make contributions to create and support development, infrastructure and provision of locations for experimentation enabled innovation” (Foxon, Hammond, Pearson, 2010; Hiteva, Sovacool, 2017). Govt take initiatives that help in diffusion of clean energy products and services through its policies. Policies is framed at Govt level and is implemented through institutions at ground level. It is made by legislative assembly, parliament, planning commission, ministries of power and other related to energy (conventional and non-conventional) both at state and central level. At the central level, the Ministry of New and Renewable Energy (MNRE) is the nodal ministry of the Government of India (GoI) whose objective is to develop and adopt new and clean energy for adding the energy requirements of the country. MNRE has set up three specialised technical institutions called National Institute of Solar Energy (NISE), National Institute of Wind Energy (NIWE) and Sardar Swaran Singh National Institute of Renewable Energy (SSS-NIRE). The evolution of clean energy policy mainly took place after 2003 with the introduction of Electricity Act 2003 in India. It was further amended to create schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) for making all villages electrified. Three major policies were introduced; National Electricity Policy 2005, National Rural Electrification Policies 2006 and National Tariff Policy 2006. These policies laid foundation for clean energy development in our country. With the introduction of National Action Plan on Climate Change (NAPCC), paved a path for the development of eight missions to tackle climate change, its adaptation and mitigation. This bought a major boost in the field on clean energy orientation.

At the state level, there are different nodal agencies and departments which operates under the respective state governments for the effective implementation of all clean energy and co-generation schemes. These agencies promote Clean Energy deployment at the local, regional level by channeling central-level subsidies, implementing demonstration projects, and providing assistance to interested parties. MNRE provides grants to these agencies for their recurring and non-recurring expenditure. Financial assistance to clean energy projects is provided through the Indian Clean Energy Development Agency (IREDA). It is the financial arm of the MNRE, which provides loans and also channels funds and other initiatives to promote Clean Energy. In addition, there are a number of government institutions whose mandate encompasses the Clean Energy sector. For example, the Ministry of Power (MoP) is responsible for the national electricity policy and national tariff policy, both of which play a key role in promoting procurement of Clean Energy-based power. The Ministry of Environment and Forests (MoEF) is also responsible for providing environmental clearances for clean energy projects. Altogether ministries (industry, agriculture, rural development etc.) Central Electricity Regulatory

Commission (CERC), independent power producers, government owned generating and transmission companies, private distributors, financial institutions (banks, international agencies, rural electrification corporation etc.), peoples institutions like cooperatives, SHG, producers company, farmers club, joint liability groups etc. work in ground level for diffusion of clean energy products and services. Supporting agencies like equipment suppliers (DC pumps, batter, LED lights, panels, charge controller, conductors, insulators, wires etc.) service and maintenance agencies, standard organisation like (Bureau of Energy Efficiency), consulting agencies, panchayat raj institutions, industry organisations and civil society are some of the other institutions.

Further civil society also helps in diffusion of clean energy products and service. It mainly comprises of people or citizens of a country with common interest and collective activity. People sometimes accept and sometimes resist the innovation made through technological changes in a particular place or settings (Meadowcroft, 2009). People will accept clean energy product only when it is triggered by societal awareness for environmental and sustainability issues (Smith, 2012; Toke, 2010). People will be concerned provided they get a message regarding the technology availability. Message should be given to the society so they socially accepts it (Walker, Cass, Burningham, Barnett, 2010; Seyfang, Haxeltine, Hargreaves, Longhurst, 2010; Wüstenhagen, Bürer, 2007). According to Avelino and Wittmayer, (2015) “civil society take the initiative in seeking opportunities to support the diffusion of a clean energy product, which in turn helps in public discourse, promote the formation of social norms on the issue and promote a variety of efforts that are required for transitioning towards a social betterment”, which denotes public is the most important social force in finding newsolutions to issues of social innovation, such as the transition to clean energy environment.

Other actor like marketers do also play an important role in diffusion of product and services. They seek business opportunities by introducing new products and services into the rural areas. They implement new business strategies to intervene into the rural areas. In present days consumers have develop a positive attitude towards clean energy products and should express a strong demand for adoption (Miller, Senadeera, 2017). Consumer demand for clean energy product and service is increasing as consumers have become active, so-called ‘prosumers’ who regard electricity as a commodity and both consume and produce electricity from clean sources (ibid). Marketers believe that awareness level, people attitude, knowledge level is required for a successful diffusion to take place (ibdi).

Altogether the presence of institutions, Govt policies, etc. should be made available for diffusion of clean energy products and services into the rural areas. MNRE, IREDA, electricity board, tax department, district industry corporation, presence of block development office, presence of panchayat office, presence of testing centres, R&D labs, rural development agencies and other agencies both at state and central level are all possible actors who are a part of this ecosystem. “There is a need for an integration of knowledge, values and interest from different actors which would enable for a joint or collective action to address the challenges and diffusion of product and service to take place” (Bouwen, Taillieu, 2004; Beers, Sol, Wals, 2010). At household level, demographic profiles like age, sex, education level, income and knowledge level are some of the factors required for diffusion to take place. Access to financial institutions, other non-energy utilities are also required for the diffusion to take place. Involvement of NGO, cooperatives, voluntary organisations etc. in the local region are required for the successful diffusion to take place.

At community level, awareness needs to be carried out by conducting road shows, cycle rally, training programs for types of schemes available, subsidy available, programs run by different agencies,

Govt etc. Presence of SHG in a community, financing options, creation of entrepreneurs, joint liability groups are also major actors who play crucial role in diffusion of clean energy products and services. Presences of cooperative societies, rural banks, micro-finance institutions, etc. needs to provide support to the end users by helping them loans and other services. They should be connected to other major financial institutions to get cash for further lending. In case of banks and micro credit agencies, their physical presence in the region and capacity to disburse funds are important factors for diffusion of clean energy products and services in rural settings. Presence of government and private vocational training institutions, universities, self employment training institutions, post-training support centres like incubation centres working in the area, NGOs etc. needs to provide training and operational support for capacity building. They all should be involved in creating awareness about the need and usage of clean energy product across household, community. Use of clean energy products can bring improvement in different platforms from schools to hospitals to other infrastructures. Deployment of clean energy solutions can be aided by the existence of communication networks, roads and other support entities. Presence of a reliable local supplier, existence of a strong supply network for providing good quality clean energy products and spare parts in addition with strong technical skills are major factors required for the diffusion to take place.

Policy attempts to capture the potential targets, guidelines, schemes available for deployment of clean energy products to address energy access. From entrepreneurial perspective if the system components can be sourced locally, assembled and installed, it can help in employment generation, cost minimisation, faster service, thus building local capacity. Here the factors has been broadly categorise into four main factors such as finance, capacity building, technology and infrastructure (Table 1.2).

Table 1.2: Categorisation of Factors

Finance	Capacity Building	Technology	Infrastructure
<ul style="list-style-type: none"> • Access to loans • Price of the product • Incentive • EMI scheme • Subsidy availability • Loan from cooperative societies • Rural banks • Micro-finance Institutions etc. 	<ul style="list-style-type: none"> • Training and workshops by Universities • NGOs and SHG to increase knowledge and awareness level • Awareness programs 	<ul style="list-style-type: none"> • Technical features of the product • Efficiency of the product • Capacity of the product • Product repair, service and delivery • Efficiency of the product • Quality of product, etc. 	<ul style="list-style-type: none"> • Presence of Training centres • Presence of SHG, NGO, BDO, PDS, Local Panchayat Office, Transportation, Communication, etc.

All the above factors (finance, capacity building, technology and infrastructure) and actors like state and central government institutions (schemes, policies, subsidy, incentive etc.) enterprises, households and community are all essential members of the ecosystem which are required for diffusion to take place. Both actors and factors need to collaborate, co-exist, co-create and compete (4C) with each other so that the clean energy product and service can reach the end consumer successfully. The framework has been devised for diffusion of clean energy products and services in rural context (Fig 1.1).

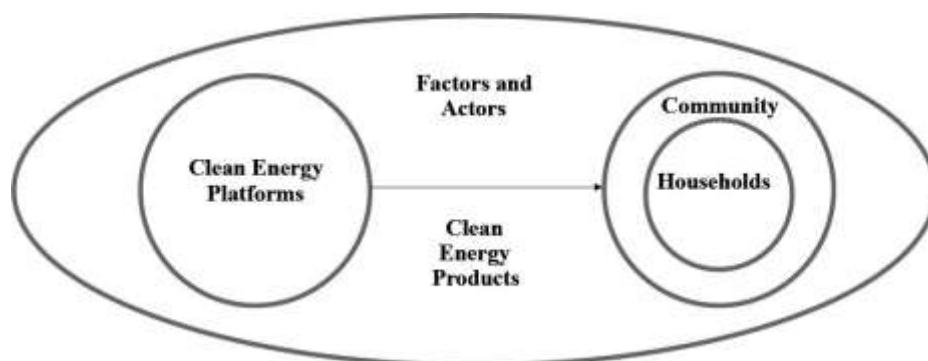


Fig 1.1: Clean Energy Access Ecosystem

In the above framework the clean energy platforms transfers the clean energy products to the rural households which are a part of the community. Here all the members are present within the ecosystem which are governed by different actors and factors.

1.2 Linkages between Actors and Factors

In this section an attempt has been made to understand the linkages between different actors and factors. Households, communities, institutions, enterprises and Govt are different actors. Finance, capacity building, technology and infrastructure are different factors (Table 1.3).

Table 1.3: Factors and Actors Linkages

Factors and Actors	Finance	Capacity Building	Technology	Infrastructure
Household Level	<ul style="list-style-type: none"> • Having easy repayment method through timely repayment schedules • Financial institutions providing saving mechanisms through post office, banks, informal group saving • Appointing collection agents-cum-service delivery for remote communities 	<ul style="list-style-type: none"> • Developing awareness about energy access through technology, supply and receiving points, etc. • Ability to select optimal products/solutions • Developing awareness on financial mechanism for purchase/repayment of loans etc. • Helping in livelihood development through involvement of SHGs etc. 	<ul style="list-style-type: none"> • Access to energy efficient products and its service providers 	<ul style="list-style-type: none"> • Access to electricity and other basic amenities such as water, sanitation, housing, health, education etc.

Factors and Actors	Finance	Capacity Building	Technology	Infrastructure
Community level	<ul style="list-style-type: none"> • Finance through NGOs, SHGs, Joint liability groups in association with banks, morofinance etc. 	<ul style="list-style-type: none"> • Sensitising about benefits of clean energy product and services • Providing training, skills through collaboration with R&D institutions, Universities etc. • Community cohesion-developing energy based community assets like solar grid, solar rice huller, solar cold storage, street light, etc. • Presence of Civil Societies, enabling successful operation of NGO's/SHG's/ JLG's 	<ul style="list-style-type: none"> • Developing awareness and protection against low quality products • Providing subsidy by Govt. on clean energy products with servicing and monitoring in remote regions 	<ul style="list-style-type: none"> • Access to basic utilities and physical infrastructure • Access to strong local governance, law and security • Access to basic support services like PDS, transportation and communication
Institutions	<ul style="list-style-type: none"> • Consumer financing through banks, MFI's, cooperatives, regional rural banks etc. • Business financing (debt) through banks, SIDBI, IDBI, NABARD etc. • Presence of angel investors or their associates • CSR grants • NGOs working on financial inclusion and other financial 'products' • Insurance providers. 	<ul style="list-style-type: none"> • Presence of skill training centres for manpower training • Presence of entrepreneurship development training centres • Presence of apex banking institutions-working on capacity building of financial institutions, NGOs etc. • NGOs working in grass root level for enterprise development/ livelihoods 	<ul style="list-style-type: none"> • Presence of testing and R&D centres. 	<ul style="list-style-type: none"> • Presence of municipality, panchayat office, community centres, electricity regulatory authorities, DISCOMs, Clean Energy Development Agencies

Factors and Actors	Finance	Capacity Building	Technology	Infrastructure
Enterprises	<ul style="list-style-type: none"> • Equity required to set up business • Preparation of business plan/ DPR/ financial projects etc. • Debt for working capital • Grants to support R&D and pilot projects • Consumer financing for clients • Insurance for transportation of equipment and supplies, etc. 	<ul style="list-style-type: none"> • Trained manpower required for employment, in enterprises for servicing, maintenance, etc. • Capacity of Financial institutions for financing • Business management for setting Incubation • Data required for decision making that is energy usage data for local area, purchasing capacity, resource availability, policies and regulations, etc. 	<ul style="list-style-type: none"> • Setting of field based testing centres • Going for accreditation and quality assurance • Energy efficiency rating • Creating platform for technology transfer/ patenting • Availability of R&D facility, • Going for international technology exchange platforms • Setting up integrated manufacturing facility • Vendor management and Competitive suppliers 	<ul style="list-style-type: none"> • Accessibility to basic physical infrastructure like road, transportation, etc. • Accessibility to communication facility like mobile, telephone, internet, etc. • Accessibility to community engagement platforms like civil societies, local panchayat offices, BDO office, etc.
Government	<ul style="list-style-type: none"> • Developing subsidy and financing programmes for MSME sector/ entrepreneurs, etc. • Developing policies by central/state/ local Govt/ banking sector involving other entities • Developing programmes for end user financing by giving concessional interest rates, flexible financing, etc. Ex: pay as you go models, mobile banking, etc. 	<ul style="list-style-type: none"> • Sensitising and creating awareness about importance of clean energy access policies • Developing policies that support skill development/ entrepreneurship development in clean energy sector • Developing programs to support bank, financial institutions, etc. • Developing incentive structure for manufacturers, suppliers, etc. 	<ul style="list-style-type: none"> • Establishment of testing and R&D centres • Developing quality standards, accreditation and easy method to access to it • To engage in R&D for energy efficient products and services to be used in households and community level 	<ul style="list-style-type: none"> • Facilitating creation of required infrastructure • To monitor and regulate govt. infrastructure

“Innovation embedded with expertise knowledge can only increase by the transfer and adoption of technologies at any point of time and when needed”. Involvement of universities, research, and education institutions in a long-term partnerships can accelerate the adoption of clean energy products and services. There is a need to converge between information flow and accessibility between different factors and actors for successful diffusion of clean energy products and services into the rural areas.

1.3 Clean Energy Product-Services Distribution and Revenue Collection Model for Rural Area

Although there are many models for distribution of product and services, here a model has been suggested which can be initiated by private companies, below is the model of distribution and revenue collection model (Fig 1.2).

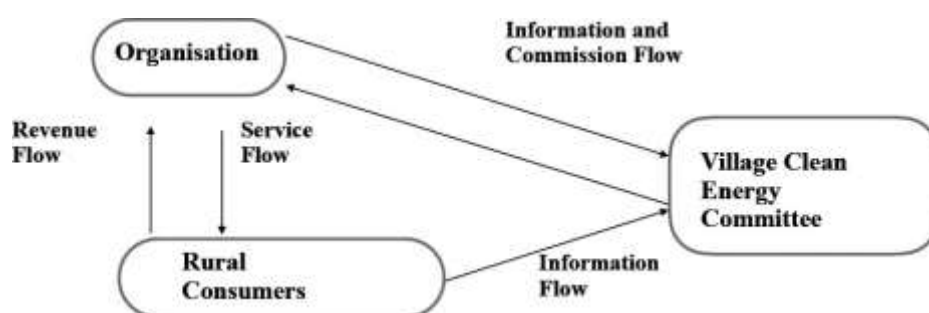


Fig 1.2: Model of Clean Energy Product-Service Distribution and Revenue Collection in Rural Area

Under this model, it is envisaged that each village should have a village clean energy committee (VCEC) to act as an interface between the rural consumers and the company. The VCEC with appropriate power can provide a platform to the consumers to give their thoughts regarding the products and services received and facilitate the company through giving feedback and collecting revenues. Some of the key activities that VCEC should be engaged in handholding of consumers in providing information about the product, EMI schemes, maintenance and repair, complaint redressal, revenue collection, disconnections and reconnections, maintaining of stock the product, etc. The VCEC should represent all sections of the village and should be constituted after careful consideration of the village dynamics. It should have a 5 to 10 members, including president, secretary of the area and a village contact person. Some of the advantages which can arise from the creation of village clean energy committee are it will facilitate active involvement of consumers in the decision making process. It will increase the level of awareness on usage, utility etc. It will help in effective and time bound delivery of service and maintenance. It will lead to timely redressal of consumer complaints. Help in timely collection of revenues and information flow. The companies should use VCEC for improving service delivery, sensitising people to adopt clean energy product and how clean energy product can be used as a income generating activity. This model is a sustainable business model which will help in revenue flow from rural consumers to the companies, service flow from the company to the rural consumers, and incentive flow from company to village clean energy committee. This model will help in effective diffusion of any clean energy product across our country, helping in generating entrepreneurs, an ecosystem of sustainable environment.

1.5 Conclusion

Marketers need to intervene into the market by developing products according to their consumers needs and want. They need to ensure to provide high quality product with low price accompanied

with timely service. Purchasing of these products needs to be financed through EMI schemes, loans, subsidy, grants, etc. so as even a poorest of poor will get a better product. Target areas needs be accessed where there is non availability of electricity or is available in scarcity. For promotion of clean energy products emphasis should be given for conducting awareness camps at village levels, in haats, group meetings, cultural events, conducting like cycle rallies, conducting workshops in colleges, universities, sensitising youths and their parents, etc. Organising national and international exhibition, event sponsorships, etc. will also help in diffusion of clean energy products. The need for such ecosystem framework arises from the fact that there is a requirement of clarity on policy in the ground level, availability of last mile delivery people, availability of skilled manpower, should have apathetic financiers, and supportive institutional environment. There is a need for proper coordination and collaboration with all the factors and actors for having a successful diffusion of clean energy products.

References :

1. World Energy Resources. (2013). https://www.worldenergy.org/wp-content/uploads/2013/09/Complete_WER_2013_Survey.pdf.
2. UNDP Report. (2001). http://hdr.undp.org/sites/default/files/reports/262_hdr_2001_en.pdf, pp. 28.
3. www.energync.org
4. Clean Edge: \$246B Market For Solar, Wind, Biofuels. (2011). Greentech Media. greentechmedia.com. Retrieved 2016-07-24.
5. MNRE (2017): *Annual Report 2016-17*. Ministry of New and Renewable Energy, New Delhi, pp 86.
6. UN. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York, United Nations, pp. 1-29., 2015.
7. Banerjee, S. G., D. Barnes., S. Bipul, M. Kristy and S. Hussain. (2015). *Power for All: Electricity Access Challenge in India*. World Bank Study;. Washington, DC: World Bank.
8. Yu, Y., J. Liu., H. Wang and M. Liu. (2011). *Assess the Potential of Solar Irrigation Systems for Sustaining Pasture Lands in Arid Regions – A Case Study in Northwestern China*. Applied Energy, 88(9), 3176–3182. doi:10.1016/j.apenergy.2011.02.028
9. <http://pib.nic.in/newsite/PrintRelease.aspx?relid=174832>
10. Veeraboin, P. and G. Yesuratnam. (2012). *Analysis of the Opportunities and Challenges of Solar Water Heating System (SWHS) in India: Estimates from the Energy Audit Surveys and Review*. Renew. Sustain. Energy Rev., 16: 668-676
11. http://petroleum.nic.in/sites/default/files/ipngstat_0.pdf
12. NCAER (1992), *Evaluation Survey of Household Biogas Plants set up during Seventh Five Year Plan*. National Council for Applied Economic Research, New Delhi.
13. Ramana. P.V. (1991). *Biogas Programme in India*. 1 (3), pp. 1- 12.
14. Census of India. (2011). Office of the Registrar General & Census Commissioner, India, New Delhi, 2011.
15. Iansiti, M and R. Levien. (2004). *Strategy as Ecology*. Harvard Business Review 82(3): pp. 68, Harvard Business Publishing, USA.
16. Hackney, R., J. Burn and A. Salazar. (2004). *Strategies for Value Creation in Electronic Markets: Towards a Framework for Managing Evolutionary Change*. The Journal of Strategic Information Systems 13(2): pp. 91-103.
17. Kotler, P. T. (1997). *Marketing Management: Analysis, Planning, Implementation and Control*.
18. Koumparoulis, D.N. (2013). *PEST Analysis: The Case of e-shop*. International Journal of Economy, Management and Social Sciences.
19. Kotter, J and L. Schlesinger. (1991). *Choosing Strategies for Change*. Harvard Business Review, 24-29.

20. Anderson, T. Curtis, A and C. Wittig. (2015). *Definition and Theory in Social Innovation: The Theory of Social Innovation and International Approaches*. ZSI Discussion Paper, Nr. 33; Zentrum für Soziale Innovation: Wien, Austria.
21. Hancock, K.J. (2015). *Energy Regionalism and Diffusion in Africa: How political actors created the ECOWAS Centre for Clean Energy and Energy Efficiency*. Energy Res. Soc. Sci, 5, pp. 105–115.
22. Ahlborg, H. (2017). *Towards a conceptualisation of power in energy transitions*. Environ. Innov. Soc. Transit. 25, pp. 122–141.
23. Huntington, H. (2009). *Creating Jobs with “Green” Power Sources*. USAEE Dialogue, Standford, CA.
24. Chapman, A.J and K. Itaoka. *Energy Transition to a Future Low-Carbon Energy Society in Japan’s Liberalizing Electricity Market: Precedents, Policies and Factors of successful Transition*. Renewable and Sustainable Energy Reviews, 2018.
25. Foxon, T.J., G.P. Hammond and P.J.G. Pearson. (2010). *Developing Transition Pathways for a Low Carbon Electricity System in the UK*. Technol. Forecast. Soc, 77, pp. 1203–1213.
26. Meadowcroft, J. (2009). *What about the Politics? Sustainable Development, Transition Management, and Long Term Energy Transitions*. Policy Sci, 42, pp. 323–340.
27. Walker, G., N. Cass., K. Burningham and J. Barnett. (2010). *Clean Energy and Socio-Technical Change: Imagined subjectivities of ‘The Public’ and Their Implication*. Environ. Plan, 42, pp. 931–947.
28. Seyfang, G., A. Haxeltine., T. Hargreaves and N. Longhurst. (2010). *Energy and Communities in Transition: Towards a New Research Agenda on Agency and Civil Society in Sustainability Transitions*. (No. 10–13). CSERGE Working Paper EDM. Available online: <https://www.econstor.eu/handle/10419/48803>.



IT

**TITLE: EMBEDDED ADVANCE DIGITAL MEDIA PLANNING
STRATEGY: A CASE OF PROMOTION COST MINIMIZATION ON
THE NET**

SASMITA SAHOO

Abstract:

A digital media strategy is part of panoramic modern promotion plan. It focuses on all the components that drive business growth. It enhances the opportunities in the term of advantages in generating sales.

Brand strategy aims at **positioning**. It determines the appropriate and cost effective tools considering PPC (Pay per Click) to achieve the calculated responses. This challenging and rewarding process warrants a long-term gains in business and to access brand equity with intangible properties like

- Brand awareness,
- Loyalty, and
- Advocacy.

considering these three priceless assets in the competitive marketing and advertising era.

Among the challenges, some are succeeding in developing promising new revenue streams in the terms as:

- Subscription services
- Digital micro transactions
- Consumer/ Customer Membership,
- Impact and influence of live events,

Final Paper for Submission:

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**EMBEDDED ADVANCE DIGITAL MEDIA PLANNING STRATEGY: A CASE OF
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A **digital media strategy** is part of panoramic modern **marketing** plan. It focuses on all the components that helps to drive business growth. It enhances the opportunities in the form of advantages and generating sales.

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Digital Advertising occurs mainly using online channels. **Brand strategy** aims at **positioning**. It determines the appropriate and cost effective tools considering PPC (Pay per Click) to achieve the calculated responses. This challenging but rewarding process warrants a long-term gains in business to access brand equity with intangible properties like:

- Brand awareness,
- Brand Loyalty, and
- Brand Advocacy.

considering these equities in today’s advertising spawning competitive marketing though Traditional Advertisement has its own advantages .

Among the challenges, some are succeeding in promising new revenue streams in the terms as:

- Subscription services
- Digital micro transactions
- Consumer/ Customer Membership,
- Impact and influence of live events,

Advanced advertising maximizes operational efficiency that generate revenue with a powerful range of media solutions and consolidate to manage advertising campaigns across all segments. Here the media players are constructing portfolios to connect and provide complementary experiences that tap the commercial potentials.

The sapience makes very strategic obesorvance that users watch, listen, participate, share, advocate more in benignancy of digital channels. Recently Advanced advertising sector has been projected a growth of 28 percent in 2019 and forecasting to grow more faster in coming 2022 (according to Global Entertainment & Media Outlook Projected Report for 2018–2022).

Activation of the one-time sales of packaged media, a multiple-stream revenue model is usually created, where players manage a visionary team to improve their team effort by franchising better players. (Live services accounted for about 40 percent of Electronic Art’s returns in US\$5 billion in FY 2018 revenue, that went up 30 percent for that year.) Success in this area has emboldened to extend the Intellectual Property (IP), all of which are targeted to **Reach*** opportunities that can create additional revenue streams. (***Reach refers to the total number of different people or households exposed, at least once, to a medium during a given period for one insertion of an adcampaign.**)

Media planning and SEM* mechanism based on SEO in digital marketing is shaping the Global Entertainment and Media (GE&M) echosystem. Content has become more penetrating and accessible on demand. Digital platforms have been growing, Branding more on direct and personalized online Channel distribution. The competition for user engagement and disbursal has never been vicious. All these developments have significantly twisted the flow of Entertainment & Media jurisdiction.

Today, profitable growth increasingly depends on having five, six, or even more gross inflow lines. Very often building new revenue streams requires making significant changes in the strategy, operating models of digital media planning. But the opportunities are coming up as a series of models offer promises for assured Impact factors (reach x frequency= impact), and it is clearly modifying capabilities essential to develop and to be implemented.

Generally, online advertising or digital advertising is a relatively low-cost method of conveying selling messages to numerous prospective customers. It can secure leads for salesmen and middlemen by convincing readers to request more information and by identifying is a relatively low-cost method of conveying selling messages to numerous prospective customers. It can secure leads for salesmen and middlemen by convincing readers to request more information and by identifying

Objectives:

This paper is based on objectives as-

- To study the prospects and opportunities of Advance Digital media planning strategy to minimise the promotion cost in general.
- To study a few cases to extract specific finding of the theme.

There are various models used to gather assured response for digital medias:

Hypothesis testing :

Testing of hypothesis is one by taking the null (Ho) hypothesis and the alternative hypothesis (Ha1). On empirical testing if the (Ho) holds true, the null hypothesis is accepted. Similarly, if Ho does not hold true or not valid then the null hypothesis is rejected and the alternative hypothesis is accepted.

Ho: Advance digital Media planning strategy to minimise the promotion cost have direct correlation with the prospect & opportunities of Digital Media Planning. So **Ho** is accepted and found null.

Ha: The cases have indirect correlation with the objective. So **Ha** is found alternative.

Model Behavior

Various revenue-generating models are emerging for creating new fan-focused revenue streams from around the digital media planning. The most prominent of these models that are gaining traction are

THE PLATFORM:

To maximize distribution reach by monetizing existing core brands, products, and intellectual property through new channels and platforms, either owned and operated or accessed via partners.

THE TARGETER:

To develop revenue streams from new ad products that connect brands to user communities, and create more compelling experiences for users and marketers.

THE TRANSACTOR:

To create revenue opportunities from closing the loop between driving user engagement and instigating commerce activity.

THE OMNI-BRAND:

To extend a branded media property into new revenue streams through physical experiences and products.

THE MEMBER:

To develop premium media experiences and other benefits, products, and services that are accessible only to those users who are willing to pay for them.

THE PROSPECTOR:

To create revenue streams in new entertainment and media markets where business models and fan experiences are not yet fully established.

THE GLOBALIZER:

To expand addressable revenue streams by entering new geographic markets.

The Right Capabilities

There are many different approaches to rush revenue streams, but a series of common capabilities underpin the success of each effort. A compelling fan-centric offer begins with engaging content to address the target. But content and distribution expertise must be paired with other capabilities in data analytics, in acquisition and retention mechanisms, in experience development, and in strategic revenue management. Because the data shows that most of the online users are engaged in their optional areas rather putting attention to advertisements.

Proportion of onsite and offsite video during last week:

Country	Onsite viewers %	Off site viewers %
India	73%	20%
USA	44%	42%
Turkey	79%	9%
Brazil	56%	24%

Source: News articles

The data shows Turkey is the leading Nation on video viewers where advertisements lose its mileage and responses. India is at second place where maximum young viewers are engaged on video clippings rather than online shopping or transactions. USA is the third nation in this categories. Recently Alexa and Google Home have turned the trend of online experiences. So there is a chance of Transformation in near future. That to online craze may decline from its temper to other accessibility.

Data analytic and insights:

First-party data has emerged as perhaps the most valuable asset for Entertainment & Media players as they seek new revenue streams as concerns to grow about accuracy and trust in the entertainment and marketing ecosystem. The wholesome business sector consider first-party data sourced from Entertainment & Media players started working on more accuracy and reliable than the information available from third-party providers. Too many companies still lack the data management expertise to fully connect, integrate, synthesize, and activate the first-party data derived from their content offerings. Online players also can create valuable first-party by deriving data from direct interactions with users or subscribers where user experience is necessarily taken into account.

News Brand Trust (0-10) (India-2019)

Aware of Brand	Specific users	Over all users
The Times of India	7.42	7.87
D.D. News	7.4	8.21
Hindustan Times	7.24	7.76
N.D TV	7.01	7.53
India Today	6.94	7.51

Local e- News papers	6.69	6.03
First Post	6.16	7.31
Republic TV	6.00	7.15

Source: online articles

For many companies, developing the streams successfully requires important changes to their business strategy, operating models, culture, and other set ups. As Entertainment & Media value shifts from user attention to user loyalty, the companies exercise the threats per opportunities confidently and move decisively toward supporting a larger portfolio of revenue in accessing digital medias and media planning. This article includes the News channel media due to it's specific mileage and viewers.

Steps in Planning:

STEP 1 - Plan Your Digital Plan 5 Steps to Creating a Winning Digital Media Plan for Local Businesses.

It's a little bit like working out before you go to the gym, but a good digital media plan requires sufficient planning, especially if you are new to online ad campaigns. Before you even begin developing your creatives, you'll want to first ask yourself some important questions:

What are your campaign objectives?

What message are you trying to send and how does it align with your brand?

What is your call to action? (What do you want your audience to do when they see your ads?)

What digital channels are you most interested in trying?

Who is responsible for implementing and monitoring the campaign?

STEP 2 - Identify Your Target Audience

One of the greatest benefits of digital media is that it allows to hyper-target the advertising campaigns. In order to take full advantage of this the players get to genuinely drilling down the fact and identify the target audience as specific. This will help to focus the objective of campaign.

STEP 3 – Mine That Data

This step may shows life so one only have more time in the day to research the different channels and tactics to display the first campaign to use much attention. Because the more research feeds the more data to mine for better future use and to launch a campaign at watertight process.

STEP 4 – Tracking Campaign

Digital offers a unique ability to track and monitor campaigns in real-time which is something traditional media cannot do. The kinds of insights that will help to determine the campaign is a success or not, and if not, where it may have gotten off track.

Some of the metrics to look at are :

CPA – The Cost per Acquisition tells how much each lead or sale cost.

CPC – Cost per Click is a metric that measures what to pay for each click from a banner ad. Many advertisers like CPC campaigns because they only pay for performance.

Total Visits – The promoters like to cover all traffic of main website. It is important to calculate the total visitors assemble on the track per month and monitor the source of the traffic is coming from. It would make sense to focus at time and budget on generating even more content that will show up in search returns over budget.

Conversions – If audience conversion rate is as it means they do the something required, then Google Analytics will allow to track just about everything of promoters website visitors to do. Make sure to sign up for an account.

STEP 5 - Adjust and Test:

Now that data from the metrics are to be used to track the success rate of the promoters campaign, and it is used to make the necessary adjustments. Here the promoters may optimize the ad copy and landing pages, which ad networks and channels are covered. The days and time of day of sending message in the case of email marketing are to be accounted for but it can significantly boost ROI by focusing at budget on actually works for the promoters.

Case References: To maximize the digital advertising effectiveness on digital media:

Case 1:

One Plus is tuned to a reputed name in the smartphone industry through the AmazonAd. To strengthen their presence on Amazon and increase their Brand equity, they invested the entire spectrum of Amazon search and Display Advertising with great results. Amazon advertising helped OnePlus to achieve their core digital marketing objectives of increasing product awareness, reaching quality and relevant shoppers, and increasing sale. OnePlus drove maximum considerations on regular days with an ‘always on’ Display Advertising presence targeting customers who were looking to buy high performance smartphones. Also, they harnessed the potential of Sponsored Brands (SB), infused with brand and generic keywords, to convert large number of customers searching for smartphones.

Case2: TiE Chennai – #TiECONChennai16

TiE Chennai, one of the most decorated chapters of TiE Global partnered with award-winning digital marketing agency echoVME to handle its Social Media marketing activities for its 9th Annual TiECON – #TiECONChennai16. The agency had a challenge of selling 1500+ tickets to both members and non-members via various social media platforms in a short span of time.

To create awareness and engage the audience, the agency generated regular posts over Facebook, LinkedIn, and Twitter that boosted conversations with 20+ entrepreneurs in and around Chennai. Apart from this, echoVME made use of Gif Promotion, series of posts, single powerful post, Lead Generation Ads for registration and designed a dedicated event page for TiE Chennai. The agency massively brought in 300+ leads for workshops and 800+ for the events.

Case 3: Chu Chu TV – #ChuChuTVRealityCheck

Chu Chu TV India’s third most subscribed YouTube Channel entrusted its digital marketing objectives to echoVME such as becoming a global brand and making ChuChuTV a platform for parents to engage and interact. As of June 2016, there were no regular posts, less than 2 Lakh likes on Facebook and very few relatable audiences on their page.

Joining hands with echoVME, ChuChuTV garnered maximum engagement via various methods. echoVME created high-quality interactive content to build trust among audiences, which were posted on regular intervals and from different genres. These posts were in form of Meme Style, Puzzles, Contents, Live Facebook, and Product based posts. The digital marketing agency created a campaign called #ChuChuTVRealityCheck, which went live on Twitter, Instagram, LinkedIn, Facebook and Snapchat. The agency’s efforts brought in 1.9 Million likes on Facebook and Global Audience Reach of 34,084,746 as of June 2017.

The Cricket pitch comes to Facebook As this title of a recent post on Facebook blog shows, there is a whole new world that has opened up for IPL fans on Facebook. Most of the teams such as Deccan Chargers, Mumbai Indians and Rajasthan Royals have their own fan pages where fans “can engage with other fans and get exclusive behind-the-scenes looks at your favorite teams and players”. With IPL online games to live chats with team captains, the experience truly extends from a few hours of mere sport to an-all pervasive lifestyle. Here are some of the other interesting resources we came across about the IPL – · The State of Indian Premiere League (IPL 3) on Social Media in 2010 – an interesting analysis around the growing IPL social media pie · If IPL was played on the Web 2.0 – a humorous take on a fantasy league on social media comprising FB Super Kings, LinkedIn Chargers, Knight

Conclusion

Digital media coverage is advertising delivered through digital channels. Channels such as social media, mobile applications, email, web applications, search engines, websites, or any new digital channel. It includes Digital marketing in any form of products or services that moves through electronic devices. The two main pillars of digital marketing are online marketing and offline marketing. There are seven 7 big categories of online marketing are:

- Search engine optimization (SEO)
- Search engine marketing (SEM)
- Content marketing
- Social Media Marketing (SMM)
- Pay-per-click advertising (PPC)
- Affiliate marketing
- Email marketing

Americans spending 11 or above hours on electronic devices per single day. It shows until a visitor spend all of his or her free time in the digital world, the life will loose some of the most important contents. Now it is possible for a young to sit in his or her living room and earn two million dollars a year playing video games, offline marketing and sharing. Therefore it is necessary to understand the digital transformation well and use as per requirements.

Note :

*Reach refers to the total number of different people or households exposed, at least once, to a medium during a given period for one insertion of an ad campaign.

*Users: Most engaged users and subscribers.

*SEM is a form of Internet Marketing that involves the promotion of websites by increasing their visibility. It is a paid form of advertising.

*SERP -Search Engine Results Page. SERPs are web page listings that return search results based on a keyword query. Simply when any one have a Google query, the pages come up with findings and results or information if available.

*Advanced advertising is about how ads are marketed and purchased. It simplifies targeting on automation process in Digital Advertising Business. It is about leveraging data to create the next generation of advertising experiences that people want to engage with Digital Advertising.



ORGANISATIONS OF TOMORROW AND FUTURE WORKPLACE BY SUPPLY CHAIN MANAGEMENT

SUBHRANSU SEKHAR TRIPATHY

ABSTRACT :

Digital currencies are revolutionizing the world. It has created a decentralized payment mechanism. These currencies are independent of any central authority, transferable electronically, more or less instantly, with very low transaction fees. Bitcoin is a form of digital currency, created and held electronically with very low transaction fees. It is the first example of growing category of money known as crypto currency. They are created using softwares that solves mathematical problems. Digital currencies are stable and are traded with markets. They are intangible and can be owned and transacted through the internet. Digital currencies have intrinsic properties like physical currency and allows for instaneous transactions that can be seamlessly executed for making payments across borders when connected to devices and networks. This type of currency numerous advantages as payments in digital currencies are made directly between the transacting parties without the the involvement of any intermediary which results in low-cost transactions. This also ensures transparency in dealings. The digital currencies issued by the central bank of a country is called Central bank Digital currency. England, Sweden and uruguay are a few nations that have considered plans to launch a digital version of their native fiat currencies. A digital currency can also exist in an unregulated form. The virtual currency are under the control of the currency developer, the founding organization or the defined network protocol, instead of being controlled by a centralized regulator. All crypto currencies are digital currencies, but not all digital currencies are not crypto currency. Investing in digital currency has become very popular due to their volatility, which makes them a great speculation tool. However, these currencies are useful and progressive. Some of the popular cryptocurrencies are bitcoin, Litecoin, Ripple, Dash, Monero, Ethereum. One of the best advantages is that these currencies have a global reach in the financial market infrastructure.

INTRODUCTION

It is believed that digital currency is the future in fact. The exchange rate against the dollar attracts potential investors and traders interested in currency arbitrage. Indeed, one of the primary reasons for the growth of digital currencies like Bitcoin is that they can act as an alternative to national fiat money and commodities like gold and works on the mechanism of Block chain technology or peer to peer network. It is pretty much the highest risk, highest –return investment. People acquire bitcoin mainly for the increase in global demand and high investment value. Digital currencies are used to buy thing electronically. No single institution controls this network. A software developer named Satoshi Nakatomo developed the most popular currency ‘Bitcoin’. The idea was to produce a currency independent of any central authority, transferable electronically, instantly with very low transaction fees.

OBJECTIVE OF THE STUDY

The objective of this paper is to analyse the benefits and the risks of using digital currency. As every new development has its pros and cons so also the digital currencies. Numerous derive benefits from its use as its value free from economic fluctuations, security can be maintained, convenient to transfer, saving of time and cost. On the other hand, like any other monetary instrument it also exposed to risks as regulatory risk, taxation risk, market risk, insurance risk. This paper aims to focus primarily on these aspects of digital currencies.

ABOUT BITCOIN AND BITCOIN MINING

Bitcoin's has emerged to be the most popular digital currency, and the thing that makes it different from conventional currencies is that it is decentralized. The objective of this paper is to focus on the benefits and risks associated with the use of digital currencies.

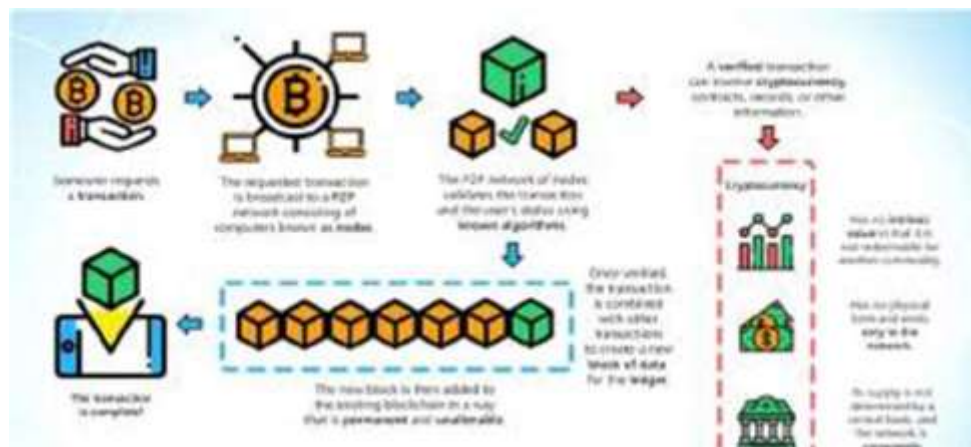
There is a bitcoin protocol that helps in creating bitcoins. There are open source software programs that follow mathematical formula to produce bitcoins.the miners have to crack this software inorer to generate these coins. After it is mined it can be stored in Electronic wallets/mobile wallets as Mycelium,Xapo,Bitcoin wallet. People send bitcoins to each other over this network and the network records all the transactions made during a particular time period into a list called a 'BLOCK'.Its the miners job to confirm those transactions and write them into a general ledger. This ledger is a long list of blocks known as 'BLOCK CHAIN'.

THE BLOCK CHAIN TECHNOLOGY

The block chain is used to explore any transaction made between any bitcoin addressee at any point on the network. Whenever any block of transaction is created, it is added to the block chain which is maintained digitally. This remains intact and is not tampered with because the miners put in a process whereby they take the information in a block and apply a mathematical formula to it and convert it into a different form. This is known as 'hash'. This hash is stored along with the block, at the end of the block chain at that point of time. Each block chain hash is produced using the hash of the block chain before it. If anybody tries to fake a transaction by changing a block that is already stored in the blockchain,then the block's hash would change and if the block's authenticity would be checked by running hash function on it, it would be found that the present hash is different from the one already stored along with the block and it can be traced as a fake transaction.

The bitcoin protocol has made it difficult to generate hashes Everytime a miner creates a hash, they are rewarded with 25 bitcoins and the blockchain is updated. They are also not supposed to meddle with transaction data in a block.

PEER TO PEER TECHNOLOGY























Source:BLOCKGEEKS

MARKET CAPITALIZATION OF DIGITAL CURRENCIES

The market is flooded with a number of crypto currencies as Ethereum,Ripple,Litecoin,Dark coin, Peercoin,Dogecoin,prime coin, China coin, Ven and Bitcoin. However in the past few years Bitcoin emerged to be the most popular currency with the largest market capitalization of \$127,331,758,431 followed by Ethereum with market capitalization of \$24,383,863,767 while the market capitalization of XRP is \$ 18,187,690,567.

TABLE 1: MARKET CAPITALISATION

#	Name	Market Cap	Price	Available Supply	Volume (24h)	% Change (24h)	Price Graph (7d)
1	 Bitcoin	\$11,382,240,050	\$712.76	15,999,336 BTC	\$67,298,200	-1.60%	
2	 Ethereum	\$904,848,975	\$10.54	85,831,133 ETH	\$4,069,260	-1.21%	
3	 Ripple	\$290,446,648	\$3.06121	35,795,131,899 XRP*	\$2,386,430	0.26%	
4	 Litecoin	\$184,904,214	\$3.82	48,378,029 LTC	\$2,258,970	-1.05%	
5	 Monero	\$83,466,495	\$6.27	13,311,446 XMR	\$3,134,490	5.38%	
6	 Ethereum Classic	\$80,817,441	\$3.942637	85,735,486 ETC	\$903,573	2.21%	
7	 Dash	\$66,519,213	\$9.68	6,874,532 DASH	\$996,632	-0.77%	
8	 Augur	\$52,038,360	\$4.73	11,000,000 REP*	\$398,072	6.36%	
9	 NEM	\$37,322,550	\$3.004147	8,009,900,000 XEM*	\$86,817	4.40%	
10	 Waves	\$35,727,500	\$3.357275	100,000,000 WAVES*	\$133,650	-3.94%	

Source: www.coinmarketcap.com

BENEFITS OF USING DIGITAL CURRENCIES

There are certain merits of using digital currencies

1. **Non-Inflationary** : Digital currencies are independent of economic fluctuations. The rise and fall in inflation rates affects the fiat currencies only. The value of the electronic currencies

remain intact. As they are insulated from the market forces, they are free from devaluation and depreciation and change in its purchasing power from time to time as is commonly observed in case of fiat currencies.

2. **Transaction security :** As the normal debit/credit card transactions require sharing of secret informations as CVV no. or Pin but the digital currency transactions does not require any such information. As in this network there is use of two keys a public key and private key. Anyone can use the public key which is the address which can be accessed but the private key is kept confidential. Whenever a bitcoin is sent, the sender signs the transaction by using the private key and public key and applying a mathematical function. This creates a certificate that proves the transaction is initiated from the sender. The payment informations can't be stolen. All these transactions are irreversible.
3. **No Government control:** Electronic currencies are not controlled by the government of any country as govt. is not the issuing authority. The circulation of digital currencies doesn't depend on the economic condition. It is uninfluenced by quantitative easing which results in increase in money supply to control inflation and liquidity crunch.
4. **Ensures Faster transferability:** The payment and settlement process in commercial banks involves a couple of days, in contrast settlement of transactions using digital currencies is a matter of few seconds, which makes it more convenient and faster. The pendency of settlements between the parties sometimes causes difficulties and forms a long queue of unsettled transactions.
5. **Low transaction cost:** The transaction fees are miniscule as compared to normal banking transaction charges. This encourages more use of such currencies as it the service charges imposed by the commercial banks are pinching the pockets of the customers. Hence electronic currencies are considered as better options.

RISKS OF INVESTING IN DIGITAL CURRENCY

The lack of uniform regulations about digital currencies raises questions about their longevity, liquidity and Like any other asset, the principle of buying low and selling high applies to bitcois. Some speculators were attracted for this after it appreciated in May 2011 in November 2013. Due to the lack of guaranteed value and digital nature there exists an inherent risks with these currencies. Many investor alerts have also been issued by Security Exchange Commission of USA and Financial Industry Regulatory Authority

REGULATORY RISK

Digital currencies are not authenticated by the government currency and be used for black market transactions, money laundering, illegal transactions and tax evasion. Governments of several countries may also decide to bring it under the regulatory purview or to ban the sale of bitcoins. In 2015, the New York State Department of Financial Services finalized regulations that would require corporate that deal with digital currencies to record the identity of the customers, appoint a compliance officer and maintain capital reserves. The transaction worth \$10,000 or more will have to be recorded and reported. Due to the lack of uniform regulations, it raises questions over their longevity, liquidity and universality.

SECURITY RISK

Mostly bitcoins and other digital currencies are bought and sold from the virtual online markets known as Bitcoin Exchanges and some are generated through the process of mining. These exchanges

are at the risk of hackers and the fear of being attacked by the malwares. If a hacker gets access to a to the private encryption key of a bitcoin owner, then he can transfer these coins to another account. At times, the Bitcoin exchanges get access to the digital wallets and hack them, resulting in stealing of these coins. A Bitcoin exchange of Japan-Mt. GOX was forced to close after millions of dollars worth of bitcoins were stolen. Any transaction can be reversed only if the person who has received them refunds them. There is no third party or payment processor as in case of debit card or credit card, hence no source of appeal if there is a problem.

INSURANCE RISK : There is no insurance coverage provided by the authorities on the investment in digital currencies as is available with the conventional modes of investment. This increases the risk and due to the lack of insulation, risk averse investors may not be attracted to make an outlay as it is an unsecured investment. In contrast, the bank deposits in India are secured by the Deposit Insurance and credit Guarantee Corporation of India, which provides a protection against risk.

MARKET RISK: The market price of digital currencies depend on the volume of trade in the virtual exchanges. The prices have a higher sensitivity to news and fluctuates with the forces of demand and supply. With the rise in the global demand, the risk exposure is also on the upswing.

TAXATION RISK : Investment in digital currencies is not subject to any tax benefits under the Indian Income tax Act or taxation laws of any country. Therefore it is not a preferred investment option for many investors. As there is no scope for relief from tax liabilities, hence it is not considered worthwhile to allocate a major portion of investment in this asset and moreover due to its intangibility, its physical possession may not be sought. Investing in a fictitious asset is not thought of as a wise decision by many in the long run.

CONCLUSION

The technological environment today is less regulated. Virtual currencies are potentially vulnerable to money laundering and terrorist funding. Hence there is a need for regulation to the interest of the users. Regulation imposes a cost on the payment system providers and intermediaries. Regulatory costs may arise from obligations placed upon the issuer of a payment or a financial instrument. Several countries have begun to reform the existing regulations or pass new regulations to address the concerns of the law enforcement authorities. With the increase in popularity of the digital currencies, it reflects the creation of public confidence and a booming future .

REFERENCES :

1. Committee on Payments and Markets Infrastructures report on Digital currencies, Nov 2015
ISBN 978-92-9197-384-2 (print) ISBN 978-92-9197-385-9 (online).
2. Badev, A and M Chen (2014): "Bitcoin: technical background and data analysis", *Finance and Economics Discussion Series*, 2014–104, Board of Governors of the Federal Reserve System, December.
3. Bank of France (2013): "The dangers linked to the emergence of virtual currencies: the example of bitcoins", *Focus*, no 10, December 2014
4. Chiu, J and T-N Wong (2014): "E-money: efficiency, stability and optimal policy", Bank of Canada, *Working Paper*, 2014–16, April.
5. European Central Bank (2015): "Virtual currency schemes – a further analysis", February, www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf.



IMPACT OF DIGITIZATION ON FINANCIAL TRANSACTIONS: A STUDY

SUSHREE SHEETAL BEURA

Abstract:

Digital economy is the economic arrangement where lesser quantity of cash is used in transactions. Government of India encourages people to do cashless transactions by taking several initiatives one among them is demonetization which was done in November 2016. Cashless financial system is based mostly on transactions done with plastic money (debit card and credit card), NEFT, RTGS, CTS, Unified payments Interface (UPI) or digital wallets modes. India is moving towards a phase of digital economy from mainly a cash driven economy. In this research paper, an effort has been made to enquire about the growth of digital transactions in India post demonetization.

Keywords: Digital economy, Demonetization, Cashless transaction, Financial system, Digitization, Cashless economy

Introduction:

Digitization has obviously played a remarkable role as a star for excelling Indian economy. Information technology is an indispensable tool for growth of any country's economy. It has also encouraged our young entrepreneurs for making our country more vibrant and dynamic.

The Government of India had banned the currency note of the Rs1000 and Rs500 denomination, which popularly known as demonetization. The government took step to curb the illegal or illegitimate money from the economy.

Our government is constantly encouraging the public to avoid too much on cash transaction. Our goal is to make our economy and trade a cash less one and adopt digital payments. Digital payments are more commonly documented, which is a boom for our economy. Digital payment can be used Pan World, enjoying freedom and security. It is known to everybody that the terrorist and money Launderers do the transactions only in cash. Hence digital payments discourage the terrorism and money laundering.

The society has already realized the impact of digital economy towards contribution of macro-economic factors like gross domestic product, employment etc. Digitization has simplified the process of Internet banking, mobile banking, POS etc. which makes our people more friendly.

Digitization makes the transaction process much easier and simplified eliminating the dependency of voluminous paper work. The financial institutions like Banks, NBFCs are the biggest beneficiaries of digitization. They are deploying the man powers in diversification of business.

Digitization serves the nation with rapid progress promoting e-services. It helps both government and people moving towards progressive development. Digitization makes the system more transparent and streamline the process. Digitization makes a country corrupt free, eliminates red-tapism.

A cashless economy is an economic system with minimum circulation of physical currency implementing the system of Digitization. India is a majorly cash driven economy where people prefer to carry cash instead of virtual Banking. A complete absence of physical currency is still an imaginary situation for India since most technologically advanced economies of the world are still running on partially cashless system. Demonetization opens the passage to the cashless economy which has been done through digital payments. There is a huge surge in the usage of E-wallet and mobile payments have been observed. The government of India is issuing guidelines through Reserve Bank for the security concern of E- wallets.

These days Indian economy is experiencing a phase of socio-economic transition as people prefer to do financial transactions digitally. Post demonetization, digital payments changed in the buying and selling behavior of Indian society. This was the third time in the Indian history where economy saw the phase of demonetization. It left people with no other option but to move slowly towards cashless transactions. A rapid growth can be seen in the internet usage for using online services. Businessmen, be it on any scale (small/medium/large) are opting for cashless transactions. Online services and payment applications are gaining tremendous popularity these days.

The paper examines, the trend of digital transactions with reference to demonetization. The study attempts to understand changes in online services and usage of mobile applications post demonetization. The way consumer remarks digital transaction after demonetization, it affects a lot in the society. To validate the study the data is collected from RBI bulletin.

Literature Review:

Mukhopadhyay (2016) studied cashless payment system in India and presented a theoretical model that evaluates decisions by consumers and sellers to adopt cashless payments. Author finally observed that the most crucial enabler of cashless payments is inflows of funds into the accounts. Bayero (2015) analysed the effects of Cashless Economy Policy on financial inclusion in Nigeria. Results showed that Awareness, Consumer/User Value Proposition, and Infrastructure were found to have strong significant relationship with Financial Inclusion while Business Model of Financial Service Providers did not show any significant relationship with Financial Inclusion. Shendge, Shelar and Kapase (2017) studied impact and importance of cashless policy in India. The study found that impact of cashless policy will be felt in modernization of payment system, reduction in the cost of banking service, reduction in cost of high security and safety risk and also curb banking related corruption.

Ahmad (2017) investigated the impact of demonetization on online banking transaction. Author found that transactions of banking segment had increased enormously during and after demonetization period compared with before demonetization. The reduction of money in circulation obviously will have a positive influence on various modes of online transactions. Neill et al., (2017) examines how different forms of money, specifically digital versus cash, impact on the work of an organisation and its customers. He has done an ethnographic study examining loan collection workflows, where bank loans given to auto-rickshaw drivers to purchase their auto-rickshaw are overseen and managed by an intermediary. The study found that making the mobile money service usable for the drivers took

considerable work and was largely achieved because it was embedded in the wider, trusted, loan payment ecosystem.

Tigari (2018) studied the impact of digitalizing Indian economy and understand challenges and opportunities of digitalization. The study suggests that the greater transparency, accountability and the security measures are the key determinants which are going to influence on the success of dream project of the government i.e. Digital India. Sheetal et al., (2019) attempts to understand changes in number of online services and usage of mobile applications post demonetization. An online survey has been conducted to provide validity to the study. Study states that due to sudden demonetization, small sized commercial establishments were highly and adversely affected for a short period of time but have come on the track now through the help of online services and various modes of e-payments options.

Dhanalakshmi (2018) concluded from the research article titled “A conceptual study on cashless economy: Digital India” that, in upcoming years there will be a quick and unanticipated growth in the amount of digital payment transactions in India. She also suggested that the digital payment transactions would touch ¹ 1 trillion within a couple of years. The Digital penetration surges through UPI and Aadhaar. UPI fund transfer can be done using Virtual Payment Address without providing IFSC and account number. UPI based transactions are rapidly growing and touching ¹ 542 billion value in August 2018.

Mohanty M, and Pattnaik, S. (2019) used the daily returns data of all the fifty companies listed in NSE Nifty to assess the reaction of stock market to the announcement of demonetization using the event study methodology. The dummy variable regression was used to study the impact on various industry sectors. These sectors like automobiles and cement had reported significantly negative returns across several event windows. The banking sector contradictory to the belief had not performed in outstanding manner as the positive returns had been nullified beyond 5 days of the event. The reaction of other sectors like Pharmaceuticals, telecom, software, oil and natural gas, coal and power and the diversified sector had performed as per expectation without any major shocks.

Vijayan (2019) found that technological development is essential for emerging countries. India is ambitious to be a front-runner in different global technology platforms so that it is vital for digital technologies to be used to develop public services, bring financial inclusion etc. India started digital India campaign to improve effective communication between citizen and government while delivering necessary services with easiness. So far, digital India campaign is successful since it has aided India intensely by creation of job opportunities, improving literacy rates, eliminating corruption, technological advancements and boosting gross domestic product. It also improved the social and economic condition of people living in rural areas through development of non-agricultural economic activities apart from providing access to education, health and financial services. This further prompts economic development since finances to support social amenities and other public infrastructures are readily available. E-governance is contributing more to attain sustainability which offers transparency in every transaction, reliability, reducing paper works etc.

Research Methodology:

This research is a descriptive type of research. The research study is based on secondary data. Basically, the required information has been derived from various magazines, books, articles from newspapers, and journals, and from the various web-sites which deal directly or indirectly with the topics related to.

The present study mainly focuses on the digital economy and its challenges and opportunities. This study intends to analyze the impact of digitalization on Indian economy.

Limitation of the Study:

The study is restricted as it is conducted from the data available from RBI bulletin. It can be further analysed by collecting primary data also. All limitations of secondary data are applicable to this study.

Objectives of the study:

- To study the concept of digitalization.
- To study the trend of digitized payment system in the economy post-demonetization.

Concept Digitization & India's Digital Economy

Digital technology also has a constructive impact on the fundamental aspects of our health care, culture, education, infrastructure, mobility and religion. It has significantly improved the life styles, living standards and comforts. Every industry has followed the digital technology route to sustain within peers or else they could have vanished.

India has about 86 million internet users and this figure is escalating at 8 to 10 percent every year. Being a populous country there is a tremendous potential of market growth which ultimately transpires to economic growth. The internet economy, also referred as digital revolution, aims to generate new opportunities for market growth and employment for years to come.

India has played a vital role in the implementation of digital technologies over the past a decade. At present India should take the leadership to fuel and support the digital economy turning into a vital growth. Our prime minister Shri Narendra Modi's launch of Digital India is quite welcomed. The objective of this program is to connect rural India with digital literacy. It is not a scheme but a dynamic revolution.

India has experienced a well settled impact and ensured the growth of digital economy that includes:-

- Empowering citizens digitally,
- Digital infrastructure facility to every citizens
- Availability of services and Governance on Demand
- Facility of Digital payments in unbanked areas.

Indian economy has benefitted a lot from digitization from all sectors with the help of apps, UPI integration etc. India is one of the leading countries for evolution of payment systems, enabling Aadhar, Jan dhan, IMPS, BHIM and mobile penetration. India is now marching ahead with biometric, digital systems and plastic payment application and virtual payment systems.

It is possible to achieve this by leveraging the information technology competencies of India technology companies and skilled personnel in the country. The goal should be to deliver advanced digital solution for the problems India faces and make a difference to the economy.

Trend of digitized payment system in the economy post-demonetization**Different types of digital payments in India**

The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. "Faceless, Paperless, Cashless" is one of professed role of Digital India (http://cashlessindia.gov.in/digital_payment_methods.html). To promote cashless transactions and converting India into less-cash society, various modes of digital payments are available to tech-savvies and some for less technical persons. These mode are:

- Banking cards
- USSD
- Aadhaar Enabled Payment System (AEPS)
- UPI
- Mobile Wallets
- Bank pre-paid cards
- Point of Sale (PoS)
- Internet Banking
- Mobile Banking
- Bharat Interface for Money (BHIM) app

Data Analysis & Interpretation

The following Table shows the trends in digitized payment system for last 4 years (Nov. 2015 – Oct.2019)

(Rs. In Billion)

Source: RBI Bulletins

Abbreviations:

RTGS: Real Time Gross Settlement

CCIL: Clearing Corporation of India Limited Operated Systems

REC: Retail Electronic Clearing

PPIs: Prepaid Payment Instruments

POS: Point of Sale

We have considered the trend of digital transactions immediately 1 year before and 3 years after demonetization. As demonetization was declared on 8th November 2016, the trend of Payment System Indicators has been studied from Nov. 2015 on year on year basis.

After going through the Table, it is pertinent to say that most of the transactions are made through RTGS followed by CCIL and REC in value term. RTGS transactions witnessed a growth of 19.85% in the first year immediately after demonetization, while CCIL and REC transactions showed

an increase of 13.45% and 49.25%. Again while comparing cards, PPIs and mobile banking we can see there is an increasing trend 4.20%, 90.01% and 108.76%, highest being Mobile Banking this shows the acceptance to it. While comparing the number of POS, it show remarkable increase of 77.86%.

While comparing October 2017 with October 2018 year on year basis, we got RTGS, CCIL, REC, Cards, PPIs and mobile banking increased 16.92%, 6.63%, 41.90%, 30.26%, 61.26% and 13.95% respectably. This shows that highest amount of transactions being done is RTGS and highest percentage growth being PPIs. There is a 29.36% growth in number POS.

Again while comparing October 2018 with October 2019 year on year basis, we got RTGS, CCIL, REC, Cards, PPIs and mobile banking increased 13.42%, 8.85%, 16.51%, 12.36%, 14.77% and 152.30% respectably. Again this shows that highest amount of transactions being done is RTGS and highest percentage growth being Mobile banking. There is a 24.18% growth in number POS.

Findings & Conclusion

The present study focuses on concept of cashless economy and the trend of digitized payment system in Indian economy post demonetization. The digital payment system in our economy is in positive direction with the increase in use of Banking cards, USSD, Aadhaar Enabled Payment System (AEPS), UPI, Mobile Wallets, Bank pre-paid cards, Point of Sale (PoS), Internet Banking, Mobile Banking&Bharat Interface for Money (BHIM) app.

Although the trend of digital payment system is rising drastically from 2016 to till date, the value of currency note circulation by RBI increased by 17%. This road to cashless economy is not an easy one Government should take necessary steps to encourage more number of people and companies to enter into this segment. The mission of digital India will successful though increasing the awareness of the people about digital payments and improving digital banking infrastructure.

REFERENCES :

- Dhanalakshmi, C. (2018). A conceptual study on cashless economy: Digital India. *International Journal of Commerce and Management Research*. Volume 4, Issue 6, Impact Factor: RJIF 5.22, ISSN: 2455-1627
- Goswami, K. C., & Sinha, S. (2019). Cashless economy and strategic impact on bank marketing. *Sumedha Journal of Management*, 8(1), 131-142.
- Kumar, S. V., & Kumar, T. S. (2016). DEMONETIZATION AND COMPLETE FINANCIAL INCLUSION. *International Journal of Management Research and Reviews*, 6(12), 1703-1707.
- Maurya, P. (2019). Cashless Economy and Digitalization. *SSRN Electronic Journal*. doi:10.2139/ssrn.3309307
- Mohanty M & Pattnaik, S., "Reaction of Indian Stock market to Announcement of Demonetization: A Sectoral Analysis", *Journal of Research Innovation and Management Science*, Vol.V, Issue. II, Impact factor- 2.5 ISSN: 2454-6542
- Nahata, V. (2018). An analysis of demonetisation and digitalisation. *Review of Integrative Business and Economics Research*, 7, 85-115.
- Sheetal, J. U., Purohit, D. N., & Anup, V. (2019). Increase in number of online services and payments through mobile applications post demonetization. *Advances in Management*, 12(1), 34-38.
- Shweta, & Shachi. (2017). Status and scope of digitalisation in india. *Journal of Rural and Industrial Development*, 5(2), 40-48.
- Tigari, Harish. (2018). Digitalization - A Step towards Cashless Economy. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, Issue – 2, Volume – 2, ISSN No: 2456 – 6470.
- Vijayan, A. (2019). Digital India – A Roadmap to Sustainability. *International Journal of Innovative Technology and Exploring Engineering*. Volume 8, Issue 5, ISSN: 2278-3075
http://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx
http://cashlessindia.gov.in/digital_payment_methods.html

AN EMPIRICAL ASSESSMENT OF EFFECTIVENESS OF ONLINE MARKETING AND ITS DETERMINANTS FROM A MARKETERS' PERSPECTIVE

VENKATA RAMANA KOTHAKOTA

Abstract :

Cybercrime is nothing but a crime like other crimes where computer system is used as an object or subject of crime and the Internet is used as the medium. In this era of digitisation, Internet is emerging as a basic need and with the rapid spread of Internet; cybercrime is increasing swiftly touching every sphere of human life. Today, almost every alternate person is directly or indirectly associated with the cyberspace and thereof becoming a victim of the crimes those occur in this the cyberspace. A part of this vast user domain is yet unaware of different cybercrimes and hence fall prey to the tricks of the miscreants. In this paper we present a state-of-the-art review of different cybercrimes prevalent over time and suggest preventive as well as curative measures against cybercrimes.

Keywords: Cybercrime, cybersecurity, keylogging, phishing, CSAM.

1. Introduction

Crime has been associated with people since evolution of human beings and cybercrime exists since the inception of web. Different countries use various techniques or strategies to overcome problems related to cybercrimes (Balaji, Prassath, & Sriram, n.d.).

Cybercrime means the crime which do not attack or harm the physical body of person instead it attacks the secret or confidential information about the person, Institution, Government sector offices, banks etc. (Balaji et al., n.d.) Cybercrime basically depends upon computer and network for that reason it is also called as computer oriented crime.

2. Types of Cybercrime

There are various types of cybercrimes we face in our day-to-day life and these are as discussed below:

2.1 Hacking

Hacking is a process of retrieving information without permission. That means in this process some unauthorised user enters into our computer system and network to collect, steal & corrupt personal data or information (Maghu, Sehra, & Bhardawaj, 2014). By using this information they may blackmail the person or organization, misuse the information for their own benefit, leak confidential information to the public and so on. To cite an example, recently on August 22, 2019, hackers broke into a leading India-based healthcare website and stole 68 lakh records containing patient and doctor information (Indo-Asian News Service, 2019).

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Different types of hackers use hacking for different purposes and they are as follows (Hacking, n.d.).

2.1.1 Hactivist:

These hackers use hacking to send social, political messages and this can be done by hijacking the website and leaving the message on the hijacked website.

2.1.2 White hat hackers:

These hackers are the authorized experts who work for Government organizations testing and identifying any loopholes in their cybersecurity.

2.1.3 Black hat hackers:

These hackers are called the criminals who try to access user systems and destroy all the information in unauthorised ways.

2.1.4 Grey hat hackers:

These hackers come between black hat and white hat hackers that means, these hackers are not authorized user and they work with both good and bad intentions that totally depend upon the hackers. If they use their skills for bad intentions then the hackers considered as black hat hackers.

2.1.5 State/Nation Hackers:

These hackers are appointed by government to provide them cybersecurity and to gain confidential information from other countries to avoid any kind of danger to the country.

2.1.6 Script kiddies:

These types of hackers are unskilled persons who use tools and scripts provided by other hackers.

2.2 DoS & DDoS attack

It is the process of overflowing the internet servers. Sometimes user creates so many request to a website and it is not responding quickly, in that case the attacker can steal the user's personal information by showing fake traffic(McGuire & Dowling, 2013).

The DoS attack uses one computer and one internet connection to flood a targeted system where as the DDoS attack uses multiple computers and multiple internet connections to overflow the targeted resource. DDoS attacks are global attacks.

For example- Internet service provider (ISPS) in Mumbai are being targeted in a DDoS attacks are said to be India's largest attack ever. The attack is of 200 GB magnitude per second in 2016. For that reason the internet become slower down during that year in Mumbai (Asheeta Regidi, 2016).

2.3 Alternate Website

In this process the hacker delete some pages from a website and upload a new page with a similar name and control the message carried by the website(Maghu et al., 2014). When the users access the website the hackers easily get the information about the user and use it for their own benefit.

For example- A 34 year old man has been arrested from Kolkata on July 24, 2019 for making a fake website of Pradhan Mantri Gramin Digital Saksharta Abhiyaan and cheating nearly 100 people (Press Trust of India, 2019).

2.4 Cyberterrorism

Cyberterrorism is considered as violent acts, terrorist activities or frighten loss of life with the help of internet in order to achieve political or ideological gains through threat or intimidation. The terrorist decides their preparation about the attack, place where the attack is going to be happen, actions that has to be taken after and before the attacks, tools which has to be used in their attacks and the targets to whom they wants to do the attacks. They communicate with each other by using internet through encryption and steganography technique in order to keep their plan confidentially. It also involves E-murder or homicide or suicide or Spyware (Maghu et al., 2014).

For example- The Pulwama terror attack on a CRPF convoy on 14 February 2019 in Jammu & Kashmir's Pulwama district where 40 jawans were killed due to bomb blast (India Today Web Desk, 2019).

2.5 Online credit card/debit card fraud

It is a common and wide spread cybercrime now-a-days. In this crime the attackers try to steal the user's physical credit or debit card credentials. Sometimes they create fake documents to open an account in another person's name, by using this information they could open a credit card account or loan account in the victim's name and then fully draw money from it (Sunil Dhawan, 2013).

For example- In August 2018 cyberattack was carried on Cosmos bank's Pune branch where 94 crores rupees being siphoned off. The attacker attacked into the ATM server of the bank and stole details of many visa and rupee debit cards holders (Divyesh Singh, 2018).

2.6 E-bank theft/ATM fraud

This fraud occurs by using ATM card. Here the criminal used the card to withdraw fund from customer's Account using pin based transactions.

Various types of ATM fraud are card skimming, cash shimming, card trapping and ATM malware. (IAS Foundation, 2018).

2.6.1 Card skimming:

In this technique the attacker steals the digital data by using a foreign device on an ATM from the magnetic strip of the card. After that they can able to produce fake card for subsequent transactions.

2.6.2 Cash shimming:

Here attacker use foreign device on ATM to take or to capture data from chip of card.

2.6.3 Card trapping:

Trapping means stealing of physical card itself and pin is compromised.

2.6.4 ATM malware:

Attacker takes control of dispensing cash method of ATM using malwares and take cash out of the ATM as much as possible or as much they want.

For example- In July 2018 ATM system hacked in Canara bank in Kolkata and the hackers wiped off almost 20 lakhs rupees from different bank accounts. The number of victim was 50 and they hold the account details of more than 300 ATM users across India. (Test bytes, 2018).

2.7 Forgery

It is the procedure through which the hacker creates fake documents, certificates, identity and currency. Now-a-days the hackers create fake website having fake government logo and signature.

Some hackers make duplicate currencies which look like the original one with the same logo, signature of the Government bank and serve among the common people.

For example- A 54 year old businessman and four others were arrested in Khammam district of Telangana on November 2, 2019 for palming off fake 2,000 rupee notes with Children Bank of India printed on them. The businessman allegedly used to pass off the fake currency to the gullible people by taking the original currency from them (News18 Reporters, 2019).

2.8 Fake calls

Sometimes people get calls from bank or any other government institution offering credit card, lottery. Sometimes tells that your debit card is going to dead in few days and wanted your personal information, OTP, bank account number, phone number which will link with the bank etc. (Consumer Information, 2019).

After getting this information, it is easier for the hacker to take cash from your bank account. For example- 33 people, including 16 women, have been arrested from a fake call centre on December 11 2019 from Noida, UP. They duping people on the pretext of providing loans at low-interest rates, they had also a website-www.comradefinocone.com on which they displayed services for home loan, personal loan, and gold loan. They contact people through calls and those people who show interest are asked to send money in their bank account or transfer via paytm, phonepe, in the name of registration fee and loan approval fee. (Press trust of India, 2019).

2.9 Social media crime

Now-a-days social media is the way to connect one people with another. It is the platform through which people can able to keep contact with friends and family by using some social media like Facebook, WhatsApp, Twitter, Instagram, YouTube. People share their every private and personal data on it.

Hackers choose social sites for hacking because they can get each and every details of the user easily (Breaking Olds, 2019). Different types of attack used by the attacker to hack social media accounts and they are Man in middle attack, phishing, keylogging.

2.9.1 Man in middle attack:

In this attack hackers secretly steal the conformation between the sender and the receiver without their knowledge. Here user thinks that their communication is private and no one can able to see but hackers secretly relays and possibly alter their communication without their knowledge.

2.9.2 Phishing:

In phishing hacker make a duplicate similar login page of some social media and share it with the victim, when the victim login in that page then the username and password redirects to the hacker's machine.

2.9.3 Keylogging:

In this hacker record the keys of the keyboard pressed by the user by using a software key logger and then it automatically makes the file of it and sends it to hacker's machine through internet.

For example-Hackers upload pirated copies of a popular Kannada movie, Pailwaan and create fake Facebook profiles of actor and MP Sumalatha Ambareesh on September 2019 in Bengaluru (Times of India reporters, 2019).

2.10 Online Harassment

Online harassment is the online behaviour of the attacker who tries to create trouble for someone by humiliating, frightening or threatening them and make serious social, psychological and physical consequences (MLC, 2018). It includes Sharing intimate messages, photos, or videos online without permission, to shame a person.

For example- A 23 year old man has been arrested in Hyderabad on May 26, 2019 for cyberstalking and sexually harassing his former classmates on social media after she rejected his proposal. (Press trust of India, 2019).

2.11 Online job fraud

It is an attempt to cheat people who are in need of employment by giving them false hope / promise of better employment with higher wages (National cybercrime reporting portal, 2008). Sometimes user find some job add in the newspaper and easily trust on it due to the job publish in the newspaper, but it is clearly mention in the newspaper that if any trouble occurs then the newspaper agencies will not be responsible for that. Fake website also designed with the same name and same format like a government website with the official signature and logo. When the aspirants fill the form and give their details the hackers easily attack the secured information of the aspirants.

For example- Fake government website of education board issued appointment letters to dozen of applicants in Agra on August 21, 2019. The duped applicants had paid Rs.10 lakh for each appointment and the fake website had been designed as an exact copy of the board's website (Siraj Qureshi, 2019).

2.12 Online Grooming

It is one of the major growing cybercrime faced by teenagers and children where a person builds on emotional bond with the children, teenager students and young person through social media, emails, gaming website and try to gaining their trust for abusing them sexually and mentally. By using the above online apps the hacker create fake account and pretend to be a child, sometimes the hacker give compliments, gifts, modelling job offer and later they start sending obscene messages, photographs, videos and ask to share your sexually explicit images or videos with them. The cyber grooming mostly target the teenagers ("Cyber safety," 2010).

For example- A 13 year old girl from Tripura was lured and raped by a 21 year old man in Chennai on May 11 2017. The rapist had befriended the victim first on Facebook and sexually assaulted her after gained her trust by online (Devika Agrawal, 2017).

2.13 Online drug trafficking

It is a crime of selling, transporting, or illegally importing unlawful controlled substances, such as heroin, cocaine, ganja, narcotics, or other illegal drugs through internet (National cybercrime reporting portal, 2008).

For example- Narcotics control bureau have seized over 2,000 kg narcotics and arrested 27 people, including 6 foreigners for drug trafficking across the country in less than a month on October 19, 2019 (NDTV Reporters, 2019).

2.14 CSAM

Child sexually abusive material (CSAM) refers to material containing sexual image in any form, of a child who is abused or sexually exploited (National cybercrime reporting portal, 2008).

For example- Central bureau of investigation (CBI) has set up an online child sexual abuse and exploitation (OCSAE) prevention and investigation unit at New Delhi under special crime zone to tackle menace of child porn on the internet on November 15 2019 (Munish Pandey, 2019).

2.15 Online Gaming

Gaming is the area where vast information is transferred through internet. People play online games on mobile phones, computers, portable gaming device and social networks. People not only play games online with other players but also they talk to them, share their views, become friends, join groups, teams etc. Some hackers play to harass the user, some try to misuse the user's personal information, and some try to get details about user's debit card and credit card by offering point/coins in the game ("Cyber safety," 2010).

For example- A 16 year old boy addicted to the popular online game PUBG (Player unknown's battleground) and faked his own kidnapping and sought ransom from his parents on October 15, 2019 (Press Trust of India, 2019).

Statistics of cases registered in India and persons arrested for cybercrime during 2008-2017 is given in figure 1. Top 15 states of India in cybercrime during 2016, as per National Crime Reports Bureau, Ministry of Home Affairs, and Government of India's 2016 statistics report, is given in figure 2 ("National Crime Record Bureau," 1953). Cybercrimes reported in India during 2018, as per statista.com, is given in figure 3 (Cybercrime in India - Statistics & Facts, 2019).

3. Security measures to overcome cybercrime

There are two types of methods can be used to overcome cybercrime one is Preventing method and another one is curative method.

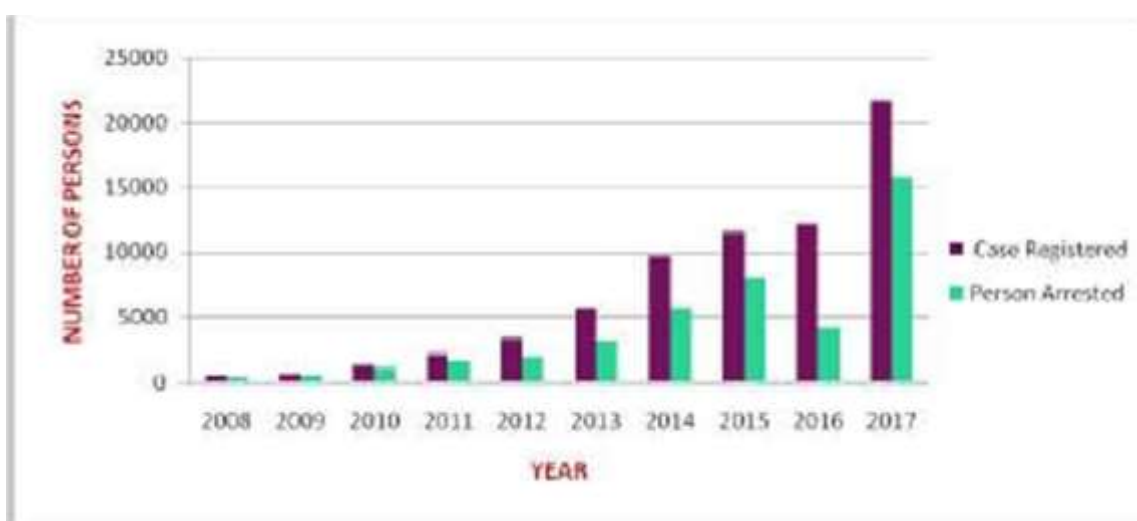


Figure 1: Cases registered and persons arrested in cybercrime during 2008-2017 in India

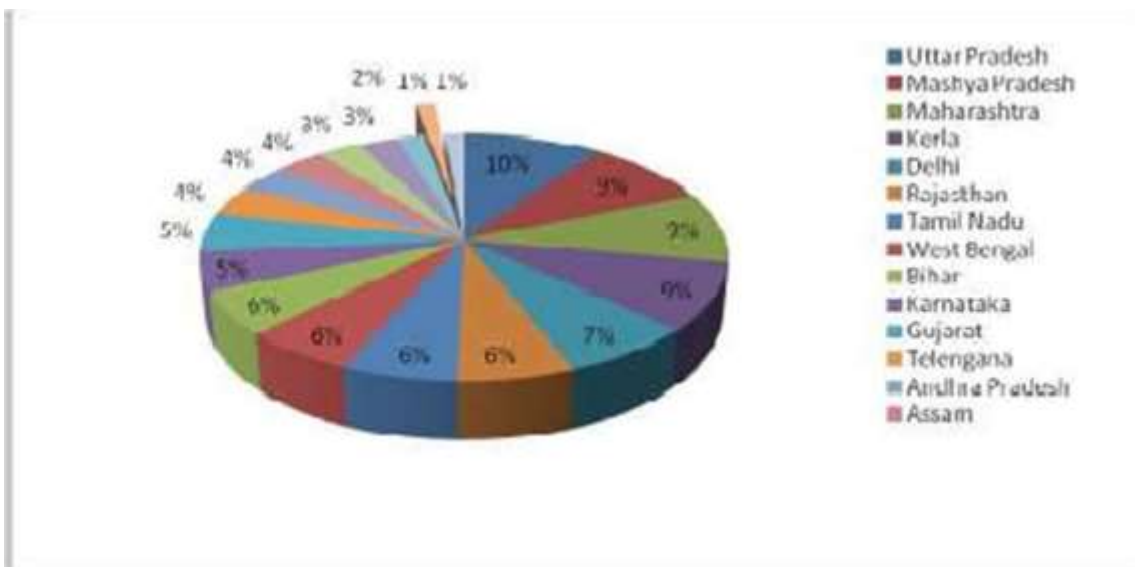


Figure 2: Top 15 states of India in cybercrime during 2016

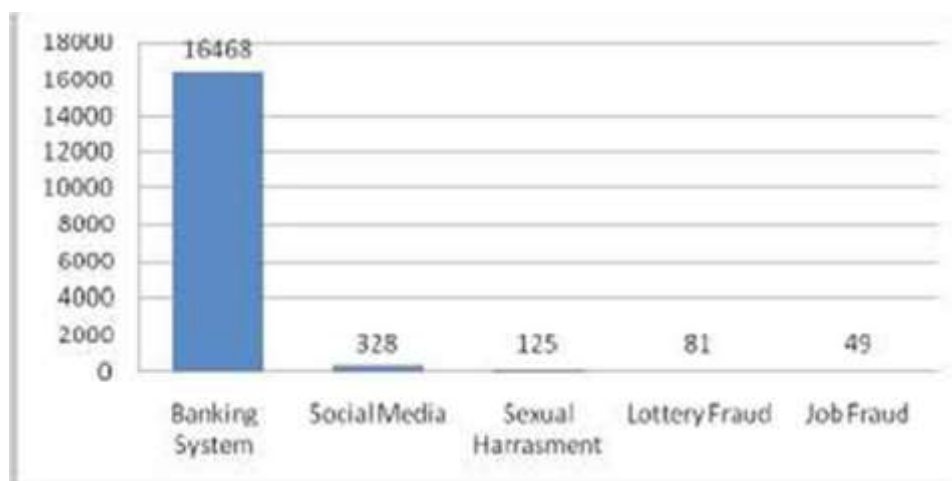


Figure 3: Number of different types of fraud cases reported during 2018 in India

3.1 Preventive Methods

In this section we discuss what are the steps should be taken to overcome cybercrime through cybersecurity. Some steps are discussed as follows:-

3.1.1 Hacking

- Use strong password for your device.
- Don't use the same password for more than one website or id or device.
- Change your password at least once in a month for your various accounts.
- Don't tell or share your password, system's pin or passcode to anyone not even your best friend.

- Use two-factor authentication and also use two-step verification for your google account.
- Read privacy policies of a company, organization, institute carefully.
- Always logout your account when your work is done.
- Use official website while entering passwords (Internet security, 2019).

3.1.2 DoS & DDoS attack

- To prevent unauthorized access of information, all hosts that are potential targets of DoS (Denial of Service) should be secured (Maghu, Sehra, & Bhardawaj, 2014).
- Make more hardware and bandwidth available, in order to allow authorized users to enter.

3.1.3 Alternate Website

- Always prefer the real website of the organization by entering https: URL which is always securing than http: URL.
- Don't click on the website from email and SMS app.
- Always check the website and procedure before filling any form.
- After confirming about the website give your information in it.

3.1.4 Cyber terrorism

- Use full-service internet security suite.
- Use strong password
- Keep the system's software always updated.
- Manage social media settings.
- Take measures to help protect you against identity theft.

3.1.5 Online credit card/debit card fraud

- User must check their balance and recent transactions online daily and also sign up for banking alerts, so that the bank will contact the user through email and SMS when some activity occurs on their accounts (Sunil Dhawan, 2013).
- Use secured network for online transaction.
- File complains immediately when your debit card/credit card is missing.
- Destroy old debit/credit cards when you have a new one.

3.1.6 E-bank theft/ATM fraud

- Use Smart credit cards which provide more security than magnetic strip.
- Shield your hand when you enter your PIN.
- Avoid using ATM in isolated locations.
- Prefer ATM machines near Bank branch.
- Examine the ATM equipment carefully for any skimming devices.
- Look for extra cameras other than general ATM security camera.
- Check the ATM card slot properly before using it (ATM Frauds and Solutions, 2010).
- Recently Govt has taken action that when someone withdraw money above 10000 rupees from ATM then a unique OTP will come to his/her cell phone by using that OTP the person will able to withdraw money from ATM (Sangeeta Ojha, 2019).

3.1.7 Forgery

- Do not try and re-circulate the fake notes.
- Look at the watermark, usually in fake notes watermark looks thick.
- In real currency figure will aligned perfectly.
- Always check the certificates by scanning their barcode.

3.1.8 Fake Calls

- Never attend the calls without caller ID information.
- If the users already receive the call then don't give them your personal information because Government agencies aren't calling to confirm your sensitive information (Consumer Information, 2019).
- Cut the call and inform the police as soon as possible.

3.1.9 Social media crime

- Use antivirus with good firewall which can detect fake user.
- Always check the URL before login.
- Use good browser and don't login through emails and messages.
- Download software from trusted sites only.
- Do not share your laptop with friends
- Do not save your password in your laptop.
- Do not trust any person or link easily.
- Do not use public WIFI.
- Restrict the access of your post to your friends and family.
- Stop accepting friend request from unknown people (Breaking Olds, 2019).

3.1.10 Online Harassment

- Do not accept friend request from unknown people from social media platforms.
- Restrict access of your profile to your friends and families only.
- Never share your phone number and other personal details.
- Never install unwanted software like dating app, gaming app etc. from unknown source (MLC, 2018).
- Do not share your photos, videos with unknown person.

3.1.11 Online job fraud

- Check the details about the company/organization who offering the job.
- Check do they want money instead of job.
- Don't share your social security number, driving license number, credit card number, or bank information before getting the job (National cybercrime reporting portal, 2008).
- Check the recruiter company/organization's email, website and name match with the real company/organization's info.
- Always prefer the real website of the organization by entering https: URL which is always securing than http: URL.

3.1.12 Online Grooming

- Avoid talking to people who asks about your physical or sexual experiences and ask to share your sexually explicit photographs or videos (“Cyber Safety,” 2010).
- Do not go to meet the person alone to whom you met online.
- Never share personal details in the chat room and limit your identity.
- Do not trust easily.

3.1.13 Online drug trafficking

- Effectively deal with peer pressure: Teen agers start using drugs because their friends utilize peer pressure.
- Deal with life pressure through meditation, exercise and yoga.
- Seek help for mental illness.
- Keep a well-balanced life.

3.1.14 CSAM

- Government provide some laws to prevent this crime, section 67(B) of IT Act states that it is punishable for publishing or transmitting of material represent children in sexually explicit act, through internet (National Cyber Crime Reporting Portal, 2008).
- Watch the behaviours when adults are with kids.
- Teach children about their private body parts and inform their parents if someone tries to touch or see their body parts.
- Inform your parents who show inappropriate interest on them.
- Raising awareness of the unacceptability of CSAM and promoting the notion that stopping CSAM is everyone’s responsibility.
- Provide mental health services to all those affected by CSAM.

3.1.15 Online Gaming

- Don’t install games from non-reputed gaming website.
- Don’t download games by clicking on the links provided by messages, mails etc. (“Cyber Safety,” 2010).
- Don’t use voice chat or video call with the players while playing game with them.
- Never meet with someone from your online gaming world.

Curative method

In this method we discussed how a person secures him/her if he/she is a victim of cybercrime. Some of the steps are given below :

- Scan the computer with up to date antivirus program.
- Keep your operating system up to date.
- Use good Firewall.
- The victim should disconnect himself/herself from internet as soon as possible.
- Unplug the network cable, phone from their system so that the data can’t leak to the hacker.
- Close the affected accounts and report to the police immediately.

- Report to the consumer agencies or cyber agencies.
- Debit card/credit card should be blocked and lodge a complaint about the fraud transactions to the nearest police station.

4. Conclusion

There are two sides of a coin, like that the valuable internet also has its own disadvantages i.e. cybercrime. As technological invention are growing up day by day to fulfil human needs and desire at the same time cybercrime is also increasing vigorously. It's impossible to stop cybercrime due to new technologies are emerging. Gradually it's becoming a great menace to human rights. Cyber attackers are mainly targeting the personal information of users and used it for their own benefit. Now, it is impossible to stop cybercrime instead of increases the awareness about cybercrime, improving the laws and also improving the bio-metric authentication to our systems, which greatly increases security. Government also put their maximum effort and funding to diminish the cybercrime. In future if the research scientist give emphasize on the growth of biometric techniques to secure personal information not only for a particular organization but also for individual one than the cybercrime will be reduce and also the collaborations between the Government organizations, intelligence, military, legal and general public can able to reduce the cybercrime.

REFERENCES :

- Balaji, G., Prassath, V. S. H., & Sriram, V. (2018). Issues Based on Cyber Crime and Security.139–146.
- Maghu, S., Sehra, S., & Bhardawaj, A. (2014). Inside of Cyber Crimes and Information Security: Threats and Solutions. *International Journal of Information & Computation Technology*, 4(8), 835–840. Retrieved from <http://www.irphouse.com>
- Indo-Asian News Service. (2019, August 22). Hackers attack Indian healthcare website, steal 68 lakh records. Retrieved from <https://www.indiatoday.in/crime/story/hackers-attack-indian-healthcare-website-steal-68-lakh-records-1590345-2019-08-22>.
- Hacking. (n.d.). Retrieved from <https://www.guru99.com/what-is-hacking-an-introduction.html>.
- Asheeta Regidi. (2016, July 25). Internet service provider in Mumbai targeted in DDoS attack, Retrieved from <https://www.firstpost.com/tech/news-analysis/internet-service-providers-in-mumbai-targeted-in-ddos-attack-3685981.html>.
- Press Trust of India. (2019, July 24). Bengal man arrested for creating fake govt website, duping 100 people. Retrieved from <https://www.indiatoday.in/crime/story/bengal-man-arrested-for-creating-fake-govt-website-duping-100-people-1572889-2019-07-24>.
- India Today Web Desk.(2019, Feb 14). Pulwama attack 2019, everything about J&K terror attack on CRPF by terrorist. Retrieved from <https://www.indiatoday.in/india/story/pulwama-attack-2019-everything-about-jammu-and-kashmir-terror-attack-on-crpf-by-terrorist-adil-ahmed-dar-jaish-e-mohammad-1457530-2019-02-16>.
- Sunil Dhawan. (2013, November). How to report a net banking, debit or credit card fraud. Retrieved from <https://m.economictimes.com/wealth/spend/how-to-report-a-net-banking-debit-or-credit-card-fraud/articleshow/66967421.cms>.
- Divyesh Singh. (2018, August 18). Hackers withdraw Rs 94 crore from Pune. Retrieved from <https://www.indiatoday.in/india/story/hackers-steal-rs-94-crore-from-pune-s-cosmos-bank-1314081-2018-08-14>.
- IAS Foundation. (2018, July). Retrieved from <https://iasscore.in/national-issues/types-of-atm-fraud>.
- Test bytes. (2018, August 23). Major cyberattacks on India(Alarming News), Retrieved from <https://www.testbytes.net/blog/cyber-attacks-on-india/>
- News18 Reporters. (2019, November 2). Five arrested for palming off fake notes from Children Bank of India in Telangana. Retrived from <https://www.news18.com/news/india/five-arrested-for-palming-off-fake-notes-from-children-bank-of-india-in-telangana-2371343.html>

Consumer Information. (2019, September). Phone scams. Retrieved from <https://www.consumer.ftc.gov/articles/0208-phone-scams>.

Press Trust of India. (2019, July 25). 33 arrested in raid at fake call centre in Noida. Retrieved from <https://www.indiatoday.in/crime/story/33-arrested-in-raid-at-fake-call-center-in-noida-1573548-2019-07-25>

Breaking Olds. (2019, August). Cyber security,” Aug, 2019. Retrieved from <https://breakingolds.com/7-ways-how-hackers-hack-social-media-accounts>.

Times of India Reporters. (2019, September 17). Pailwan leaked online: producer files complaint against piracy, Retrieved from https://m.timesofindia.com/entertainment/kannada/movies/news/pailwan-leaked-online-producer-files-complaint-against-piracy/amp_articleshow/71169107.cms .

MLC. (2018, September). Online harassment. Retrieved from <https://www.betterinternet.sg/Resources/Resources-Listing/Youth-online-harassment>.

Press Trust of India. (2019, May 26). Man held for cyberstalking ex-classmate in Hyderabad. Retrieved from <https://www.indiatoday.in/crime/story/stalker-arrested-hyderabad-1534979-2019-05-26>.

National Cyber Crime Reporting Portal. (2008). Ministry Of Home Affairs. Retrieved from <https://cybercrime.gov.in/webform/CrimeCatDes.aspx>.

Siraj Qureshi. (2019, August 21). Fake govt job racket busted in UP. Retrieved from <https://www.indiatoday.in/crime/story/fake-govt-job-racket-busted-in-up-1590064-2019-08-21>.

A Handbook for Adolescents/Students on Cyber Safety. (2010). Ministry of Home Affairs, New Delhi, India.

Devika Agrawal. (2017, May 11). Child grooming: India must take measures to protect children from online sexual abuse. Retrieved from <https://www.firstpost.com/india/child-grooming-india-must-take-measures-to-protect-children-from-online-sexual-abuse-3438528.html>.

NDTV Reporters. (2019, October 19). Over 2000 kg narcotics seized in New Delhi. Retrieved from <https://www.ndtv.com/india-news/over-2000-kg-narcotics-control-bureau-2119260>.

Munish Pandey. (2019, November 15). CBI sets up Special unit against child pornography. Retrieved from <https://www.indiatoday.in/india/story/cbi-sets-up-special-unit-against-online-sexual-exploitation-of-children-1619290-2019-11-15>.

Press Trust of India. (2019, October 15). 16 year old PUBG addict fakes kidnapping in Hyderabad. Retrieved from <https://www.indiatoday.in/crime/story/16-year-old-pubg-addict-fakes-kidnapping-1609390-2019-10-15>.

National Crime Record Bureau. (1953). Crime in India 2016 Statistics, New Delhi, India.

Cybercrime in India - Statistics & Facts. (2019, January 18). Retrieved from <https://www.statista.com/topics/5054/cyber-crime-in-india/>.

Internet security. (2019, May). Retrieved from <https://www.wikihow.com/Prevent-Hacking>.

ATM Frauds and Solutions. (2010, Feb). Retrieved from https://www.slideshare.net/Clarice_Wilson/atm-frauds-and-solutions.

Sangeeta Ojha. (2019, December 29). SBI to deactivate these Atm-cum -debit cards from January 2020. Retrieved from <https://www.livemint.com/money/personal-finance/sbi-to-deactivate-these-atm-cum-debit-card-from-january-11577255646029.html>.



THE ROLE AND IMPORTANTANCE OF FOREIGN DIRECT INVESTMENT (FDI) IN INDIA- AN OVERVIEW

Dr.DEBASIS PANI

Abstract:

In this paper I have presented cloud computing as a service model offering users on demand network access to a large shared computing resource. Building, Managing, Controlling Administrating, and process maintenance of a largescale data center results in savings of various factors in terms of electricity, hardware, network band width, operational cost. Despite these benefits, public clouds are still not widely adopted specially by the enterprises and school colleges. Most large organization today are operating on private clouds. The major concern of adoption is security. In this paper, we try to explain the security concern limit for migrating into public cloud. I have created incentive for cloud adoption, thinking beyond data abstraction and another top concern for the migration into cloud. This research elaborates the challenges of migrating enterprise data into the public cloud while retaining tenant trust and visibility. This paper describes the various security Strategies of cloud computing.

Keywords: Cloud, Data, security, asymmetric, Cryptography, protocol, Encryption.

1. Introduction

Cloud computing and optimum utilization of public cloud is today's necessity for the big, medium as well as small enterprises. The enterprises top concern migrating into the cloud is collection with potential malicious tenants. In an infrastructure such as service (IaaS) model, tenants rent virtual machine on servers they share with other tenants; logical isolation among virtual machines is enforced by hypervisors. In the platform as a service (PaaS) model, different tenants may run applications in the same operating system, without clear isolation beyond basic operating system level protections. An attacker can collocate a virtual machine under its control on the same server as a targeted victim virtual machine. The main concernis with cloud provider subject to the range of thread. Major barriers to adoption are security and operational risks to which existing cloud infrastructure are prone, including hardware failure, software bugs, power out rages, server misconfiguration, malware and insider threads. Such failures and attacks are not new; but their risk is amplified by the large scale of clouds. Another concern hindering migration into public cloud edge lack of availability and reliability guarantees. Developing moretrustworthy cloud-computing model for enterprise, and a trusted gateway with-in the enterprise from internal data center to external public cloud is the measure challenge.

My research paper addresses the challenge of migrating enterprise data into the public cloud while retaining tenant trust and visibility. I have devised cryptographic protocols and traditional trust parameters from enterprise data centers into the public cloud by conferring strong protection on migrated data including integrity, freshness, and high availability. I purposed and auditing framework to verify properties of the internal operation of the cloud and assure enterprises that their cloud data and workloads are handled securely and reliably.

The cloud computing is mostly used to sell hosted service in the sense of application service providing that run client server software at the remote location. These services are popularly known as SAS(Software As a Service),PAAS(Platform as aService),IASS(Infrastructure as aService), HAAS(Hardware as a Service)and EAAS(Everything as a service). End user access cloudbased applications through a web browser, thin clients and mobile application. Development of the internet from being document centric via semantic data towards more and more service and also present availability of high capacity of network, low cost computers, and utility computing compelled us or it lidded to growth in cloud computing.

Privacy and privacy Solution: Cloud computing services are having range of threads such as sky drive, Google docs and Gmail social. The access has the immense risk of data being disclosed either accidentally or deliberately network services has pressed the issue of privacy concern of cloud computing services. The solution to privacy in cloud computing include policy legislation as well as end user choice for how the data is stored. A small trusted gateway within the enterprise intermediates all communications from internal data center to external public cloud and independent cloud auditing services run by the third party must monitor the enterprises resources. Tenants commonly assume that encrypting their data before sending to the cloud is sufficient for securing it. Encryption provides strong confidential dataagainst a prying or breached cloud provider. It does not, however, protect against corruption of data due to software bugs or configuration errors, which requires enforcement of a different property”Data Integrity” to ensure that data retrieve by a tenant is authentic, or has not been modified or corrupted by an unauthorized party. Data integrity is very easy to achieve typically through message authentication codes or MACS on data blocks. One of the critical but sub-related security property i.e freshness of data is often overlooked. Freshness ensures that latest updates are always propagated to the cloud and prevents rollback attacks in which new version of the data is presented to the tenants.Data freshness always provide fresh and updated data. To achieve the data, freshness it is essential for protecting against miss configuration errors or rollbacks.

Our work targets the challenge of migrating enterprise data intothe public cloud whileretaining tenant trust and visibility. Idevised cryptographic protocols that extend traditional trustperimeters from enterprise data centers into the public cloud byconferring strong protections on migrated data, including integrity,freshness, and high availability. In addition, we propose an auditingframework to verify properties of the internal operation of the cloudand assure enterprises that their cloud data—and workloads—arehandled securely and reliably.

2. Challenges of Cloud computing

The highly distributed and non-transparent nature of cloud computing represents a considerable obstacle to the acceptance and market success of cloud services. Potential users of these services often feel that they lose control over their data and they are not sure whether cloud providers can be trusted. Particularly, they are concerned and confused about the capabilities of Cloud providers.(Khan, 2010). Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to

a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models(Mell, 2011).

The Essential Characteristics are:

- *On-demand self-service.* A consumer can unilaterally provision computing capabilities, such as server time and network storage, as needed automatically without requiring human interaction with each service provider.
- *Broad network access.* Capabilities are available over the network and accessed through standard mechanisms that promote use by heterogeneous thin or thick client platforms (e.g., mobile phones, tablets, laptops, and workstations).
- *Resource pooling.* The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to consumer demand. There is a sense of location independence in that the customer generally has no control or knowledge over the exact location of the provided resources but may be able to specify location at a higher level of abstraction (e.g., country, state, or datacenter). Examples of resources include storage, processing, memory, and network bandwidth.
- *Rapid elasticity.* Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward commensurate with demand. To the consumer, the capabilities available for provisioning often appear to be unlimited and can be appropriated in any quantity at any time.
- *Measured service.* Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction appropriate to the type of service (e.g., storage, processing, bandwidth, and active user accounts). Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service.

Service Models:

Software as a Service (SaaS). The capability provided to the consumer is to use the provider's applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited userspecific application configuration settings.

Platform as a Service (PaaS). The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.

Infrastructure as a Service (IaaS). The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is

able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls).

Deployment Models:

Private cloud. The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). It may be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on or off premises.

Community cloud. The cloud infrastructure is provisioned for exclusive use by a specific community of consumers from organizations that have shared concerns (e.g., mission, security requirements, policy, and compliance considerations). It may be owned, managed, and operated by one or more of the organizations in the community, a third party, or some combination of them, and it may exist on or off premises.

Public cloud. The cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider.

Hybrid cloud. The cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds).

3. Cloud computing Security issue:

Multiple tenancy is the characteristics of cloud computing that allows multiple applications of cloud service providers currently running in a physical server to offer cloud service for customers. This physical server partitions and processes different customer demands with virtualization. Virtualization possesses good capability of sharing and isolation; and is a right core technology of cloud computing. By running multiple virtual machines (VMs) in a physical machine, virtualization enables to share computing resource such as processor, memory, storage, and I/O among different customers' applications, and improves the utilization of cloud resources. By hosting different customers' applications into different virtual machines, virtualization enables to isolate fault, virus, and intrusion of one from other virtual machines and hardware; and reduce the damage of malicious applications. The technological difficulties of multiple-tenancy model include data isolation, architecture extension, configuration self-definition, and performance customization. Data isolation means that the business data of multiple customers do not intervene mutually. Architecture extension means that multiple-tenancy should provide a basic framework to implement high flexibility and scalability. Configuration self-definition means that cloud computing should support different customers' respective demands on its service platform configuration. Performance customization means that cloud computing should assure different customers' demands on the performance of multiple-tenancy platform under different workload. The impact of multiple-tenancy model (Anantwar, 2012) is different corresponding to different cloud deployment models.

Taking SaaS as an example, SaaS with multiple-tenancy function characteristic has two basic features. First, it is easy to scale-out and scale-up to serve for a mass of customers based on Web service. Second, it can present additional business logic that enables customers to extend its service platform and caters to larger enterprises' demands. Multiple-tenancy model of cloud computing

implemented by virtualization offers a method to satisfy different customer demands on security, segmentation, isolation, governance, SLA and billing/chargeback etc.

Seven Security Issues of cloud computing are ((CSA), 2010) 1) abuse and nefarious use of cloud, 2) insecure interfaces and APIs; 3) malicious insiders; 4) shared technology issues; 5) data loss or leakage; 6) account or service hijacking; 7) unknown risk profile.

4. The security risks of cloud computing

The analysis suggests the security risks of cloud computing from the perspective of customer, service provider and government as follows:

The security risks confronted by customers: The security risks that customers need to confront in cloud computing environment include:

- (1) The downtime of cloud computing environment that brings great depress to the confidence of customers cannot be avoided totally;
- (2) The leak of commercial secrets that means a nightmare for customer cannot be avoided totally;
- (3) How to face the privilege status of cloud service provider and the security concerns such as fault elimination, damage compensation and business migration etc.

The security risks confronted by service providers: The security risks that service providers need to confront in cloud computing environment include:

- (1) How to assure the long-term secure operation of the cloud data centre and isolate the fault to reduce its influence to the smallest extent; are the security risks that service providers have to face with;
- (2) How to fight against the numerous and aggressive network hackers is a disturbing security problem;
- (3) For customers with various demands, how to effectively and securely manage these customers and identify and block the malicious customers is another unavoidable task.

The security risks confronted by the government: The security risks that government administrators need to confront in cloud computing environment include:

- (1) How to enhance the security protection of a mass-scale data centre is one important concern;
- (2) How to securely manage the numerous and various scale cloud service providers;
- (3) How to evaluate and rank the security level of cloud service providers and the security credit of cloud customers and publish the proactive alarm of malicious programs.

5. Security strategies of cloud computing

When constructing or migrating customer business to a cloud environment, its security must be assured. I have proposed several security strategies as follows.

5.1 Securely Construction Strategies of Cloud Computing

Traditional Security Practice:

Traditional security practice such as the security protection of physical facilities, network, computer system, software application, and data still work in a cloud environment, and constructing a cloud environment should obey the common international information security standards such as ISO27001. (Jianhua Chea*, 23, 2011) Therefore, the traditional security practice mechanisms should be assured for a secure cloud environment.

Virtualization Security Risks Assessment:

Regardless of a public or private cloud, the construction and deployment of a cloud environment cannot lack numerous virtualization products. Therefore, we need to assess the merits and drawbacks and security level of various virtualization technology resolutions and suite products; and choose the best one to reduce the security risks brought by virtualization.

Development Outsourcing Risk Control:

Constructing a cloud environment is a large-scale systematic engineering with heavy workload and many advanced technologies, so it is hard to take charge of all development work for an organization. A practical action is to handover partial development work to several outsourcing parties, which will introduce some security risks. Therefore, we should identify the security risks incurred by outsourcing service and establish strict control strategies to assure their quality level and security requirement.

Portability and Interoperability:

Customers must keep in mind that they may have to change service providers for the sake of unacceptable cost increase at contract renewal time, business operations ceasing by service providers, partial cloud service closure without migration plans, unacceptable service quality decrease, and business dispute between cloud customer and provider etc. Therefore, portability and interoperability should be considered up front as part of the risk management and security assurance of any cloud program.

5.2 Operational Strategies of securing Cloud Computing*Business Continuity Assurance*

Rapid change and lacking transparency within cloud computing requires that business continuity plan and disaster recovery expertise be continuously engaged in monitoring the chosen cloud service providers. Regular inspections of a cloud service provider about cloud infrastructure and its physical interdependencies, disaster recovery and business continuity plans, contract documentation about security control action, recovery time objectives (RTOs), and access to data should be performed.

Attack Proactive Alerting

Security incidents will be inevitable during in a cloud environment's operation. As cloud is an ultra, large scale distributed network system that contains a lot of physical infrastructure, host system, and business application, the range attacked by malicious people is very widespread and traditional attack proactive alerting mechanisms in small network environment may fail to work. Therefore, how to monitor the network access all the time and alert timely on the malicious intrusion should be resolved.

Data Leak Prevention

Sensitive data leak is an important security risk of cloud environment. There are two potential data leaking ways: static data leakage and dynamic data leakage. Static data leakage means that the data stored in data centre, application memory and terminal memory is accessed and leaked by unauthorized users, dynamic data leakage means that the data being transformed in cloud environment is accessed and leaked by customer account hijacking or network channel wiretapping. Therefore, all static and dynamic data are facing the security risk of leakage and tamper, and how to resolve it should be concerned seriously.

Security Accident Notification & Response

Once security incidents occurred in a cloud environment, cloud service providers should notify their customers at first time, so as to customers can evaluate the potential damage incurred by these security incidents. Furthermore, cloud service providers should start the emergency plan to response these security incidents, including application-level firewalls, proxies, application logging tools, disaster recovery project, and cloud service backup etc. Therefore, cloud service providers should create their respective standard security incident response mechanisms.

Security Incidents Audit

To avoid the same security incidents occurring again, cloud service providers should find out the reasons of security incidents. Auditing can contribute to the reason analysis of security incidents in cloud environment. However, traditional security auditing techniques (e.g. security log, compliance check tools) might not satisfy the auditing demand of cloud environment.

Therefore, cloud service providers should develop some new security auditing approaches. In addition, as a new evidence-obtaining way, electronic discovery is gradually accepted by court. Courts now are realizing that information security management services are critical to making decisions as to whether digital information may be accepted as evidence. While this is an issue for traditional IT infrastructure, it is especially concerning in Cloud Computing due to the lack of established legal history with the cloud.

6. Conclusion

Cloud computing is a kind of computing paradigm that can access conveniently a dynamic and configurable public set of computing resources (e.g. server, storage, network, application and related service), provided and published rapidly and on-demand with least management and intervention. However, the prevalence of cloud computing is blocked by its security to a great extent. To contribute some effort to improving the security of cloud computing, we surveyed the main existing security models of cloud computing and summarized the main security risks of cloud computing from different organizations. Finally, I gave some security strategies against these common security issues of cloud. In the future, I hope to fulfil these security strategies with technology and management ways.

Bibliography

- (CSA), C. S. (2010). *Top Threats to cloud computing* .
- Anantwar, R. G. (2012). Cloud Computing and security models: A Survey. *International Journal of Engineering Science and Innovative Technology (IJESIT)*, 1(2).
- Jianhua Chea*, Y. D. (23,2011). Study on the security models and strategies of cloud computing. *International Conference on Power Electronics and Engineering Application*, 586 – 593.
- Khan, K. M. (2010). Q. (2010). Establishing trust in cloud computing. *IT professional*, 12(5), 20-27. *IT professional*, 12(5), 20-27.
- Mell, P. &. (2011). *The NIST definition of cloud computing*.



CYBER SECURITY THROUGH THREAT INTELLIGENCE

Dr. PRANABA NANDA DAS

Abstract :

Today, the cybersecurity industry across the globe is facing myriad challenges, generated every minute. Siphoning of unnecessary data in system intentionally and non-intentionally, pseudo alarm and passing through various non-binding security solution and a deepening botch, technical resource. Organization are flushed with some useful data and some extra data leading their analyst into blackholes, which to select and what to discard.

Threat Intelligence is a preventive method to any intrusion that may cause cyberattack. It is an engrossed method of assuring security question of who is trying to breach, what is the motto, from where it has originated and what firewalls notations are needed in victim's system to uphold. It is not only curated for some, rather it is designed for who is on the driver seat and must face the incoming vulnerabilities irrespective of size of organization.

Threat intelligence provide security options, incident response, vulnerability management, profound action risk management and decision making. Threat intelligence need integration of vast security shield rather than just a security measure which would fail to deliver the desired as needed in time of calamity.

Machines can churn huge data in fractions of seconds which a human can't. Whereas a human can perform reconnaissance, analyse more deeply than any artificial intelligence. When both fused together, they work in a coordination to give the exclusive protection intended. So, a new way to cultivate threat intelligence is using machine learning to synchronize and automate data gathering and processing, by assembling scattered data from various or previous attacked attempts, joining the calculated data by briefing on indications of compromise and deceiving techniques and steps involved of breach creators.

Keywords: Cybersecurity, Threat intelligence, Intrusion, Vulnerability management

I. INTRODUCTION

Data breach statistics published in 2012 by taking 855 samples ,Verizon RISK (response, intelligence, solution and knowledge team) which diffuses the yearly data breach investigation report.(Piper & Dewalt, 2013)

The ongoing threat defines as it's is very difficult to prevent an attack and security infiltration due to more sophisticated and accurate target vulnerabilities. cyber criminals have envisaged tactic, technique and procedure (TTP) so sometime it becomes cumbersome to find and neutralize threats. organized criminals that installs ransomware and ask for ransom to unlock the lock system.

Threat intelligence comes in open source or may be from commercial source. Cyber security is a dynamic transaction, an equilibrium act is needed between a defender and attacker.

Cyber intruder need only a loophole to dissect any system whereas defenders in their natural ground bears negative effect though of their stable position of response. For e.g. - by better intrusion detection protocol. This in equilibrium provides a gateway which is called as “scope of defection”. Scope of defection is never stable but its mobility attack techniques mutates every time and what is targeted changes every time.(Qiang et al., 2018)

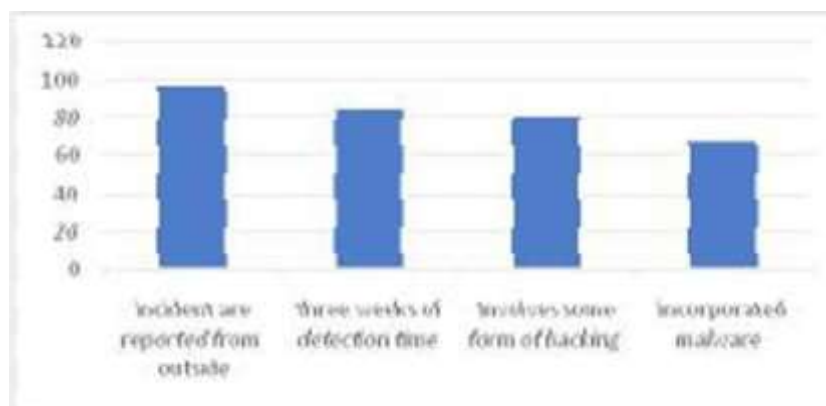


Figure 1: Data breach statistics

Given the perspective of cyberwall, as a result of interconnectivity, changing use of technology, no shielding team can have a blanket ban on attacks in queue. One way to mitigate is by observing the pattern of organization being targeted so that an incident in one place can be a prediction of attack on similar organization. This leads to threat intelligence, that which can be briefed as proof-based knowledge that includes context, mechanism, indicator, implication and curative advice that can be used to take decision.

Information security vendors and community have chalked a plan offering Threat intelligence sharing platform (TISP) solution which is a context aggregation that fetch various threat data feeds and as well a threat intelligence management system that extracts business needful from gathered information.

1.1. THREAT Vs ATTACK

Anything potential that cause harm to the system or organization as network threats, threats, cloud threats etc.

Attack used to breach the system. For ex. Dos attack, OS attack, virus, worm.

Cyber threats cover a wide screen of malicious activities that can occur in cyber world that may include website defacement, espionage, denial of service attack and destructive malware.

Cyber threat happens when there is a prediction of malicious behaviour and cyber-attack is when incident becomes a real time attack (Abu, Selamat, Ariffin, & Yusof, 2018).

2. ORIGIN OF THREAT INTELLIGENCE

The Alien vault survey at black hat 2016 revealed that most of the parties vested on their own detection standard processes as a root to their intelligence surveillance plan. Sixty six percent participants said data source was obtained from their own internal detection system, forty-seven from trusted parties, forty-three from paid service providers, thirty-eight from government agencies, thirty-six from open source communities, and twenty-seven from blogs and online forums (AlienVault. Threat Intelligence Déjà Vu. 2016.).

So, a better way of threat detection is using internal threat detection system to accumulate data as it provides better clarity to the work done and will lead a better use of accessories as information and tools in a better way. While open source or government analysis gives comprehensive landscape view. A clear view can speed up organisation efforts to develop, maintain and refine intelligence must haves that support a business in its planning and deployment of its intelligence detection lifecycle. So, we can say Cyber threat intelligence can be categorised into three types i.e.- internal, external and community.

Internal source is the way malicious data collected from within especially internal network and SIEM (security information and event management) that being installed in an organization. Threat gathered may be in form of email log, alerts, incidence response report, event logs, DNS logs, firewall log, etc.

External sources bear wide spectrum of data and it's should fulfil verification by certain having background of organization threat incoming and its relation. Online data maybe "open source" (security researcher, vendor blogs, and publicly available reputation and block lists) that provides indicator for finding the threat and configuration without any paid fees. However open source has negative side as they have feeds which has a service level agreement on data quality by cyber threat intelligence update mechanism from vendor. Whereas commercial sources of threat intelligence are provided after payment that include threat intelligence feeds, structured and unstructured threat information expressions (STIX) data reports.

Community based threat intelligence work is based on a common hub of same issue intended member. Information sharing and analysis centres (ISACs) is one type of association under National council of ISACs (NCI) which covers financial services or higher education. And the other Research and Education Networking (REN-ISAC) is a community for research and higher education.(Abu et al., 2018)

3. STANDARDS AND TOOLS IN THREAT INTELLIGENCE

To hasten up sharing of intelligence among organization, a full proof structured automated exchange of information is required. For this there is a growth of developing standard for sharing of threat intelligence (e.g., cybox, STIX and TAXII) and the augmentation of threat intelligence distribution launchpad that supports automatic information sharing (e.x- MISP, OTX). Till day STIX is known to be parental protocol for describing threat intelligence data and mostly used by threat intelligence sharing platform. (Sillaber C, Sauerwein C, Mussmann A, Breu R. Data Quality Challenges and Future Research Directions in Threat Intelligence Sharing Practice.)

Variety of standards are available today for an organization to adapt depending on their desired needs.

MITRE (Massachusetts institute of technology research and engineering) created three types of standard (cybox, STIX, TAXII) which is a package designed for multitudes need in cyber threat intelligence handling. Cybox means Cyber observable expression XML schema. CYBOX manifest chronological and time range between events. It is adopted to present STIX observation which brief happenings like IPv4 address, with handful similarS object. STIX is structured threat information expression that augments cybox wordings for briefing cyber threat information therefore it can be shared, stored and analysis can be done. The STIX architecture has nine variables such as observables, indicators, incidents, tactics, technique and procedure (TTP), exploit target, courses of action, campaigns, threat actors and reports. IP addresses for command and control servers and malware hashes are widely used among community users.

TAXII (trusted automated exchange of indicator information) is an open source standard and service guidelines to make happen sharing of actionable Cyber threat Intelligence among organizations. TAXII emphasis on sensitivity of threat by providing a common and open gateway for siphoning of

CTI with ability like encryption, authentication, addressing, alerting and querying between systems in a compact and secure manner. (Connolly J, Davidson M, Schmidt C. The Trusted Automated eXchange of Indicator Information)

MILE (management incident lightweight exchange) three stage of standards as package which involves Incident object description and exchange format (IODEF), Structured cyber security information (SCI) and Real time Internetwork Defence (RID). IODEF described by RFC 5070 to normalize data from many sources for human analysis and incident response. IODEF adds ancillary for additional data and RID can be used as communication standard in CTI (Abu et al., 2018)

To enhance static information Mandiant introduced open indicators of compromise (openIOC).

Another VERIS (vocabulary for event recording and incident sharing) enhanced by Verizon allow the organization to share incident data and be part of broad set of analysis.

There is a germinating need from organization and security professional on accumulating threat data and steps to process this data. However, without being assisted by threat intelligence tools this threat data can clog the data flow. As of which organization have developed tools for security issues handling. Two tools evolved for nomenclature and dictionary, Common platform enumeration (CPE) for hardware and Common configuration enumeration (CCE) for security software configuration. For sharing client / server in an enterprise threat intelligence data REN-ISAC (The research and education networks information sharing and analysis centre) introduced collective intelligence framework (CIF). It includes a server component that collects and store threat intelligence data. Data can be IP addresses, ASN numbers, email addresses, domain names and uniform resource locators (URLs) and other attributes.

Mcafee products used to protect a Linux, windows or Mac computer against malicious software in circulation by introducing “pull” service for subscribers, virus definition or DAT files that include up-to-date virus signature.

A malware information sharing platform (MISP) developed by the computer incident response centre Luxembourg (CIRCL) whose objective was to collect and share Indicators of compromise (IoC) of target origin including vulnerabilities or financial indicators used in fraud cases (Webroot, 2014).

4. ISSUE AND CHALLENGES

It is essential to look upon the toady’s threat types and identify the threat data source and threat intelligence sharing platform.

Threat intelligence has burgeoned in very short span of there are multiple threat data feed available either from open, close or free to us. To shield against threat intrusion customer should have timely access to relevant, actionable threat intelligence and to act on that intelligence. However, many still fight the mammoth of data and inexperience staff to cope with threat intelligence programs. For this reason, survey is done in organization where many responds by saying they need effective threat intelligence programs to handle breach (Ponemon Institute LLC. The Value of Threat Intelligence: A Study of North American & United Kingdom Companies Sponsored by Anomali. 2016.)

Privacy and legal issues come side by side when dealing with threat. Many organizations hide intrusion as it may have negative effect on their brand image and never reveal.

5. ARTIFICIAL INTELLIGENCE FOR OPERATIONAL CYBER THREATS INTELLIGENCE

The aim of Operational Cyber Intelligence is to minimize the critical tasks and belongings of an organization by mentioning the operational environment, mentioning the effect of the operating environment, scanning the adverse, and to establish future course of action (COA).

The operational cyber intelligence provides a connection that establish the probability and impact of a cyber-attack through its strategic implementation that ensures a robust framework for analysis and emphasizing on potential threats and vulnerabilities having the organization threat environment.

It doesn't search information relating to a specified attack on an organization, it rather focuses on the opponent's resistive capabilities, attack and weaponry system, operational scenarios. It makes the path more centric and enables to respond and block the attack within its own vicinity.

The main centre of gravity for the automating operational cyber threat intelligence is by studying the behavioural pattern of the threatening agents. There is no full proof systematic resources found for operational cyber threat intelligence using artificial intelligence. Some companies that have analysed the behavioural pattern through machine learning are: Exabeam (USA), Darktrace (UK), CyberX (USA), Interset (Canada).(Trifonov, Nakov, & Mladenov, 2019)

According to TU-Sofia et. Al, the activity and the outgoing data in a network of victim is the main information for constructing behavioural model. This involves analogies with the non-invasive brain-computer interface whereby the physiological human brain signals through EEGs(electroencephalograms) can be used for human emotions.(Liu, Sourina, & Nguyen, 2010)

6. CONCLUSION

Cyber threat intelligence is in its early stage and needs to fully implemented in any and every organization.

An organization can harvest threat intelligence platform to handle large data feeds and hiring a threat data analyst to analyse, process and tackle into an actionable threat intelligence while in a community the members should make sure that the data shared among members must be of that standard quality.

The context unravels that timely progression in cybersecurity works and existing failure system collapse if supportive technology ,planning and various shortcomings can be answered.(Ahrend, Jirotko, & Jones, 2016)

REFERENCES :

- Abu, M. S., Selamat, S. R., Ariffin, A., & Yusof, R. (2018). Cyber threat intelligence – Issue and challenges. *Indonesian Journal of Electrical Engineering and Computer Science*, 10(1), 371–379. <https://doi.org/10.11591/ijeecs.v10.i1.pp371-379>
- Ahrend, J. M., Jirotko, M., & Jones, K. (2016). On the collaborative practices of cyber threat intelligence analysts to develop and utilize tacit Threat and Defence Knowledge. *2016 International Conference on Cyber Situational Awareness, Data Analytics and Assessment, CyberSA 2016*. <https://doi.org/10.1109/CyberSA.2016.7503279>
- Liu, Y., Sourina, O., & Nguyen, M. K. (2010). Real-time EEG-based human emotion recognition and visualization. *Proceedings - 2010 International Conference on Cyberworlds, CW 2010*, (November 2015), 262–269. <https://doi.org/10.1109/CW.2010.37>
- Piper, S., & Dewalt, D. (2013). *Definitive Guide to Next-Generation Threat Protection*.
- Qiang, L., Zhengwei, J., Zeming, Y., Baoxu, L., Xin, W., & Yunan, Z. (2018). A Quality Evaluation Method of Cyber Threat Intelligence in User Perspective. *Proceedings - 17th IEEE International Conference on Trust, Security and Privacy in Computing and Communications and 12th IEEE International Conference on Big Data Science and Engineering, Trustcom/BigDataSE 2018*, 269–276. <https://doi.org/10.1109/TrustCom/BigDataSE.2018.00049>
- Trifonov, R., Nakov, O., & Mladenov, V. (2019). Artificial intelligence in cyber threats intelligence. *2018 International Conference on Intelligent and Innovative Computing Applications, ICONIC 2018*, 1–4. <https://doi.org/10.1109/ICONIC.2018.8601235>
- Webroot. (2014). Threat Intelligence/ : What is it , and How Can it Protect You from Today's Advanced Cyber-Attacks. *A Garner Brief*, 1, 9. Retrieved from https://www.gartner.com/imagesrv/media-products/pdf/webroot/issue1_webroot.pdf



VIRTUAL BUYER-SELLER INTERACTION: A TRUE PREDICTOR OF ONLINE PURCHASE-INTENTION

Dr. RAMESH CHANDRA RATH

Abstract:

Individuals in modern society are hard-pressed to be physically present in each and every instance that is needed for their lives. Social media made their lives easier in this regard. So, virtual interaction, if can be effective, then those individuals (on-line purchaser) may be pushed up to the threshold level of their psychology (purchase intention) to purchase on-line their desired product. In this context, the research problem can be stated as follows.

Research Problem

“Can the on-line purchase intention be predicted by virtual buyer-seller interaction?”

Objectives of the study

This study aimsto analyze the influence of effectiveness of buyer-seller interaction on online purchase intention; and to studypattern of mediating effects of customers’ engagement, perceived value, and attitude towards on-line shopping action, through a proposed model.

Research Design & Methodology

Descriptive research design is the base of this study, whereliteratures on empirical study, theoretical research work, case studies and results of various works arelogically relatedby the authors of this studyto propose a structural model. The proposed model is focused on parallel mediation.

Major Findings

Virtual buyer-seller interaction with certain level effectiveness, is justified to have meaningful impact on online purchase intention. Three parallel mediators like customers’ engagement, perceived value, and attitude towards on-line shopping action, are playing the mediation role within the above said impact. There are three sets of determinants behind the virtual buyer-seller interaction.

Originality/ Contribution

Virtual buyer-seller interaction is explored to be a meaningful antecedent of online purchase intention. Additional originality is that three parallel mediators are justified between the above said relationships.

Key Word: Online purchase intention, virtual buyer-seller interaction, social media

1. Introduction:

Individuals in modern society are hard-pressed to be physically present in each and every instance that is needed for their lives. Social media play a vital role in providing a space in their mind for the virtual interactions between seller and buyers. If these interactions can be effective, then those individuals (here after, on-line purchaser) may be pushed up to the threshold level of their psychology (here after, purchase intention) to purchase on-line their desired product. It is not so simple to describe the relationships between the buyers and sellers in the modern marketing scenario; it is even more complex in the online marketing or purchasing actions. So far as behavioural intentions are concerned, some more psychological aspects may appear between the buyers' actions and sellers' actions. In these line of thoughts, if the literatures will be searched, then some important variables can be identified such attitude, value, customers' involvement, some such other variables may appear with the relationships between buyers' behavioural intentions and the typical connection of buyer with seller. Thus, it is very important in the strategic point view that the buyer-seller relationships need to be connected with purchase intention for online purchase actions. In this background, researchers for present study put the following problem statement.

1.1 Research Problem:

Interactions in the mind space, not in the physical place or not by face to face, drive the behavioural intentions in the modern market scenario. Moreover, if it is the online purchase action, then the above said virtual buyer-seller interaction may say to be played a crucial role. But, the exact relationship patterns between 'virtual buyer-seller interaction' and 'online purchase intentions' and the role of other relevant variables within this relationship should be explored. In this context, the research question can be stated as "can the on-line purchase intention be predicted by virtual buyer-seller interaction?"

1.2 Objective of the study:

Based on the research problem, the objectives of the study are (1) to identify the determinants of effective buyer-seller interaction, (2) to study the influence of effective buyer-seller interaction on online purchase intention, and (3) to analyze the mediating effects of customers' engagement, perceived value, and attitude towards on-line shopping action.

1. Research design & methodology:

This qualitative study is based upon the modern trends of the society and wanted to take break-through by logical arguments, where literatures on empirical study, theoretical research work, case studies and results of various works are logically related by the authors of this study to propose a structural model. The proposed model is focusing on three parallel mediators. These mediators are mediating the effect of virtual buyer-seller interaction on the online shopping intention. This study proposed three groups of determinants of the above said interactions mainly relating to the social media.

2. Literature review:

As a model is proposed based on the available literatures, it is very necessary to review the relevant literatures looking at the objectives of the study, which are derived from the research questions. Variables and relationships between the variables are explored by relating the literatures on the ground of certain criteria.

3.1 Effectiveness of virtual buyer-seller interaction

To become market leader it is essential to identify and meet the needs of customers. Service quality, product quality and value influence the customers' satisfaction (Evanschitzky, Sharma, & Prykop, 2012). And, customers' satisfaction tended to focus their attention on internal performance measures (productivity) and may direct attention away from administrative effectiveness (Adsit, London, Crom, & Jones, 1996). Price of the product, response to the service failure, service quality & computation and perception of the service quality and the satisfaction are significant predictor of the customers' loyalty (Evanschitzky et al., 2012; Padmavathy, Balaji, & Sivakumar, 2012; Vyas & Raitani, 2014). The main aim of the marketer is attract the new customers and retain the existing customers, which is mainly depends on six factors namely ease of use, reliability, convenient accessibility, security, low transaction cost and the time consumption emerged as factors that lead to customer satisfaction (Ehigie, 2006; Singh & Kaur, 2013). Not only customers' satisfaction but also there is needed to good relationship among the marketer and customers' for the organizational success. So, it is stated that integrator, facilitators, and management attitude towards coordination are influencing the collaboration between the sales and marketing. And, positive correlation between the sales and marketing has significant impact on business performance (Ali, Mustafa, Ibrahim, Zaharim, & Sin, 2008; Evanschitzky et al., 2012; Meunier-Fitzhugh & Piercy, 2007). Again same thing also stated by Keiningham, Cooil, Peterson, & Vavra (2006) that the employee satisfaction do not affect the overall customers satisfaction but there is a significant impact on the employee satisfaction and the customer satisfaction. By discussing the above statements it can conclude that buyer seller interaction leads to the customers' satisfaction and Customers' satisfaction leads to the sales performance of the organization.

In the digital era of the 21st century buyer-seller interaction basically held through the virtual media. Here, social media has key role in buyer-seller interaction. Buyer-seller interaction through the social media enable the customers in value adding and marketing mix decision, customers participation on strategic choice jointly with sellers and co-create value with them (Sashi, 2012). Again, online social networks (Facebook, Google, Linked In) and Social Media (YouTube, Blogs, and Twitter etc.) sites as the sources for getting information about different companies, their brands, products and services to make a decision relating to the purchase of products (Bilal, Ahmed, & Shahzad, 2014). Another author, Tafesse, (2016) stated in relation to above that the customers are more engaged in the brand page in the social media especially in face-book. Brand-posts are liked and shared in more numbers, which shows the consumer interest on social media have relation to the potential deference. And, Firm-created social media communication is shown to have an important impact on functional brand image, while user-generated social media communication exerts a major influence on hedonic brand image (Bruhn et al., 2012). Hence, virtual buyer-seller interaction trough social media has significant role on customer satisfaction and customers' involvement in the marketing decision making.

3.2 Purchase Intention

Every organization have the main focus to sale the product or services. To sale the product or services creating the purchase intention among the consumer is most important. Perceived social value, perceived price value, perceived quality value, and perceived benefits contribute the positively towards customers purchase intention (Apiraksattayakul, Papagiannidis, & Alamanos, 2017). In addition to it, service-oriented employee behaviors play a major role in enhancing service quality and customer

satisfaction, but do not directly influence purchase intentions (Ha, Akamavi, Kitchen, & Janda, 2014). Again, But, the service-oriented employee behavior and the physical environment have no direct effect on purchase intentions (Ha et al., 2014). While, in contrast, risk perceptions have been found to adversely impact upon customer purchase intentions (Apiraksattayakul et al., 2017). And, moderating effect of celebrity endorser-product fit and purchase intention, whereas athlete endorser-product fit enhanced consumers' purchase intentions in low product involvement scenarios (Liang & Lin, 2018). Purchasing personnel and sales representative have similar attitude are found to have significant impact and having the highest score of correlation coefficient on relationship management and relationship quality (Ali et al., 2008). Supporting to the above author, another author also stated that employee satisfaction increases the customer satisfaction, independence of interaction of customer and employee (Evanschitzky et al., 2012). Further, Purchase intention is significantly and positively influenced by consumers' perceived value, which ultimately influenced by single discount rather than multiple discount. More over price has a significant moderating effect on the relationship between price-promotion framing and consumers' purchase intention (Chen & Cheng, 2019). Consumers' frequency of visiting a shopping mall is significantly and positively associated with purchase intention, which has antecedents such as convenience, tenant variety, functional attributes, hedonic value, and promotion (YEO, ONG, & Ling, 2019) and Consumers' purchase intention is increased by consumer-engagement, which ultimately explained by interactivity, sociability, social ties, and social identity (Choi, 2019).

3.3 Online purchase intention

In current trend consumers are preferring to purchase their product and service in online platform. Where, fan-page engagement have a strong impact on generating social media connectedness and purchase intention (Rahman, Moghavvemmi, Suberamanaian, Zanuddin, & Bin Md Nasir, 2018). Also, perceived emotional value and electronic word of mouth, have been found to have no significant influence upon purchase intentions (Apiraksattayakul et al., 2017). Whereas, brand awareness and perceived value had significant partial mediation effect between source credible online reviews and purchase intention (Chakraborty, 2019). In addition to it competitive online environment, it is important to better understand the main drivers of purchase intentions in the online lodging industry and how to convert browsers into renters (Nisar, Hajli, Prabhakar, & Dwivedi, 2019). Again, social network marketing will enhance the market understanding by learning what people want and need rather than trying to persuade them to buy what they happen to be offering (Gohel, 2019). competitive online environment is important to better understand the main drivers of purchase intentions in the online purchasing and how to convert browsers into consumer (Nisar et al., 2019). But, brand personality, organizational association and perceived quality had no mediation effect between source credible online reviews and purchase intention (Chakraborty, 2019). Further, Perceived enjoyment, perceived usefulness, trust, and perceived cost significantly affect mobile users' behavior intention towards m-commerce, whereas perceived ease of use and social influence do not significant influences on m-commerce use (Apiraksattayakul et al., 2017; Bhullar & Gill, 2019).

3.4 Effectiveness of buyer seller interaction & online purchase intention.

The relationship between 'buyer-seller interaction' and 'online purchase intention' are explained by various literatures those witness the mediating properties of 'customer engagement', 'perceived value', and 'attitude towards online shopping actions'. In this study, these mediators are justified as parallel mediators by putting the logical arguments within the literatures.

3.4.1. Role of customer engagement

Marketing success is mostly depending on the customer engagement. Whereas fan page in the social media is the most important way to make the customer engaged in the marker's plan. In this context relationship-oriented needs had positive impacts on fan page usage intensity and fan-page engagement and content-oriented needs had also positive impact on purchase intention (Ho, See-To, & Chiu, 2014). In addition to the results of the above study, Choi (2019) stated that interactivity and social identity among the antecedents of consumer engagement increase consumers' purchase intention through their consumer engagement. Along with this lifestyle fit uncertainty mediates the effect of product uncertainty on purchase intention (Zhenjiao Chen, Cenfetelli, & Benbasat, 2019). Again, the social networks plays a predominant role in influencing the behavior of consumers in the virtual environment, particularly through messages and the variety of information given to the consumer who is about to make a purchase (Ioană & Stoica, 2014). Hence, firm-created social media communication is shown to have an important impact on functional brand image, while user-generated social media communication exerts a major influence on purchase decision (Bruhn et al., 2012).

3.4.2. Role of Perceived value

Perceived quality of in-store brand presentation has a direct positive effect on brand value and trust-credibility whereas in-store brand image expression has direct positive impact on trust-benevolence and affective commitment (Aurier & Séré de Lanauze, 2011) and perceived value has a positive influence on purchase intention (Y. F. Chen & Cheng, 2019). Perceived social value, perceived price value, perceived quality value, and perceived benefits contribute the positively towards customers purchase intention. While, in contrast, risk perceptions have been found to adversely impact upon customer purchase intentions (Apiraksattayakul et al., 2017). Content-oriented needs and relationship-oriented needs having social interaction value show positive impacts on fan page usage intensity and fan page engagement, which ultimately enhance the online shoppers' purchase intention (Ho et al., 2014). Further, In online shopping, an increase in consumers' perceived information, increases their perceived value of the product, thereby positively affecting purchase intention (Hao, Shao, & Ma, 2019). And, also product usage scenario information can significantly and positively influence the perceived information quantity of consumers (Hao et al., 2019). But, perceived emotional value and electronic word of mouth, have been found to have no significant influence upon purchase intentions (Apiraksattayakul et al., 2017).

3.4.3. Attitude towards on-line shopping action

Attitude towards the product is a mediating variable between purchase intention and e-WOM evaluation (Hamouda & Tabbane, 2013). And, Technology acceptance and consumer attitude main reason for adaptation of online channel (Erkan, 2016). In this context, Duffett & Duffett (2017) said that social media marketing communications show a positive impact on each attitude component, but on a declining scale, which correlates to the purchase funnel. E-WOM has also significant positive impact on purchase intention through the mediation effect of consumers' trusts along with the direct impact of former on latter (Alharbi, Aziz, Yusof, & Hamid, 2020; Briliana & Juli Silaen, 2019; Wadana & Widodo, 2018). Further, celebrity endorsement in social media and brand image proved to be significant positive impact on purchase intention. Further, the characteristics like similarity, respect have significant positive influence; but characteristics like expertise, physical attractiveness, and trustworthiness do not have significant influence on effectiveness of celebrity endorsement in social

media (Ahmad, Idris, Mason, & Chow, 2019). But, product uncertainty and life-style uncertainty affect negatively on-line purchase intention; product uncertainty drive positively life-style uncertainty (Zhenjiao, Chen et al., 2019). Generally, decisions of the customers are taken by gathering information through the search engines, read other customers reviews on retailing sites or third-party forums not controlled by seller has more influence on purchase intentions than other source of information for the decision making (Kim, 2019). Another author, Sashi (2012) also stated that buyer-seller interaction through the social media enable the customers in value adding and marketing-mix decision, customers participation on strategic choice jointly with sellers and co-create value with them . Again, firm-created social media communication is shown to have an important impact on functional brand image, while user-generated social media communication exerts a major influence on hedonic brand image (Bruhn et al., 2012). For developing an e-commerce system, customers’ online shopping intentions, satisfaction of customers, online system quality, online information quality and online service quality are important elements (Ke, 2019). And, brand and brand value has the significant impact on the customers satisfaction and loyalty (Moorthi & Mohan, 2017).

4. Results & discussion:

From the above evidence it is originate that the key determinant of the buyer-seller interaction is customer specific attributes, producer specific attributes (Evanschitzky et al., 2012) and social media specific (Sashi, 2012). The customer specific attributes are knowledge, level of interest, convenience and perceived risk. According to Ehigie, 2006; Singh & Kaur (2013) main aim of the marketer is to attract the new customers and retain the existing customers, which mainly depends on factors like ease of use, reliability, convenient accessibility, security, low transaction cost and the time consumption. The producer specific attributes are presence of company/ brand in websites (Ho et al., 2014) and e- interaction scope given by the company (Nisar et al., 2019). And, social-media specific attributes include convenience to browse (Ke, 2019), technical availability (Erkan, 2016) and attractiveness of the website (Zhenjiao Chen et al., 2019).

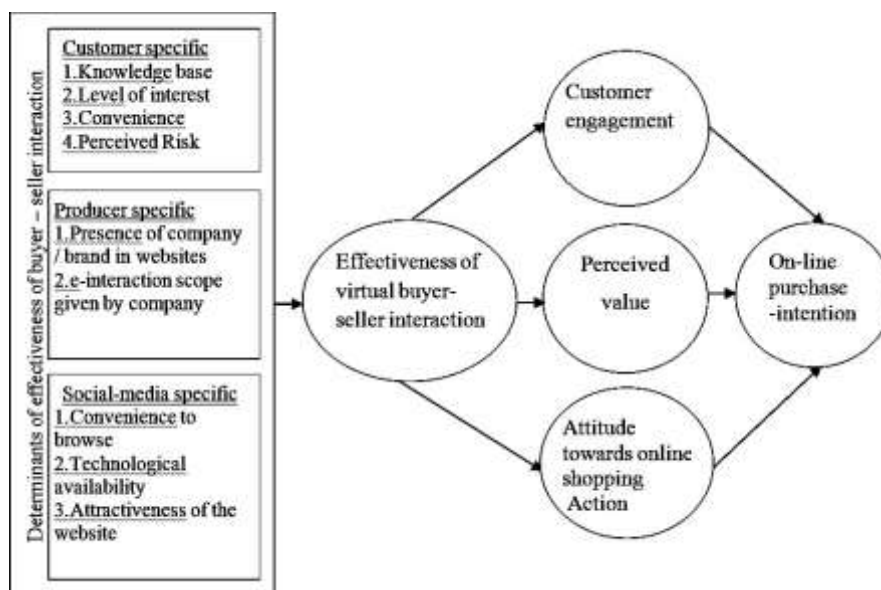


Fig. – 1 Online purchase intention grounds on virtual buyer-seller interaction

According to Ho, See-To, & Chiu (2014) relationship-oriented needs justify positive impacts on fan-page usage intensity and fan page engagement and content-oriented needs had also positive impact on purchase intention. Additionally, Choi (2019) stated that interactivity and social identity among the antecedents of consumer engagement increase consumers' purchase intention through their consumer engagement. So, customer-engagement acts the mediating role between virtual buyer-seller interaction and purchase intention. In online shopping, an increase in consumers' perceived information, increases their perceived value of the product, thereby positively affecting purchase intention (Hao et al., 2019). And, attitude towards the product is a mediating variable between purchase intention and e-WOM evaluation (Hamouda & Tabbane, 2013). Further, technology-acceptance and consumer attitude main reason for adaptation of online channel (Erkan, 2016) and social media marketing communications had a positive on each attitude component, but on a declining scale, which correlates to the purchase funnel (Duffett & Duffett, 2017). Therefore, from the above discussion it is found that effectiveness of virtual buyer-seller interaction has significantly driving to the online purchase intention with the parallel mediation through the customer engagement, perceived value and attitude towards online shopping action. Once the impact of virtual buyer-seller interaction on online purchase intention is justified in any market scenario, it can be inferred from this study that more is degree of effectiveness of virtual buyer-seller interaction; more will be the strength of intention for online purchase action in the said market scenario. This study further justify that three variables mediating simultaneously (parallel mediators) the effect of virtual buyer-seller interaction on online purchase intention. Hence, the mediating effect can carry more strength rather than the direct effect of former on latter.

5. Major Findings:

Virtual buyer-seller interaction with certain level of effectiveness is justified to have meaningful impact on online purchase intention. The buyer-seller interaction has three sets of drivers such as customer specific attributes, producer specific attributes and social-media specific attributes. The customer specific attributes include knowledge, level of interest, convenience and perceived risk. Producer specific attributes are derived from presence of company/ brand in website and e-interaction scope given by company. And, social-media specific attributes are convenience to browse, technological ability and attractiveness of website. There are three parallel mediators like customers' engagement, perceived value, and attitude towards on-line shopping action, are playing the mediation role within the above said impact. Thus, these three mediators enhance the impact of virtual buyer-seller interaction on online purchase intention than the former would have on the latter only by direct relationship.

6. Originality / Contribution:

Virtual buyer-seller interaction is identified and proposed in this study as an unique managerial term to be important driver / antecedent of online purchase intention, which can give deeper insight into the e-commerce strategy. Another contribution to the existing field of knowledge, structural models having mediation, is that three parallel mediators are justified to mediate the effects of effective buyer-seller interaction on the online shopping intention. At first, rare researchers addressed the issue of virtual buyer-seller interaction; further, rarely any literatures justify any variable/factor as the antecedent(s) of effectiveness of virtual buyer-seller interaction, which are addressed in the present study.

7. Limitations & Future research avenues:

This study is based up on the logical arguments with in the reviews of past literatures, but the empirical evidences can judge the proposed relationships shown in the model with a better applicability. Discussion with any relevant executive or the opinion of decision maker's organizations would have given an in-depth idea regarding customer retention and its preceding stages, which is lacking in the present study. Justifying the proposed model empirically can add more value to the justifications.

8. REFERENCES:

- Adsit, D. J., London, M., Crom, S., & Jones, D. (1996). Relationships between employee attitudes, customer satisfaction and departmental performance. *Journal of Management Development*, 15(1), 62–75. <https://doi.org/10.1108/02621719610107827>
- Ahmad, A. H., Idris, I., Mason, C., & Chow, S. K. (2019). The impact of young celebrity endorsements in social media advertisements and brand image towards the purchase intention of young consumers. *International Journal of Financial Research*, 10(5), 54–65. <https://doi.org/10.5430/ijfr.v10n5p54>
- Alharbi, M. K., Aziz, Y. A., Yusof, R. N. R., & Hamid, A. B. A. (2020). Moderating Role of Trust between eWOM Communication and Purchase Intention. *Journal of Chemical Information and Modeling*, 1(1), 44–53. <https://doi.org/10.1017/CBO9781107415324.004>
- Ali, K. A. M., Mustafa, Z., Ibrahim, K., Zaharim, A., & Sin, K. M. (2008). Correlation Analysis on Buyer-Seller Relationship in Malaysia/ : With Reference to Similarity and Relationship in Managerial and Quality Perspective School of Mathematics Science , Faculty of Science and Technology , Faculty of Engineering , Universiti Keb. In *1st WSEAS International Conference on Multivariate Analysis and its Application in Science and Engineering* (pp. 99–104).
- Apiraksattayakul, C., Papagiannidis, S., & Alamanos, E. (2017). Shopping via Instagram: The Influence of Perceptions of Value, Benefits and Risks on Purchase Intentions. *International Journal of Online Marketing*, 7(4), 1–20. <https://doi.org/10.4018/ijom.2017100101>
- Aurier, P., & Séré de Lanauze, G. (2011). Impacts of in-store manufacturer brand expression on perceived value, relationship quality and attitudinal loyalty. *International Journal of Retail & Distribution Management*, 39(11), 810–835. <https://doi.org/10.1108/09590551111177945>
- Bhullar, A., & Gill, P. S. (2019). Future of Mobile Commerce: An exploratory study on factors affecting mobile users' behaviour intention. *International Journal of Mathematical, Engineering and Management Sciences*, 4(1), 245–258. <https://doi.org/10.33889/ijmems.2019.4.1-021>
- Bilal, G., Ahmed, M. A., & Shahzad, M. N. (2014). Role of Social Media and Social Networks in Consumer Decision Making: A Case of the Garment Sector. *International Journal of Multidisciplinary Sciences and Engineering*, 5(3), 1–9. Retrieved from <http://www.ijmse.org/Volume5/Issue3/paper1.pdf>
- Briliana, V., & Juli Silaen, N. (2019). Creating Purchase Intention Throughs Positive Electronic Wom, Brand Attitude, Satisfaction, and Brand Awareness. Case of Wardah Exclusive Lip Cream on Instagram. *SU-AFBE*, (November). <https://doi.org/10.4108/eai.6-12-2018.2286282>
- Bruhn, M., Schoenmueller, V., Schäfer, D. B., Bruhn, M., Schoenmueller, V., & Scha, D. B. (2012). Are social media replacing traditional media in terms of brand equity creation/ ? *Management Research Review*, 35(9), 770–790. <https://doi.org/10.1108/01409171211255948>
- Chakraborty, U. (2019). The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions. *Journal of Research in Interactive Marketing*, 13(2), 142–161. <https://doi.org/10.1108/JRIM-06-2018-0080>
- Chen, zhenjiao, Cenfetelli, R., & Benbasat, I. (2019). The Influence of E-Commerce Live Streaming on Lifestyle Fit Uncertainty and Online Purchase Intention of Experience Products. In *Proceedings of the 52nd Hawaii International Conference on System Sciences* (Vol. 6, pp. 5081–5090). <https://doi.org/10.24251/hicss.2019.610>
- Chen, Y. F., & Cheng, R. C. (2019). Single discount or multiple discounts? Effects of price promotion framing messages on online consumer purchase intention. *International Journal of Technology and Human Interaction*, 15(1), 1–14. <https://doi.org/10.4018/IJTHI.2019010101>

- Choi, Y. (2019). The study of antecedents of consumer engagement and purchase intention in social commerce. *International Journal of Cyber Behavior, Psychology and Learning*, 9(2), 51–63. <https://doi.org/10.4018/IJCBPL.2019040104>
- Duffett, R. G., & Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitudes. *YOUNG CONSUMERS*, 18(1), 19–39. <https://doi.org/10.1108/YC-07-2016-00622>
- Ehigie, B. O. (2006). Correlates of customer loyalty to their bank: A case study in Nigeria. *International Journal of Bank Marketing*, 24(7), 494–508. <https://doi.org/10.1108/02652320610712102>
- Erkan, I. (2016). The Influence of Electronic Word of Mouth in Social Media on Consumers' Purchase Intentions. *Computers in Human Behavior*, 61(June), 47–55.
- Evanschitzky, H., Sharma, A., & Prykop, C. (2012). The role of the sales employee in securing customer satisfaction. *European Journal of Marketing*, 46(3–4), 489–508. <https://doi.org/10.1108/03090561211202576>
- Gohel, P. (2019). Targeted social network advertising/ : An intuitive study to determine user centrality in dynamic contact network. *INFOCOMP*, 18(1), 09–19.
- Ha, H. Y., Akamavi, R. K., Kitchen, P. J., & Janda, S. (2014). Exploring key antecedents of purchase intentions within different services. *Journal of Services Marketing*, 28(7), 595–606. <https://doi.org/10.1108/JSM-01-2013-0025>
- Hamouda, M., & Tabbane, R. S. (2013). Impact of Electronic Word of Mouth Evaluation on Purchase Intention. *International Journal of Online Marketing*, 3(2), 20–37. <https://doi.org/10.4018/ijom.2013040102>
- Hao, R., Shao, B., & Ma, R. (2019). Impacts of video display on purchase intention for digital and home appliance products-empirical study from China. *Future Internet*, 11(11), 1–19. <https://doi.org/10.3390/fi11110224>
- Ho, K. K. W., See-To, E. W. K., & Chiu, G. T. C. (2014). How Does a Social Network Site Fan Page Influence Purchase Intention of Online Shoppers. *International Journal of Social and Organizational Dynamics in IT*, 3(4), 19–42. <https://doi.org/10.4018/ijodit.2013100102>
- Ioană, E., & Stoica, I. (2014). Social media and its impact on consumers behavior. *International Journal of Economic Practices and Theories*, 4(2), 295–303.
- Ke, Y. (2019). The e-commercial quality components impact on customers' purchase intention The e-commercial quality components impact on customers' purchase intention. *Journal of Physics: Conference Series*, 1–3. <https://doi.org/10.1088/1742-6596/1345/3/032033>
- Keiningham, T. L., Aksoy, L., Cooil, B., Peterson, K., & Vavra, T. G. (2006). A longitudinal examination of the asymmetric impact of employee and customer satisfaction on retail sales. *Managing Service Quality: An International Journal*, 16(5), 442–459. <https://doi.org/10.1108/09604520610686124>
- Kim, Y.-J. (2019). The Relative Impact of User- and Marketer-generated Content on Consumer Purchase Intentions/ : The Case of the Social Media Marketing Platform , 0 . 8L. In *International Association of Societies of Design Research Conference* (pp. 1–13).
- Liang, H. L., & Lin, P. I. (2018). Influence of multiple endorser-product patterns on purchase intention: An interpretation of elaboration likelihood model. *International Journal of Sports Marketing and Sponsorship*, 19(4), 415–432. <https://doi.org/10.1108/IJSMS-03-2017-0022>
- Meunier-Fitzhugh, K. Le, & Piercy, N. F. (2007). Exploring collaboration between sales and marketing. *European Journal of Marketing*, 41(7–8), 939–955. <https://doi.org/10.1108/03090560710752465>
- Moorthi, Y. L. R., & Mohan, B. C. (2017). Brand value proposition for bank customers in India. *International Journal of Bank Marketing*, 35(1), 24–44. <https://doi.org/10.1108/IJBM-09-2015-0132>
- Nisar, T. M., Hajli, N., Prabhakar, G., & Dwivedi, Y. (2019). Sharing economy and the lodging websites: Antecedents and mediators of accommodation purchase intentions. *Information Technology and People*. <https://doi.org/10.1108/ITP-06-2018-0297>
- Padmavathy, C., Balaji, M. S., & Sivakumar, V. J. (2012). Measuring effectiveness of customer relationship management in Indian retail banks. *International Journal of Bank Marketing*, 30(4), 246–266. <https://doi.org/10.1108/02652321211236888>
- Rahman, Z., Moghavvemi, S., Suberamaian, K., Zauddin, H., & Bin Md Nasir, H. N. (2018). Mediating impact of fan-page engagement on social media connectedness and followers purchase intention. *Online Information Review*, 42(7), 1082–1105. <https://doi.org/10.1108/OIR-05-2017-0150>

Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*, 50(2), 253–272. <https://doi.org/10.1108/00251741211203551>

Singh, J., & Kaur, P. (2013). Customers' attitude towards technology based services provided by select indian banks: Empirical analysis. *International Journal of Commerce and Management*, 23(1), 56–68. <https://doi.org/10.1108/10569211311301439>

Tafesse, W. (2016). An experiential model of consumer engagement in social media. *Journal of Product and Brand Management*, 25(5), 424–434. <https://doi.org/10.1108/JPBM-05-2015-0879>

Vyas, V., & Raitani, S. (2014). Drivers of customers' switching behaviour in Indian banking industry. *International Journal of Bank Marketing*, 32(4), 321–342. <https://doi.org/10.1108/IJBM-04-2013-0033>

Wadana, G. B., & Widodo, A. (2018). SOCIAL MEDIA USAGE; INVESTIGATION OF E-WOM, TRUST, ON PURCHASE INTENTION INVOLVEMENT OF RENAN STORE CONSUMERS IN BANDUNG CITY. *Electronic Word of Mouth Picture*, 1(2), 219–222.

YEO, A. C. M., ONG, W. S., & Choon Ling, K. (2019). The antecedents influencing shoppers' frequencies of visit and purchase intention in the shopping mall/ : A study on the pull factors. *HOLISTICA*, 10(3), 53–74. <https://doi.org/DOI:10.2478/hjbpa.2019.0029>



ALTERATION OF HEALTHCARE SERVICE QUALITY IN INDIA:AN EXPLORATIVE INVESTIGATION ON DIGITAL INTERVENTION

ANAND GOUDO

Abstract:

Quality of healthcare is an imperative aspect in order to strengthen the healthcare system of India. In the current scenario, many aspects of the healthcare delivery have been digitalized. The digitalisations of the services have been done in the aspects of both technical and functions aspects of the service. The digitalization of the service quality have been done in order to provide speedy healthcare services. The present study will extract out the latent factors that affect the perception of the patients towards digital aspects of the healthcare service quality. The study has used exploratory factor analysis to extract out the latent unmanifested variables affecting the perception of the patients. The implied findings of this research will help in framing a patient centric collaborative service delivery model suited according to the contemporary demands of digitalization.

Keywords: Healthcare, service quality, perception, patients, digitalisation

Introduction:

The health service is undergoing drastic change with the changing phases of technology and consumer demands. The service delivery in the healthcare organisations have been embedded with the digital technology interventions. The interventions of the technology have been efficient in speedy delivery of the service. The technological interventions have been associated with the the blend of the technological as well as functional aspects. The interventions of electronic services have wide range of possibilities that could benefit the patients.¹⁻³ The technological innovations and interventions could shrink the bubble of disparities that substantially hinders the accessibility in health service among the different economic classes.⁴⁻⁵ As health organisations have integrated the digital mode of service delivery, it is very necessary to evaluate its operational validity and its resilience for uncertain service delivery problems.

Contemporary services have reported the perception of the patients and its overall validity towards the integrated health services. However there is discrepancy in the health service accessibility across different groups of patients due to unique socio-economic fabric.⁶

Theoretical background:*Drivers of e-health:*

Electronic communications can have enormous benefit on the medical care. The key contributors of the health care services depends on the evaluation of the information, communication oriented and decision making strategy of diverse stakeholder. The speed of connectivity, error free server strengthens the strong foundation of the e health services. An efficient e-health service strengthens the public health framework, and improves the collaborative healthcare by improving access to quality of care. Thus the E-health system enhances connectivity and clinical core capabilities⁷ the drivers of e-health are i) Preference of the consumer. ii) Technical specifications iii) Policy iv) Economic perspectives.

This is characterised by the availability of the information and inclination of the consumer to avail online information.⁸ there is growing trend among the millennial for greater participation towards the management of personal health status. It should be equipped with the equitable health access which further laid the foundation for the customized health services. Through the information technology intervention, accessibility to the special knowledge and the expertise can be designed easily. Through proper information availability, health statistics reports can be prepared easily.¹⁰

The technical capabilities of the information technology ecosystem with the availability of speed, connectivity is basic foundation of the designing the digital service strategies. The capabilities of the health services through transcendence of the geographical constraints across time and space and even within races.⁹ The e-health services are necessary to draft policy for resource allocation planning, optimising the use of resources. The health services are necessary to enhance to frame convenient patient oriented healthcare system through Integrated Delivery Network. The health care setting also aimed to design healthcare with economic perspectives. The design of the National Health Policy is designed with inclusion of the cost effective digitally enabled service with profound technical interventions.

Research objective:

- 1) To extract out the factors affecting the perception of the patients towards the digital interventions of service delivery.

Research Methodology:*Framework of the sample*

The assessment of digital health service is a sophisticated concept. It requires basic knowledge of the computers and internet. Hence in order to assess the cognitive psychology, the sampling frame has been taken from the population having minimum experience of the online accessibility of e-health services. The method of convenient sampling has been taken for justification of research objective.

Research Design

The research objective has been addressed through the mixed method approach. The mixed method approach condition is appropriate in the conditions when they provide substantial provision of provisionally accepted theoretical relationships.¹¹ In this research, explanatory method have been followed sequentially in order to extract the results in a better way. In this part only, quantitative investigation has been conducted in order to filter out the patients who have minimum experience of the accessibility of the health services digitally. This process has helped in guiding the selection of the healthcare organisation for the qualitative investigation. The survey questionnaire has been

distributed among the 200 patients seeking the e-health services regularly. The qualitative survey after screening through quantitative investigation has been conducted by visiting the sites. In total a total of 51 site visits have been accomplished. In 51 site visits, field notes have been drafted. After that principles of computational linguistics have been followed. The qualitative investigation, the codes are simplified and transcribed contextually with ingeminated relevant literatures previously.

Results and Analysis:

Constructs of Digital marketing as obtained through qualitative investigation:

1) Efficiency of the system: A system is defined by its component parts and the interactions among them. Our analysis suggests that interviews reflecting a systems perspective also frequently reflected other perspectives related to the components of health care organizations (e.g., financial systems) and the kind of learning orientation that has been described as critical to facilitating organizational adaptation in a systems context.

2) Ease of use: Our analysis suggests that a focus on people (e.g., the needs of patients) goes hand in hand with a concern for human relationships. The ease of use and access are two important factors for designing and integrating the service. The key constructs of the Ease of the use are convenience in navigation, Ease to access, effective navigation, and absence of issues like system shutdown and system error.

United words	N	Compression ratio
digital_security	2	22.5
digital_reliability	2	15.0
digital_system	2	20.0

Table 1: Details of Bigram



Figure 1: Term frequency Wordcloud representing thematisation of the constructs

3) Security: The security of the services has been an important dimension for delivering the service. It includes both technical and functional aspects. Since the services are delivered partially through digitally and manually. These securities in the digital communication are maintained through the maintenance of the privacy of information and protection of the customer data. The security of the financial transaction also plays a greater role in ensuring the confidence in the system.

4) Service reliability: The reliability of the system plays an important role in the delivery of the service. The service reliability includes accuracy in drafted bills, accuracy in medical record maintenance and flexibility in online transactions.

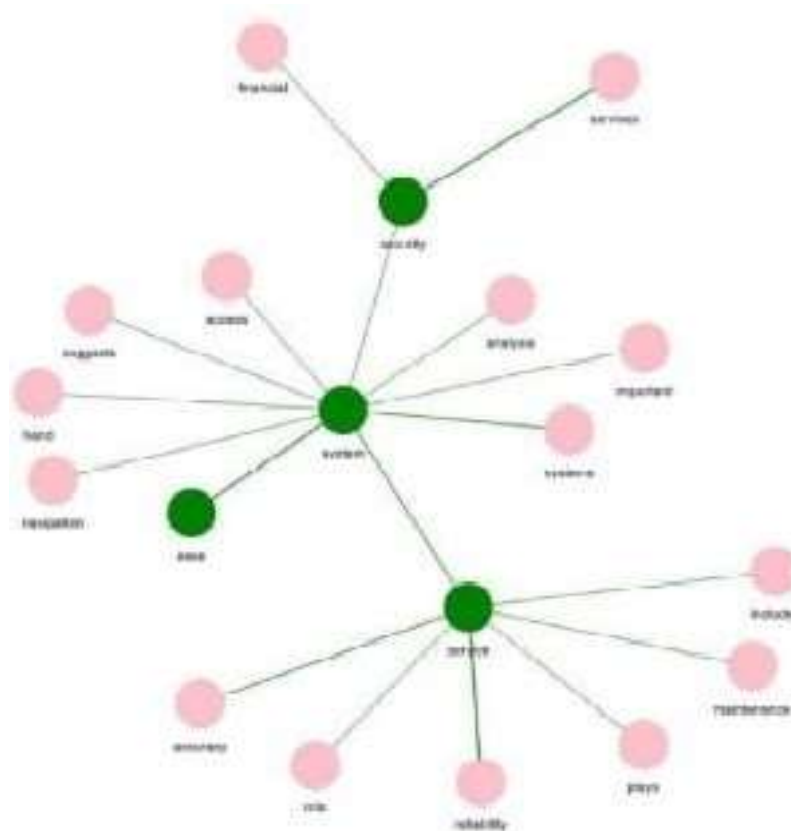


Figure2: Redefined diagram obtained through qualitative investigation depicting the perceived factors affecting the perceived service quality.

Discussions and Managerial Implications:

The implied findings of this research will help the organisations as well as stakeholders in designing the strategy for e-health services. The healthcare management services are integrated digitally. In depth knowledge about the perceived cognition of patients or users about the services will help in strengthening the technical foundation for framing and implementing the digital services. It will lay the way for the concept of “SOLID” as i) Single Responsibility Principle ii) Open/Closed Principle iii) Liscov Substitution Principle iv) Interface Segregation Principle v) Dependency Inversion Principle along with the principle of “YAGNI”. Besides these the analysis of the factors will help in predicting the nature of patients which will also help in infusing the concepts of wellness. The better execution and designing of the digitally integrated services will help in predictive analytics of the intervention requirement for the cohort of the patient. The study will also help in comprehending the financial planning and other related resource allocation strategically as well as resiliently.

Limitations of the research:

The limitations of this research can be extended to the following aspects:

- i) The span of qualitative investigation can be extended with wider coverage.
- ii) The purview of this study can also be taken from the opinion of technical experts as well as stakeholders of the organisation in order to have better insight.

References:

1. Bahr TJ, Crampton NH, Domb S. The Facets of Digital Health Professionalism: Defining a Framework for Discourse and Change. In: Shachak A, Borycki E, Shmuel PR, eds. Health professionals' education in the age of clinical information systems, mobile computing and social networks. 1st edn. Academic Press, 2017: 65–89
2. Mather CA, Cummings EA, Gale F. Advancing mobile learning in Australian healthcare environments: nursing profession organisation perspectives and leadership challenges. *BMC Nurs* 2018;17:44.
3. Goldsmith J. The Internet and managed care: a new wave of innovation. *Health Affairs*. 2000;19:43–50.
4. Robinson TN, Patrick K, Eng TR, Gustafson D. An evidencebased approach to interactive health communication: a challenge to medicine in the information age. Science Panel on Interactive Communication and Health. *JAMA*. 1998;280:1266–9.
5. Rouleau G, Gagnon M-P, Côté J, et al. Impact of information and communication technologies on nursing care: results of an overview of systematic reviews. *J Med Internet Res* 2017;19:e122..
Ferguson T. Digital doctoring—opportunities and challenges in electronic patient-physician communication. *JAMA*. 1998;280: 1362–2.
6. Eng TR, Maxfield A, Patrick K, Deering MJ, Ratzan SC, Gustafson DH. Access to health information and support: a public highway or a private road? *JAMA*. 1998;280:1371–5.
7. Maheu M, Whitten P, Allen, A. E-health, Telehealth, and Telemedicine. Jossey-Bass, San Francisco, CA, 2001.
8. Baker L, Wagner TH, Singer S, Bundorf MK. Use of the Internet and e-mail for health care information: results from a national survey [erratum appears in *JAMA*. 2003;290:334]. *JAMA*. 2003;290:2400–6.
9. Novak TP, Hoffman DL. Bridging the Digital Divide: The Impact of Race on Computer Access and Internet Use. 1998.
10. Rangan, V. K. 2009. “Aravind Eye Hospital, Madurai, India: In Service for Sight,” Harvard Business School Publishing Case Study, Product No. 593098-PDF-ENG
11. Edmondson, A. C., & Mcmanus, S. E. (2007). Methodological fit in management field research. *The Academy of Management Review*, 32(4), 1155–1179. <https://doi.org/10.2307/20159361>



MACHINE LEARNING TECHNIQUES FOR DETECTION OF SPAMMERS IN ONLINE SOCIAL NETWORKS: A SURVEY

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Abstract:

Online Social networks are being used by many internet users to stay connected with friends, interact online and collaborate among them. Users often spend enough time on popular online social networking sites (e.g., Twitter, Instagram, Facebook, etc.), to get news updates, discuss among friends on current issues and post messages that is interesting to others. However, these popular social networks are being exploited by many spammers who deliberately involve in malicious activities such as inserting spurious messages or the some commercial information, posting spam or fake reviews on products or services etc., that lead to severe inconvenience and confusion for genuine users' in their social activities. So detection of spammers is a key research challenge in the online social networks. In this paper, we surveyed the literature for machine learning based effective techniques used for detection of spammers in online social networks.

Keywords: Machine Learning, Spammers' Detection, Online Social Networks

1. Introduction:

Online Social Networks (OSNs) provides opportunities to internet users establishing virtual connections among the people similar community, backgrounds, and activities to communicate, collaborate and expand their circle of friends. Social network users also share their interests, achievements, views, comments, reviews, opinions, brand promotions in the form of texts, photos, videos etc. In the last decade, OSNs like Twitter and Facebook, Sina Weibo, etc, are being popularly used as a communication intermediate by millions of users of the internet. The OSNs combine user profiles with the mobile technologies which enable the users to be connected to the other users at any time and from anywhere. OSNs are popular because of the fact that users can update their own profiles and upload personal data, communicate with other users, and view other's profiles. Furthermore, OSNs are utilized for job searching, learning, entertainment, and business advertisements and product promotions. However, the unrestricted access and usages of OSNs makes their legitimate

users vulnerable to different types of security attacks and creates a high risk for them as these networks are also being used as a tool by the security attackers for criminal and malicious activities. Attackers can acquire sensitive information about the user by using OSNs and can carry out many kinds of criminal activities or cyber attacks like spamming, malware distribution, phishing, Sybil attacks etc. In this survey we focus on the traditional security threats in OSNs especially spamming and summarize the machine learning techniques used for detection of spammers in OSNs.

1. Online Social Networks

Wikipedia defines a social network as “a social structure made up of a set of social actors (users), sets of dyadic ties, and other social interactions between the actors” [1]. A typical structure of a social network is represented in Fig. 1.

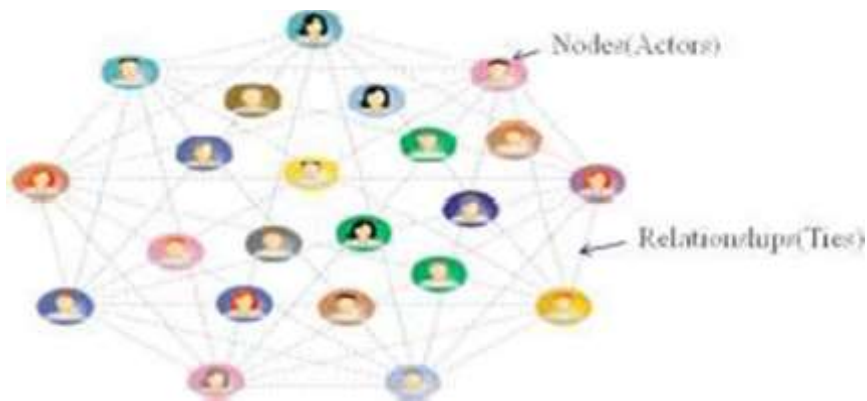


Figure 1: Social Network Structure

An Online Social Network (OSN) is defined as a Social network formed by the users of specific social media and there exist social links between them [2]. Each of the users can communicate and collaborate among them. To name some of the OSNs are Facebook, Twitter, Flickr, Instagram, Sina Weibo, etc. Here after we use the term OSNs in place of Online Social Networks.

2. Security threats in OSNs and their impacts

Nowadays, the OSNs are being widely used by millions of users to share their views and suggestions regarding anything and also their personal information among their friends, and other users. This shared personal information, including photos and videos may somehow be captured and illegally used by malicious users and third party organizations for earning their revenues. So there are a lot of potential security threats in OSNs which put the OSN users at risks. These threats can be divided into three major types [3]. The one of the kind of threats is *multimedia content threats*. The second of its type is *traditional threats* in which attackers carry out attacks based on the weaknesses and vulnerabilities of OSNs' infrastructure. The third kind of attack is *social threats* in which attackers setup a social relationship with OSNs users with intention to exploit them. In the next section we will discuss about the traditional security threats in OSNs and their impact on the OSN users.

3. The traditional threats and their impacts

The traditional security threats are intended by the attackers to exploit the weaknesses and vulnerabilities of the OSNs' infrastructure and services to attack on OSN users. Traditional threats include phishing, spreading malware, spamming, and profile cloning etc. to attain a user's personal

information. This information are very beneficial for attackers, as they can congregate other confidential particular, like a user's personal identification number, login, password, and bank account details and using these information they can commit other serious cyber crimes [3]. Now, we recount various traditional kind of security threats posed by the attackers and their impact on OSN users. Fig. 2 represents some of the types of traditional threats frequently observed in OSNs.



Fig. 2: Types of traditional security threats

4.1 Phishing

In OSNs, the attacker tries to drag the sufferer to a malicious page by sharing a fake URL with an attractive or alluring title and/or picture for launching phishing attack. It leads to cyber fraud, information loss, account loss, pornography, cyber stalking etc [3].

4.2 Malware

Most of the OSNs do not know how to check whether the URL introduced contains malware or not. The attackers may insert spurious URLs to redirect the user to a fake website, and later, send the malwares to user's system for stealing confidential data of users interrupting the system operations [4]. This may lead to loss or disclosure of personal information, loss of ownership of data, loss of reputation of users.

4.3 Sybil attack and fake profile

Now-a-days, a Sybil attack in OSNs is a consequential and notable threat. The Sybil attackers create multiple fake profiles to subvert the reputation of the service providing systems and the users. By operating these fake profiles, they can outvote or countermand the innocent OSN users and create confusion among the others [5].

4.4 Spamming

In OSNs, the attackers spread the unsolicited bulk messages (spam) in the OSNs in the form of false news, advertising, false promises, false notices, fake reviews etc. That causes serious inconvenience to the users. It leads to loss of time, misuse of network bandwidth, confidentiality and reputation of the legitimate users of the OSNs [6].

4.5. De-anonymization attack

Some OSNs like Facebook and Twitter, has features to protect the users' identity and maintain privacy by using alias name. But malicious users can use the methods like group memberships, tracking cookies to disclose the user's real identity in OSNs. It leads to disclosure of identity, relationship, loss of reputation of the authentic users [7].

4.6 Profile cloning attack

Attacker creates clones of the the existing user's profile to gather sensitive personal information about the user's friends or to commit several types of internet scams and frauds. This may cause severe problems like loss of reputation, disclose of sensitive information, cyber bullying, cyber stalking and blackmailing etc [8].

4. Spammer detection techniques in OSNs

In the last few years, security issues in OSNs have been the potential research area of many researchers in industries and academia. Now-a-days unwanted messages (comments, chat, etc.) in OSNs create a lot of inconvenience and bring many security threats in OSNs, which are often called Social Spam. Social spam is always directed towards the users of social networking platforms. Experts view that up to 40% of users of OSN have fake accounts and these are used for spamming [9]. It is a serious security issue that needs to be addressed efficiently and accurately. Many researchers have proposed many techniques in the literature. In our survey we will review the machine learning algorithms.

5. Machine learning Techniques for spammers detection

In this section, we review different Machine Learning algorithms and present taxonomy of their classification. Machine Learning algorithms can be categorized based on the types of learning approaches as supervised, unsupervised, semi-supervised and reinforcement learning. The taxonomy of Machine Learning algorithms is shown in Fig.3 [10, 11]. Two major categories of machine learning are Supervised and unsupervised learning. Supervised learning categorized into regression and classification [12]. A number of researchers viewed the spam detection as a classification problem. There are many classification techniques however some of the important classification techniques include decision tree, Bayesian classification, SVM, k-NN algorithms, random forest, ANN and deep learning. Unsupervised learning techniques include clustering and dimensionality reduction algorithms. Some important clustering algorithms include k-means and Hierarchical clustering. Some dimensionality reduction techniques include Principal Component Analysis (PCA) and Singular Value Decomposition (SVD). As spammer's detection is a classification problem, so we will concentrate more on classification.

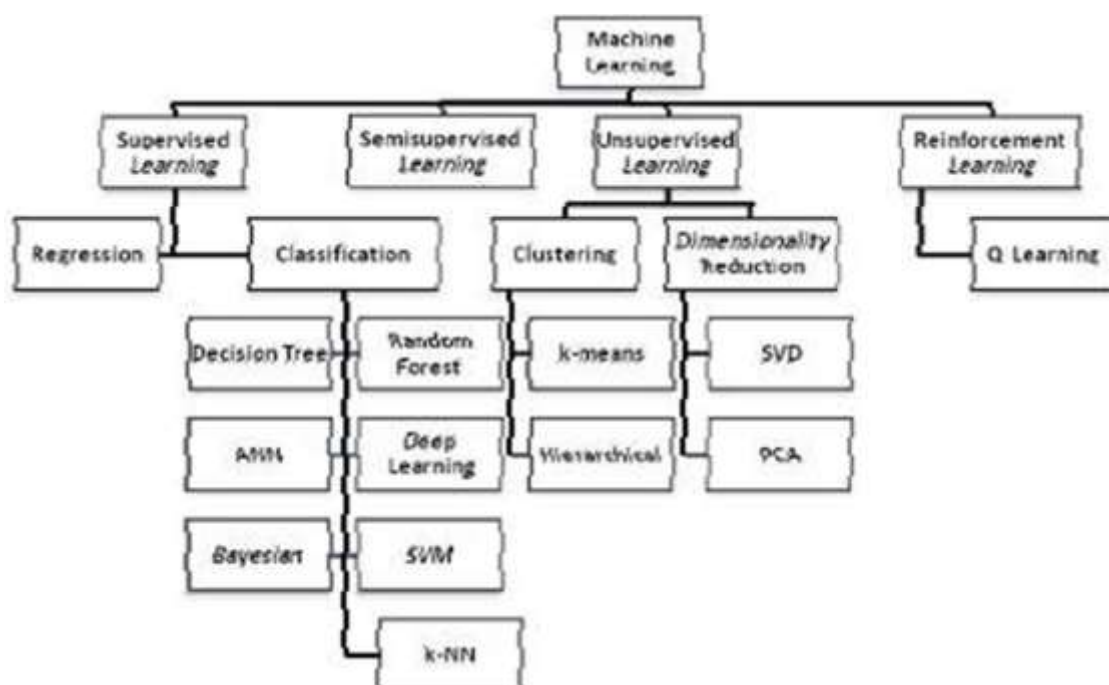


Fig. 3. Taxonomy of Machine Learning techniques

6.1. Supervised learning

In Supervised learning approach a set of input and outputs (datasets with labels) is provided, and learning system establishes the relationship between the input and output when the system is trained. Once the training process is complete, an objective function is determined from an input x with a best possible estimate value of output $y(f : x \rightarrow y)$. The main role of supervised approaches is to develop a model that represents relationship between a set of input features and forecast the objective outcomes. Main supervised approaches are regression and classification. Classification algorithms can be divided into various types. Based on logic classification algorithms are decision tree and random forest, based on perception Artificial Neural Networks(ANN) and deep learning, based on statistical learning they are Bayesian classification and Support Vector Machine (SVM) and based on instances it is k-Nearest Neighbor (k-NN) algorithm[10].

6.1.1. Regression

Regression model is used for prediction tasks. A linear regression model targets to predict a continuous value (Y) from a given set of independent set of features (X). It is a very simple ML model that predicts accurate value of (Y) with minimum errors using the mathematical model [12] is shown in Eq. (1).

$$Y = \beta_0 + \beta_1 X + \varepsilon \quad (1)$$

Where, Y is the continuous output variable, X is the set of input variables and ε represents the possible random error.

6.1.2. Decision trees

Decision tree is based on a set of rules with if-then-else form represented in a tree structure, where the internal nodes called decision nodes that represents a test on a feature, each branch denotes an outcome of a test or the split of the values of one attribute, and leaf node holds the value of the target attribute or in other words the class label. A decision tree is used to predict label or class by using a training model based on decision making rules from training data set. The path through the decision tree is a conjunction of attribute-value literals that are obtained by conducting disjunction tests at each tree node to arrive at the final decision available at the leaf [13].

6.1.3. Random forest

Random forest (RF) is a collection of trees selected at random and each of these trees gives a classification result. RF algorithm first creates a random forest classifier to predict the results by aggregating the results from different trees. RF works better for the large and heterogeneous data sets where decision tree fails. [14].

Existing classification techniques are facing significant challenges in case of curse of dimensionality and highly correlated data sets. But because of the improved ways of training, random forest classifiers are proved to be robust and tolerant over decision trees and can be suitable for large data sets like social networking data sets [15].

6.1.4. Artificial Neural Networks

An artificial neural network (ANN) mimics the model of a neuron of human neural system for classifying the reasonably high volume of data [16, 17]. ANN is an interconnection of a large number of neurons that act as units to process data and produce information. ANN is built on layers, these layers associated with nodes and each node is associated with an activation function. A three layered architecture of an ANN is shown in Fig. 4.

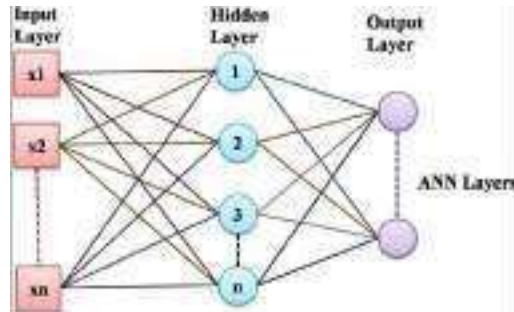


Fig. 4 A three layered architecture of ANN

The layered architecture of ANN contains one input layer, one or more hidden layer (s) and one output layer. The main advantage of ANN is that it is suitable to classify complex, nonlinear large and heterogeneous data sets as there is no restriction for the inputs.

6.1.5. Deep learning

Deep learning algorithms are used for classification of large datasets. Deep learning approaches are used to automatically learn from data using multiple layers to extract higher level features progressively in successive layers. It composes with some non-linear modules to transform the representation from low label layer to high level layer in order to achieve the best possible solution [18]. It is inspired by the pattern of communication and data processing and interpretation in human nervous systems. The key benefits of deep learning are automatic high-level features extraction from the large set of data [19].

6.1.6. Support vector machine

Support Vector Machine (SVM) is a technique used for both classification and regression. It obtains a best possible hyperplane to classify the data points from a large data set in a multidimensional space [20]. Fig.5. represents the SVM Classifier with a Hyperplane.

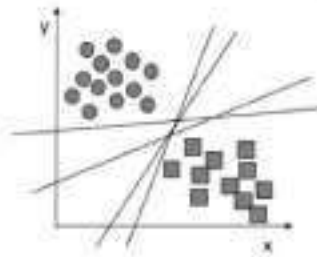


Fig.5. SVM Classifier with Hyperplane

6.1.7. Bayesian Classification

Bayesian algorithm is based on Naïve Baye's theorem. The algorithm finds the relationships among the datasets by learning the conditional independence using several statistical methods. It allows different probability functions for different variables of class nodes. Bayesian classifier is popularly used for Spam filtering as a common method for categorizing unsolicited emails (spam) from the legitimate ones, (ham). Therefore most of the email clients implement Bayesian algorithm for spam filtering [21]. Due to the advantage of simplicity of applicability, it is being extensively used in the area of spammer detection in social media analysis and also to recognize positive, negative or spam product reviews.

6.1.8. k-Nearest Neighbor

K-Nearest Neighbor (k-NN) is a simple and effective algorithm used for classification. The k-NN generally predicts the classes based on the distance between specified training data and the test data point. The k-NN method computes the distance using various distance functions like Euclidean distance, Hhamming distance etc. This approach also identifies the missing values in the feature set and helps reduction of dimensionality [10].

6.2. Unsupervised learning

Unsupervised learning approach deals with unlabelled input data set. The learning model tries to extract the relationships from the data and classify the set of similar patterns into clusters or performs reduction of dimensionality or helps detection of anomalies.

6.2.1. k-means clustering

The k-means algorithm forms a fixed number of clusters (k) from a given set of data. Initially k numbers of random points are chosen as cluster centers and all the remaining points are made connected with the nearest cluster centers. Once the clusters are formed by covering all the data points from the dataset, a new centroid from each cluster is re-computed. The centroid of the cluster is updated in each of the iteration, by repeating the algorithm until no more changes in the centroid of all clusters takes place [22, 23].

6.2.2. Hierarchical clustering

Hierarchical clustering approach is applied to group similar data to make clusters which have either top-down or bottom-up order. In a top-down hierarchical clustering technique, a large single partition is partitioned recursively until one cluster for each observation is obtained. In a bottom-up hierarchical clustering, each observation assigns to its cluster based on density functions [24, 25]. In this clustering approach, no prior information is required about the number of clusters and it is easy to implement.

6.2.3. Singular value decomposition

Singular value decomposition (SVD) is used as a dimensionality reduction technique in machine learning. It uses matrix factorization method for reducing the dimensionality in a feature space. SVD guarantees the optimal representation of the data [26].

6.2.4. Principle component analysis

Principal Component Analysis (PCA) is a feature extraction method for dimensionality reduction. The PCA combine all the information and drops the least priority information from the feature space to reduce the dimensionality by converting a set of correlated features to a set of uncorrelated features. The output of PCA is a linear combination of observed features called principal components. PCA is a widely used as a predictive model for exploratory data analysis. It is being used for detection anomalies from the data like spam filtering and also in regression [27].

6. Review of Literature

We will review the literature to identify the effectiveness and weaknesses of various methods and approaches proposed for spammers' detection in OSNs using machine learning and some other efficient techniques. The summary of those methods and approaches are shown in the table 1 below.

Table 1: Review of ML techniques for spammers' detection in OSNs

Authors	Challenge	Detection techniques	Solution / Model /Analysis
Dada E.G. et.al., 2019 [21]	To survey on various ML algorithms used for email spam filtering	used Naive Baye's, Neural Network, SVM, NB Tree, Decision Tree, Ensemble classifiers, Random Forests, and Deep learning.	A comparative study of some popular ML techniques and basic architecture of email spam filtering is proposed.
Masood F. et. al., 2019[28]	To review different techniques for detecting Spammers on Twitter, and classify those approaches.	Random Forest, Decision Tree, k-Nearest Neighbor, SVM, Clustering.	Comparison made between proposed methods and features used for spam detection in twitter.
Aldwairi M. et. al., 2019[29]	To design a technique to detect and filter out sites that contains false and any misleading information.	Logistic Regression, Random Tree, Naïve Baye's Classifier.	Detection of fake news in social communication.
Singh, A.P. et. al., 2019 [30]	To provide a technique for detection of Spammer in social network using effective Machine Learning approach.	Artificial Bee Colony, Artificial Neural Network, Naïve Baye's Classifiers, Support Vector Machine	Extraction of features of the text data using tokenization mechanism, A comparison between proposed technique and existing classification algorithm.
Zheng X. et al, 2015 [31]	To propose a ML based solution for effective Spammers' Detection.	Support Vector Machine Classifier	A solution for classification of Spammer is proposed which is feasible and capable to produce better results.
Manwar S. R et al, 2017 [32]	To identify suspicious users and spam on Twitter using template, content, user based features to analyze behavior of user.	Support Vector Machine, Naïve Baye's classifiers	A template matching approach is proposed to identify whether the given tweet is spam or not within less execution time.
Bhuiyan H. et al, 2018 [33]	To survey different existing spam filtering system using ML Techniques and define rules regarding accuracy.	Random Forest, Naïve Bayes, Support Vector Machine, k-NN Classifier	A standard process of spam filtering system is proposed for Client Side and Enterprise level Email spam filtering system

7. Conclusion

In recent years OSNs have been used as a convenient means of information exchange for millions of internet users, as those networks allow users to express their views, share photographs, video clips, and charts with friends from anywhere and anytime with least cost. However, these potential services often expose legitimate users to serious cyber security threats. In this survey, we provided a review on several kinds of traditional security threats on OSNs and identified in the literature the security solutions proposed to defend different types of threats. In particular, we

thoroughly reviewed the innovative techniques proposed in the literature for spammers' detection in OSNs. In our future work we will design a model for automatic feature selection and detection of spammers' using machine learning techniques and the model will be simulated such that it would produce the best possible results with greater accuracy and scalability. In future this survey can also be useful for the beginners of research in the area of security in OSNs.

REFERENCES :

- [1]. Social Network: Available online: <https://en.wikipedia.org/wiki/Social-network> (accessed on 10.01.2020).
- [2]. Arnaboldi, V., Passarella, A., Conti, M., & Dunbar, R. I. M. (2015). *Introduction*. *Online Social Networks*, 1–7. doi:10.1016/b978-0-12-803023-3.00001-1
- [3]. Rathore, S., Sharma, P. K., Loia, V., Jeong, Y.-S., & Park, J. H. (2017). *Social network security: Issues, challenges, threats, and solutions*. *Information Sciences*, 421, 43–69. doi:10.1016/j.ins.2017.08.063
- [4]. M. Reza Faghani, H. Saidi, *Malware propagation in Online Social Networks*, in: Proceedings of the 4th International Conference on Malicious and Unwanted Software (MALWARE'09), 2009, pp. 8–14.
- [5]. G. Noh, H. Oh, Y.M. Kang, C.K. Kim, *PSD: Practical Sybil detection schemes using stickiness and persistence in online recommender systems*, *Inf. Sci.* 281 (2014) 66–84.
- [6]. Nexgate, Research Report 2013 State of social media spam, (<http://nexgate.com/wp-content/uploads/2013/09/Nexgate-2013-State-of-Social-Media-Spam-Research-Report.pdf>).
- [7]. G. Wondracek, T. Holz, E. Kirda, C. Kruegel, *A practical attack to de-anonymize social network users*, in: IEEE Symposium on Security and Privacy, 2010, pp. 223–238.
- [8]. R. Krishnan, *Facebook's latest feature Alerts You if Someone Impersonates Your Profile*, (<http://thehackernews.com/2016/03/fake-facebook-account.html>).
- [9]. Franceschi-Bicchierai, Lorenzo (2013-10-01). "Social Media Spam Increased 355% in First Half of 2013".
- [10]. Praveen Kumar, et.al. C. S. R. *Machine learning algorithms for wireless sensor networks: A survey*. *Information Fusion*. (2018), doi:10.1016/j.inffus.2018.09.013
- [11]. Batrinca, B., & Treleaven, P. C. (2014). *Social media analytics: a survey of techniques, tools and platforms*. *AI & SOCIETY*, 30(1), 89–116. doi: 10.1007/s00146-014-0549-4
- [12]. D.C. Montgomery, E.A. Peck, G.G. Vining, *Introduction to Linear Regression Analysis*, 821, John Wiley & Sons, 2012
- [13]. J.R. Quinlan, *Induction of decision trees*, *Machine Learning* 1 (1) (1986) 81–106
- [14]. L. Breiman, *Random forests*, *Mach. Learn* 45 (1) (2001) 5–32
- [15]. M. Belgiu, L. Drăguț, *Random forest in remote sensing: a review of applications and future directions*, *ISPRS J. Photogramm. Remote Sens.* 114 (2016) 24–31.
- [16]. S.S. Haykin, S.S. Haykin, S.S. Haykin, S.S. Haykin, *Neural networks and learning machines*, vol. 3, Pearson Upper Saddle River, NJ, USA, 2009.
- [17]. H. White, "Learning in artificial neural networks: a statistical perspective, *Neural Computing*." 1 (4) (1989) 425–464.
- [18]. Y. LeCun, et.al., *Deep learning*, *Nature* 521 (7553) (2015) 436–444.
- [19]. A.H. Marblestone, et.al., "Toward an integration of deep learning and neuroscience, *Front. Comput. Neurosci*". 10 (2016) 1–41.
- [20]. V.N. Vapnik, "An overview of statistical learning theory", *IEEE Trans. Neural Networks*, 10 (5) (1999) 988–999.
- [21]. Dada, E. G., Bassi, J. S., Chiroma, H., Abdulhamid, S. M., Adetunmbi, A. O., & Ajibuwa, O. E. (2019). *Machine learning for email spam filtering: review, approaches and open research problems*. *Heliyon*, 5(6), e01802. doi:10.1016/j.heliyon. 2019.
- [22]. T. Kanungo, D.M. Mount, N.S. Netanyahu, C.D. Piatko, R. Silverman, A.Y. Wu, *An efficient k-means clustering algorithm: analysis and implementation*, *IEEE Trans. Pattern Anal. Mach. Intell.* 24 (7) (2002) 881–892.
- [23]. J.P. Ortega, M. Del, R.B. Rojas, M.J. Somodevilla, *Research issues on k-means algorithm: an experimental trial using matlab*, in: CEUR Workshop Proceedings: Semantic Web and New Technologies, 2009, pp. 83–96

- [24]. S.C. Johnson, *Hierarchical clustering schemes*, Psychometrika 32 (3) (1967) 241–254.
- [25]. R.G. D’Andrade, *U-statistic hierarchical clustering*, Psychometrika 43 (1) (1978) 59–67
- [26]. V. Klema, A. Laub, *The singular value decomposition: its computation and some applications*, IEEE Trans. Automat. Contr. 25 (2) (1980) 164–176.
- [27]. S. Wold, K. Esbensen, P. Geladi, *Principal component analysis*, Chemometrics Intell. Lab. Syst. 2 (1–3) (1987) 37–52
- [28]. Masood, F., Ammad, G., Almogren, A., Abbas, A., Khattak, H. A., Din, I. U., Zuair, M. (2019). *Spammer Detection and Fake User Identification on Social Networks*. IEEE Access, 1–1. doi:10.1109/access.2019.2918196
- [29]. Aldwairi, M., & Alwahedi, A. *Detecting Fake News in Social Media Networks*. Procedia, Computer Science, 141, 215–222. doi:10.1016/j.procs. 2018.10. 171
- [30]. Singh Amit Pratap, Dutta Maitreyee, *Spam Detection in Social Networking Sites using Artificial Intelligence Technique*, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278- 3075, Volume-8 Issue-8S3, (2019).
- [31]. Zheng, X., Zeng, Z., Chen, Z., Yu, Y., & Rong, C. (2015). *Detecting spammers on social networks*. Neurocomputing, 159, 27–34. doi:10.1016/j.neucom.2015.02.047
- [32]. Manwar S. R., Lambhate P.D., Patil J. S., *Classification Methods for Spam Detection In Online Social Network*, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395 -0056, Volume: 04 Issue: 07 | July-2017.
- Bhuiyan Hanif Ashiquzzaman Akm, Juthi Tamanna Islam, Biswas Suzit , Ara Jinat , *A Survey of Existing E-Mail Spam Filtering Methods Considering Machine Learning Techniques*, Global Journal of Computer Science and Technology: C Software & Data Engineering, Volume 1 Issue 2 Version 1.0 Year 2018.



PREPARING HUMAN RESOURCES FOR DIGITIZATION/ IMPACT OF DIGITIZATION ON HUMAN RESOURCE MANAGEMENT

BIKASH SARANGI

Abstract:

Digitization have affected establishment and Human Resource Department (HRD) to the great extent . The revolution in technology has results for present-day establishments on numerous extents . Digital technologies are converting the momentum of the human resources inside the establishments . Establishments are considered moreover their financial status , service quality or human resource gratification as well as in what way they assimilate in the company of the outlands, patronages ,associates and humanity at liberty. This study empirically analyzed the implications of rising technologies on Human Resource management. The litterateur marked to study the effects of digitization on organization. This article seeks to prospect the contemporary movements in acquiring digitization for HR implementations by numerous establishments . This paper focus on the importance of digitization due to digital era and adaption of digital technology in all sectors. The essential for the Human Resource is to convert this game plan and perspective into implementation and turn it a huge hit. It is relevant to make sure that the human resources in an establishment is lined up to its game plan and preference .

Keywords : Digitization, Human Resource management, Establishment, Digital Technology.

Introduction:

As from 1960's , the automation of commercial operations has been a field which has been extensively contemplated (Kaufmann,1966). Digitizing is a notable movement which is remarkably evolving the manner in which we reside , do our duty and generates worth . Digitization is transforming the financial system and the business community. The innovations in technology have came out as most critical issues of making deals over the last half decades. The mental make-up of employees are also affected by the technological developments .Now-a-days employees seek simple to operate digital technologies to carry out their duties in a effective and high virtualized milieu . Organization can manage the employees ingress to their own affairs apart from their profession over the use of company internet. Now-a- days, employees are indulging in the flexi-time choice when in contrast to ancient times . Automation has absolutely modernized and increased the procedures and structures in diverse operations throughout the organizations. Mainly Human Resource specialists anticipate that digital implementations assist to enhance the production capability and worker involvement and transformation in the employment . It preserves the face value of the organization and constructs a more flexible and alert manpower which is more amenable and resilient to distinct work requisites . In terms of HRD , technology assists in all operations from enlist/drafted to depart and has substantially transformed in the way of employees and employers getting ingress to the HR data. Digitization of Human Resource Management should not merely be considered only a transformation procedure . Digitization has turned from an abstract and futuristic concept into a transformative power that reshapes the economic landscape and acts as

a major disruptor with far-reaching consequences (Weill and Woerner,2015 ; Bughin and Van Zeebroek,2017 ; Schwab,2017 ; Zammuto et al.,2007).The leaders of HR must be responsive to the reality that it requires a major transition and workers must be manually all around this transition failure which it is identical to a broken chain. Digital switch-over has been conceived in a short time as a contemporary model for a substantial obligatory assignment for organizations to persist by captivating benefit of these stated contemporary technological facilities. This is not to deprecate the Digital switch-over nor technological facilities . But to spike it mark its perpetual cruciality . Digital switch-over is a incessant policy making that consistently subsists unconditionally or comprehensively , not mandatorily requiring a substantial single-stroke action plan to carry out/execute a specified aspiring layout .

Objectives Of the study

- To understand how the digitization in HRM is emerging.
- To gain insight on how effective is the digitization on HRM.

Literature Review

Digitization is an transforming perspective to employment operation , customer engagements of workers . The influence of fast growing in digitization has indicate that enterprise have had to acclimated to contemporary market predictions . Result-based/Performance Management is the organized process through which an agency associates its workers as human beings and group members , in enhancing organizational efficacy in the performance of company objective and targets . Human Resource Management(HRM) system has go through lot of modifications in the past few years to effectually convert endeavor to accomplishment . Bell Curve comparison has been remarked to be waste of time and frequently noxious to performance. Companies like Accenture, Adobe, Deloitte and Microsoft have endorsed contemporary manners of evaluating to increase human being and organizational accomplishment (Neeti Kumar, 2016). Data processing device will progressively supersede all physical efforts (Coster & Westelius,2016). Digitization transforms in what way workers in the employment communicate , what they anticipate from their supervisor and jobs additionally when and where work is performed (EI- Khoury, 2017). The responsibility of HRM has transformed from being the care & supervision and maintenance of records of Human Resource department in the 20th century, to reverting a strategic business partner concentrating on self-improvement and competency inducement in the 21st century (Thite & Kavanagh,2009). HR experts now-a-days is being capable to render the entire establishment more efficient and thus incorporate HR work into censorious trade affairs (Bondarouk, Marsman & Rekers,2014). As digital technologies consistently supersedes the manner orthodox HR operations are carried out , HR experts require to evolve contemporary technical proficiencies to effectively convey their services to workers (Bell et al.,2006). HR experts are not blindfolded by the focusing on digitization converting organizational HR work. As automation is converting establishments and work on a wider context , HR experts must assist the expansion all around the establishment . Consequently , it urging a wider comprehension of the influence of technology on the establishment in a broader point of view (Hempel,2004). Uncontrollable transformations influence establishments exceptionally , demanding an nimble , adjustable preparation for conversion (Ebersold & Glass,2015). An effective business milieu influences an establishment's accomplishment . This conversely generates a requirement for establishments to be adaptable , which entails the capabilities to react to transforming cut-throat milieus (Attia, Duquenne & Le-Lann, 2014; Sekhar, Patwardhan & Vyas,2016). Accommodating HR operations impacts workers' accomplishment by way of motivating engagement and participation by permitting them to upgrade their own performance . Accommodating HRM is required so as to renovate administrative operations (Sekhar et al.,2016). Numerous establishments function in rough and tumble cut throat markets steered by fast transformation which leads to imminent requirements and goals that are frequently varying . Therefore , orthodox structures constructed for evaluation and responsibility for former and ongoing exercises are

anymore applicable (Cappelli & Tavis,2016). Digital switchover play an progressively predominant part in both the professional experience of workers and HRM, which is to be influenced in several manners (Parry & Strohmeier,2014). Digital conversion approaches lead about modifications to and have suggestions for business frameworks (Matt et al.,2015). Digitization is influencing establishments and human resources (Bengtsson & Bloom,2017). Digital conversion has transformed the manner organizations connect to their employees, in what way organizations carrying on business, in what way they formulate their business framework and in what way they manage themselves (Westerman & Bonnet,2015). As a result HRM is more diversified , more human-centered with the accountability of structuring divergent , complicated tasks to subsistence the youngsters more involved in their work. Digital conversion invoke interrogations the orthodox manners the HR activities are undertaken in establishments (Palmer et al.,2017). The transformation to the HR department that digital technology will lead epidemic and unfocussed all around every organization (Larkin,2017). Digitization influences HRM more than merely along assisting everyday organizational task . The usage of technical facilitates the actual HR functions has included contemporary demands on the HR function and human resource in the establishment is one that is lined up with the strategic requirements of a machine age . Technology is transforming the manner HR penetrates , contrives , transfers and reserve enormous amounts of data. Digital conversion is not only restricted to technical perspective start-ups and organizations setting-off in the cutting- edge technology zone, traditional organizations launch into on this digital conversion move on a similar note (Weill & Woerner,2018). The present era comprehension of digitization shift its focus from modestly do business with a data processor to a consent that digitization convert in what way walk of life associate with both business-to-business and business-to-customer backdrops (Loonam et al.,2018). Digitization has pivoted from a modernistic conviction into a revolutionary competency which modify the lucrative perspective and play the part of a crucial interrupter with comprehensive upshots (Bughin & Van Zeebroek,2017; Schwab,2017).

Digitalization's Impact On Organization

Digitization is required for establishments and so as to being digitally blooming , moving digital by carrying out contemporary mechanisms and procuring digital technologies is not adequate (Manyika et al.,2015). Digitization can be distinguished as a receiving container where contemporary transformations are apprehended . Companies predominantly portraying as middleman , are substituted by digital stands and steadily impose on of business. Digitization legitimates firms to enhance operability , to expand their transformation endeavors and to preferably distribute their resources. Digitization interrupts orthodox organizations everyday business and operations. Even so , a contemporary high competition sphere nourished by digital conversion .

Impact Of Digitalization On Employees

The streamlining of human resources by virtue of the contemporary digitalized doorway has crucially influenced those personnel with limited skills because of the computerization. The futurity of work relying on a digitized financial state also stipulates a contemporary competency which will impose a supportable forthcoming activities . Because of the digitized doorway, human resources are not anymore sketchy to do their duties only from the workplace and only for their employer. This has conveyed transforms in what way human resources is being hired . Operation monitoring has grasp a contemporary configuration by way of the digitization of work steps. Establishments can wield this contemporary technical equipment to outline performance portraits , estimate and differentiate the performance of varied employment . Performance estimation along setting target becomes a contemporary feature as establishments commence to operate mobile applications with their human resources in which these can record goal achievements on a day-to-day basis . Because of the extension of digitization of work across the chance of taking work every place with smart phones, tablets and laptops. Work has become a persistent partner in many jobs. It has become a rationality to work on weekends, leisure times , vacations , trains and airplanes journey.

Due to improved distinctness advancements in decision-making, employee confidence and internal networking have been achieved (Francis & Scheers,2013).

Effects Of Digitization

Now-a-days digitization is transpiring in almost every fields of the economy at a breakneck speed and in a deep down means . All sectors using contemporary techniques and provisions to operate their trade onward and to subsist on the cut-throat market. To promote/assist digital conversion , the organization requires to move from their orthodox , pyramidal framework to a elastic , decentralized organization with a team to keep pace with the complex and fast changing environment. The generation diversifications from Y to Z which have distinctive attributes and potentialities comparatively to prior generations will enforce contemporary functional systems and authority . Digital authority does not only mean the convention of the contemporary media assets for alliance and transmission , but it also needs the assimilation of the authority approaches and techniques to the cyberspace. The contemporary technologies and outcomes are not just exhilarating the requirement for transformation , they also facilitate and endorse the modification itself. It is vital for the employers to explore their businesses and market condition initially , later to determine regarding the exact plan of action and framework and to include their human resources in the digital conversion .

Methodology

Entire population consists of private technical and management college staffs of eastern zone of Odisha. A systematic meeting program was applied to accumulate data.

Variables

Dependent Variable -: Human Resource Management

Independent Variable -: Digitization

Research Design

The survey and analysis was experimental and explanatory in complexion . The elements of sample design involve the subsequent :

- ✓ Type of population : Definite
- ✓ Sampling unit : Eastern zone
- ✓ Source list : private technical and management college staffs
- ✓ Sample size : 100

Mechanisms of Data Collection

An exploratory survey was carried out primarily by managing the meeting program about twelve numbers of interviewees . The data was accumulated in the intermediate - level grading order staff of two divergent(technical and management) colleges . Meetings were accompanied for collecting information with private educational institutions on their viewpoint about their establishment and the difficulties faced by them due to digitization . The interviewees were interviewed on the affairs influencing the digitization effect on their work, aspirations from their roles, up to what degree they are complacent and feasible recommendations for outpacing the torment of stress by assessing the individual efforts and organizational efforts .

Rationale of Study

The research comprised of both primary and secondary data. The primary data was gathered by organized meeting program . Secondary data was gathered from research proclamations , customary publications .

Hypothesis

H₀ : There is no difference so far in the effect of digitization and human resource Management.

H₁ : There is some difference so far in the effect of digitization and human resource Management.

Data Analysis and Findings

Table No-1 : Observed Value

Digitization effect	Human Resource Management		
	Satisfied	Unsatisfied	Total
Satisfactory	10	20	30
Unsatisfactory	4	66	70
Total	14	86	100

Expected Value :

$$30 \times 14/100 = 4.2, 30 \times 86/100 = 25.8, 70 \times 14/100 = 9.8, 70 \times 86/100 = 60.2.$$

Table No-2 :Expected Value

Digitization effect	Human Resource Management		
	Satisfied	Unsatisfied	Total
Satisfactory	4.2	25.8	30
Unsatisfactory	9.8	60.2	70
Total	14	86	100

Applying χ^2 test

O_{ij}	E_{ij}	$O_{ij} - E_{ij}$	$(O_{ij} - E_{ij})^2$	$(O_{ij} - E_{ij})^2 / E_{ij}$
10	4.2	5.8	33.64	8.1
20	25.8	-5.8	33.64	1.3
4	9.8	-5.8	33.64	3.4
66	60.2	5.8	33.64	0.6

$$\chi^2 = 13.4.$$

$$\begin{aligned} \text{Degrees of freedom} &= (c-1)(r-1) \\ &= (2-1)(2-1) \\ &= 1. \end{aligned}$$

Table Value of χ^2 for one degree of freedom of at 5% level of significance is 3.841. The calculated value of χ^2 by both methods is more than its table value. Hence, the hypothesis rejects. We conclude that there is no difference effect between digitization and human resource.

Conclusion

Digitization renders it simple to handle the performance on a ongoing exercise. It minimizes the documentation and enhance the authenticity of the evaluation. It minimizes the considerable time depleted to do evaluation. It enhances the efficacy of human resources and are capable to acquire remarks on their work and upgrade on their own. Digitization of Human Resource Management is implemented by many advanced organizations and everyone else implementing it by making modifications in their performance management system. The digitization has revealed that it has primarily transformed the human resource population, the efficiency required and the manner to communicate and associate moreover to interface within an establishment not merely from human resource point of view but from the organizational point of view also. Matt et al.,(2015)correspond in what way digital conversion has converted the business operations, processes & frameworks so as to leverage the well-beings of contemporary technology. It is vital for establishments to acquire each and every contemporary technology that arises to persist steady in the cut-throat platform. Acquiring contemporary technology give rise to numerous provocations relevant to the human resources. These provocations involve pedagogy to the subsisting human

resources, communicating the lack of skill, captivating talents and sourcing for specific skills, redefining the job role and leveraging the technology to optimize the cost of operations. Therefore, companies require to identify the role of human resources in the overall technology transformation. Managing talent will take on a whole new dimension and require different and innovative practices. Behavioral change needs to be embedded in managers to enable the right cultural shifts in this rapidly changing environment. Managers must be equipped to manage the external workforce through digital toolsets. Digital innovations will require the workforce to be more diverse & agile regarding adapting to new roles over time and organizations will need to focus on hiring those with broader skill.

REFERENCES

1. Attia, E. A., Duquenne, P., & Le-Lann, J. M. (2014). Considering Skills Evolutions in Multiskilled Workforce Allocation with Flexible Working Hours, *International Journal of Production Research*, 52(5): 4548–4573.
2. Bell, B. S., Lee, S. & Yeung, S. K. (2006). The Impact of E-HR on Professional Competence in HRM: Implications for the development of HR professionals, *Human Resource Management*, 45(3): 295-308.
3. Bengtsson, C., & Bloom, M. (2017). Human resource management in a digital era: A qualitative study of HR managers' perceptions of digitalization and its implications for HRM (Unpublished Master's thesis). Lund University School of Economics and Management, Sweden.
4. Bondarouk, T., Marsman, E., Rekers, M. (2014). HRM, Technology and Innovation: New HRM competences for old business challenges? in Bondarouk, T., Olivás-Luján, M. R. (eds.) *Human Resource Management, Social Innovation and Technology*, Emerald Group Publishing Limited, pp. 179-215.
5. Bughin, J. and van Zeebroeck, N. (2017). The best response to digital disruption. *MIT Sloan Management Review*, 58:80–86.
6. Cappelli, P. & Tavis, A. (2016) *The Performance Management Revolution: The focus is shifting from accountability to learning*, Harvard Business Review, pp. 58-67.
7. Cöster, M. & Westelius, A. (2016). *Digitalisering*, 1st Edition, Stockholm: Liber.
8. Ebersold, K. & Glass, R. (2015). The Impacts of Disruptive Technology: the Internet of things, *Issues in Information Systems*, 16(4): 194-201.
9. Francis, J. & Scheers, C., (2013): The future workplace of young Europeans, *European View*, (12/2), pp 199–204.
10. Hempel, P. S. (2004). Preparing the HR Profession for Technology and Information Work, *Human Resource Management*, 43(2&3): 163-177.
11. Kumar Neeti, *Future of Performance Management System*, People Matters, July 5, 2016.
12. Larkin, J. (2017). HR digital disruption: The biggest wave of transformation in decades. *Strategic HR review*, 16(2), 55-59.
13. Loonam, J., Eaves, S., Kumar, V., and Parry, G. (2018). Towards digital transformation: Lessons learned from traditional organizations. *Strategic Change*, 27(2):101– 109. Available at <https://doi.org/10.1002/jsc.2185> (Accessed: 2018-05-23).
14. Manyika, J., Ramaswamy, S., Khanna, S., Sarrazin, H., Pinkus, G., Sethupathy, G., and Yaffe, A. (2015). *Digital america: A tale of the haves and have-mores*. McKinsey Global Institute, December:4–80.
15. Matt, C., Hess, T., & Benlian, A. (2015) Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), 339-343.
16. Palmer, I., Dunford, R., & Buchanan, D.A. (2017). *Managing Organizational Change: a Multiple Perspectives Approach*, 3rd Edition, International ed. New York: McGraw-Hill Education.
17. Parry, E., & Strohmeier, S. (2014). HRM in the digital age-digital changes and challenges of the HR profession. *Employee Relations*, 36(4).
18. Schwab, K. (2017). *The Fourth Industrial Revolution*. Crown Business.
19. Sekhar, C., Patwardhan, M., Vyas, V. (2016). A Study of HR Flexibility and Firm Performance: A perspective from IT industry, *Global Journal of Flexible Systems Management*, 17(1): 57-75.
20. Thite, M. and Kavanagh, M. (2009). 'Evolution of human resource management and human resource information systems: the role of information technology', in M. Kavanagh and M. Thite (eds), *Human Resource Information Systems: Basics, Applications and Future Directions*, Thousand Oaks, CA: Sage.
21. Weill, P. and Woerner, S. L. (2015). Thriving in an increasingly digital ecosystem. *MIT Sloan Management Review*, 56:27–34. Available at <http://mitsmr.com/1BkdvAq>.
22. Weill, P. and Woerner, S. L. (2018). Is Your Company Ready for a Digital Future? *MIT Sloan Management Review*, 59(2):21–25. Available at <http://mitsmr.com/2A4yP1S> (Accessed: 2018-05-21).
23. Zammuto, R. F., Griffith, T. L., Majchrzak, A., Dougherty, D. J., and Faraj, S. (2007). Information technology and the changing fabric of organization. *Organization Science*, 18:749–762.

HR

EFFECT OF GREEN HUMAN RESOURCES PRACTICES ON JOB SATISFACTION: EVIDENCE FROM IT SECTOR IN INDIA

DWIPANITA MISHRA

Abstract :

Environmental concerns are of utmost importance for any industry, be it service industries like IT. Today is the day when every region is implementing Go Green policies to reduce environmental problems. IT have taken these green initiatives to expand the IT industry along with humanity. The Indian IT industry now knows that there should be a green sense of social ethics and credibility, so the IT industry is expanding its HR functions to align its goals and policies with sustainable goals that reflect an eco-vision are. In Indian Perspectives, this research seeks to find the impact of green HR practices on IT employee job satisfaction. A total of 273 responses from the IT sector were collected and empirically analysed. It is well-known that green HR practices have an important relationship with job satisfaction (JS). In growth, Human Resources Planning (HRP), Welfare and Training and Development (TND) has found a progressive impression on job satisfaction (JS). It has also been established that TND has the most impact on JS. Educators, educators, policymakers, experts, scholars, local and foreign entrepreneurs from India and other parallel countries can benefit from this paper by rethinking the meaning between Green HR practices and job satisfaction.

Key words: *Green HR Practices, job satisfaction, IT sectors*

1.1. Introduction

Concept of Green HRM: The green Human Resources Management has performed for companies attractive in practices associated with the protection of the situation and protective environmental steadiness. Green HRM is the usage of human resource management strategies to encourage the supportable use of resources within business organizations and, most commonly, recommends the source of environmental sustainability. The determination of successful green is to usage crops and approaches that would not negatively affect the environment concluded pollution or depleting natural resources. Thus, Green HRM includes eco-friendly, human resource strategies and applies that, on the one hand, will support administrations realize its economic goal through environmental labelling and on the other indicator, defend the environment from any harmful influences that strength source of the policies & movements by the organizations. According to, the incorporation

of commercial ecological administration into human resource management is designated as green HRM.

Green HR: According to, “Green HR mentions to expending every employee edge to promote sustainable practices and complement employee responsiveness and obligations on the problems of sustainability.” Established that green HR shows the significant part in organizations to sustenance the environment associated difficulties by accommodating it and in management viewpoint HR policies and practices, training people and implementation of rules related to environmental security. Thus, Green HR is an employee, which is well conscious about environmentally friendly accomplishments, dedicated to explaining environmental concerns by involved green traditions both in his individual, and expert subsists.

HRM applies are the self-possessed human resource plans, procedures and systems that essentially are implemented in the organization or business part. Likewise, green HRM performs are the trustworthy green HRM plans, procedures and methods that essentially get executed the organisations in instruction to decrease undesirable environmental impacts or improve optimistic environmental impacts of the organization. The eventual purpose of green HRM practices is to progress the organisation supportable environmental concert and as well as employee job satisfaction.

Job Satisfaction: In the perception of Job satisfaction, there exists an amalgamation of positive & negative psychological feelings of individual employees in the workplace. Job satisfaction exemplifies the level to which opportunities are equal to the actual honours. Industries’ growth & productivity directly depends on the employee’s job satisfaction. The importance of job satisfaction especially arises in case of the numerous negative significances of job dissatisfaction such as lack of loyalty, increased absenteeism, increased number of accidents etc. Situational Factor.

Job satisfaction is the crucial occupation of all these and several individual arrogances put together. Job satisfaction indicates towards high productivity, attentive leadership value, promotional opportunity & work as retention tools. Job satisfaction is the most important factor for the HR manager to practice Green HR policies in the company, the absence of which can lead to dissatisfaction and negativity in the workplace.

1.2. Research Questions

Precisely, this study accepted to reconnoitre the response to the subsequent research Questions (RQ):

- 1. RQ1:** Is there any association between Green HR practices and Job Satisfaction?
- 2. RQ2:** Do Green HR practices have any impact on Job Satisfaction?

1.3. Research Objectives

The main purpose of the research is to identity the impact of Green HR practices on job satisfaction. In way to emerge this objective, the subsequent precise purposes measured:

- To statement the association between Green HR practices and job satisfaction;
- To recognize the impact of Green HR practices on job satisfaction;
- To propose some methods in direction to enrich the Green HR practices of the selected industrial initiatives.

1.4. Literature Review

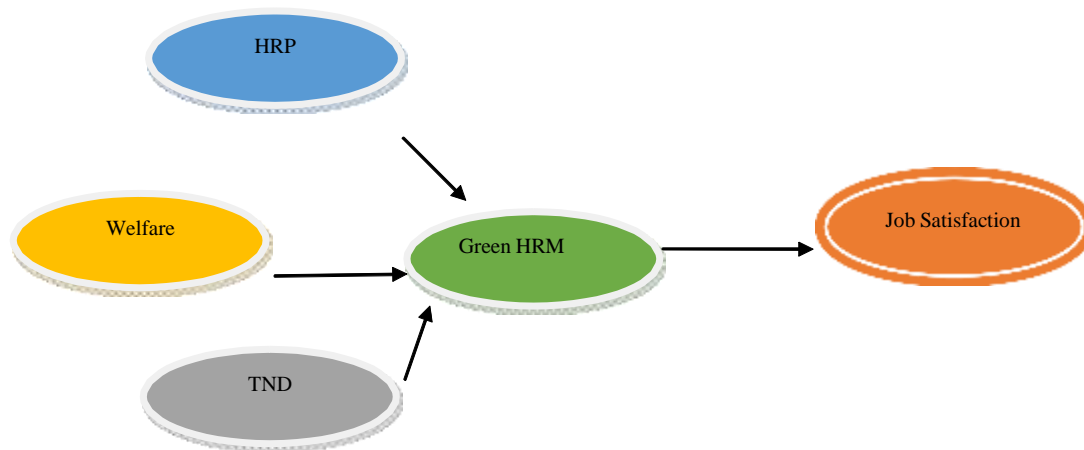
In 1990s green management emerged to become imperative globally in 2000s (Lee, 2009). Green-HRM is defined as the steadiness between industrial growth & upholding the environment so that the expectations may flourish (Daily and Huang, 2001). Industries participating in the issues of environmental supervision whereas their present branches of our society and cannot be inaccessible from the environment (Liu, 2010). Enhance the awareness about the impact of eco-friendly concerns in the workplace and home into the low-level employees (Oates, 1996; Bird, 1996:227). Organization measured that the function of HR manager in interpreting Green HR policy into repetition (Renwick et al., 2008, p.1). Green HR policies spotlights on the cooperative and personage capabilities to fetch about green behavior. The aforementioned has remained realized that environmentally relevant accomplishments can be experienced by the workforces in occupied life and secluded life. Hence, Green HRM focuses on employee's environmental behavior in the company, which in turn, employees can bring on such blueprint of utilization in their private life (Viola Muster and Ulf Schrader, 2011).

M W Sheikh (Sheikh, 2014) explains the importance of Green HRM based on the Save the Earth movement. He explained that the Green Audit ISO 14000 Green HRM will help the owner and entrepreneur to implement green branding and rigor. Shoeb Ahmed (Ahmed, 2015) discusses the need to foster the interrelationship between HR policies and practices with Green HRM principals for sustainable development. The study suggests that the Green HRM green department can be a key business strategy for an actively participating organization. Opatha and Arulrajah (Arulrajah O., 2014) underline the importance of Green HRM and its ability to serve the individual, society and business, and also explain the various characteristics of Green HRM.

Job satisfaction is thoroughly related to that individual's performance & job satisfaction in the workplace (Davis et al., 1985). Job satisfaction is unique of the furthestmost considered concepts in the expanses of industrialized structural psychology, social psychology, organizational behaviour, personnel and human resource management, and organizational management. This varieties wisdom in that awareness of the elements, the significances, and other associates of job satisfaction can be energetic to organizational success & image (Cranny, Smith & Stone, 1992). Employers concerned in outstanding economical in today's world economy essential to essence on retaining excellence employees. "Satisfying employees for an effort well through growths satisfaction and efficiency" (Walker, 1998, p.18). Job satisfaction is adjoining the sensation of the environment of employment. In command of a society to be efficacious, it must endlessly guarantee the acceptably of their employees (Berry, 1997).

In his study of workers in private and public sector banks in Shimla district of Himachal Pradesh, Shallu Sehgal (2012) reported that social, economic variables, age, gender and financial benefits are significantly associated with worker satisfaction. Researchers reported that those who worked in the adolescent classroom were happier than others. Suman Devi and Suneja (2013) testified that there are significant differences between workers in public and private sector banks in various aspects such as job satisfaction, salary and margin, monitoring, coaching and development. However, these differences are not significant when it comes to associates, employee management, supervision, performance evaluation, and the nature of the job.

1.5. Theoretical Framework



1.6. Research Hypothesis

H0: Green HR Practices have no significant association with job satisfaction

H1: Green HR Practices have significant association with Job Satisfaction

H0: Green HR Practices have no significant impact on Job Satisfaction

H2: Green HR Practices have significant impact on Job Satisfaction

1.7. Research Design & Methodology

This segment is separated into six sub-sections. The primary sub-section offerings the research design. In the subsequent sub-section, the research approach has discoursed. The third sub-section exemplifies the sampling design. In the fourth-sub, data sources are revealed. The fifth sub-section affirms the variety of processes and the assets of tools. The sixth sub-section clarifies the reliability and validity whereas the last sub-section highlights the types of statistical procedures employed to test the hypotheses.

➤ Research Design

This study is essentially an exploratory study. Exploratory studies are an appreciated means of finding out 'what is happening; to seek new perceptions; to ask enquiries and to assess occurrences in a new light' (Robson, 2002). It can be connected to the accomplishments of the traveller or explorer (Adams and Schvaneveldt, 1991). Its great benefit is that it is flexible and adaptable to modification (Naipul, 1989).

➤ Research Approach

As this study is a professional and management research, it has appearances of positivist and explanatory approaches and it includes the empirical approach (Hussey and Hussey, 1997; Robson, 1993) as adequate as the inductive methodology (Easterby-Smith, Thrope and Lowe (2002).

Construction these two research approaches in the same part of the research is effortlessly conceivable and beneficial for research.

➤ Sampling Design

A sampling frame of 273 respondents from various IT sectors in India were selected randomly and all respondents were selected as per convenience.

➤ Data Sources and Instrumentation

As the data collection instrument, the questionnaire was circulated among IT sectors in India. The sample size was contained of 273 respondents for further study. For sample size calculation, the criteria of (Chou, Bentler, & Satorra, 1991) was accepted. In this research, three substances for GHRM were involved from (Green, Wu, Whitten, & Medlin, 2006). Five items were acknowledged Job Satisfaction from (Davidson, 1979) as it is alleged to be an easier methodology to collect data (Haque and Taher, 2008; Yu and Egri, 2005). Also, four substances were applied per each for recruitment & selection, five items for performance appraisal, and five items for rewards systems from (Harrison, Price, Gavin, & Florey, 2002; Hartog & Verburg, 2004). The questionnaire was de-signed into five-point Likert scale from one, strongly disagree to five, and strongly agree. The data were analysed through SPSS 24 for descriptive statistics and measurement reliability for the adopted tools.

1.8. Interpretation & Hypothesis Testing

Respondent Profile

The demographic statistics explored that 92.5% of respondents were males, while only 7.5% were females in this study. In employment status, the maximum response was established from lower managers at 72.9%, while the least response was verified from the higher manager at 1.8%. Maybe, due to the limit time and less availability to higher managers was the main reason. On the other hand, the maximum respondents were holding a Master's degree at 53.5%. The age distribution showed the maximum response among 31 to 40 years that were 55.7% (see Table 1).

	Frequency	%	Valid %	Cumulative %
<i>Gender</i>				
Male	247	92.5	92.5	92.5
Female	26	7.5	7.5	100.0
<i>Employment</i>				
Lower manager	199	72.9	72.9	72.9
Middle manager	69	25.3	25.3	98.2
Higher manager	4	1.8	1.8	100.0
<i>Education</i>				
Graduation	46	16.8	16.8	16.8
Master	146	53.5	53.5	70.3
Other	81	29.7	29.7	100.0
<i>Age</i>				
21–30	73	26.7	26.7	26.7
31–40	152	55.7	55.7	82.4
41–50	40	14.7	14.7	97.1
51–60+	8	2.9	2.9	100.0

Table 1: Alpha reliability co-efficients of composite scales. Reliability statistics

Construct	Cronbach's α	Cronbach's α based on standardized items	No. of items
Green HRM	.796	.786	5
HRP	.760	.720	8
Welfare	.954	.848	5
TND	.720	.664	5
Job Satisfaction	.866	.802	5

There was a measured reliability test for Green human resource management, HRP, welfare that showed .796, .760 and .954 Cronbach's α , respectively. In addition, TND and Job Satisfaction also reported .720 and .866 Cronbach's α , respectively.

KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy.		.821
Bartlett's test of sphericity	Approx. χ^2	2,953.215
	Df	231
	Sig.	.000

To analyse the linear relationship between all variables, firstly PCA test was piloted to check the sampling acceptability. KMO showed the .821 with significance of .000. The degree of freedom showed 231 with χ^2 of 2,953.2 that is acceptable for further study.

Additional, a multiple regression analysis was performed to recognize the predictors of JS as Hypothesized in the model. An enter wise variable collection was used in the regression Analysis and table-2 and table-3 show the summary measure and ANOVA of the model.

Table 2. Predictors of JS - model summary

Model	R	R ²	Adjusted R ²
1	0.720(a)	0.518	0.464

Predictors: (Constant), Green HRM, HRP, TND, Welfare

Table 3. ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.958	6	6.160	9.497	.000(a)
	Residual	34.375	53	.649		
	Total	71.333	59			

Predictors: (Constant), Green HRM, HRP, TND, Welfare

Dependent Variable: JS

The Green HR practices (Green HRM, RNS, RNPS, PNA) in the overhead model exposed the aptitude to predict JS ($R^2 = 0.518$). In this model, value of R^2 signifies that 51.8 percent of the experimental variability in JS can be explained by the Green HR practices namely Green HRM, HRP, TND, Welfare. The residual 48.2 percent is not explained which means that the interval 48.2 percent of the variation of JS is related to additional variables which are not represented in the model. This modification is highly significant as specified by the F value ($F=9.497$ and $P = 0.000$) [For details please see table-3]. An investigation of the model summary presented by the table-3 in conjunction with ANOVA, presented by the table-3, specifies that the model clarify the most possible combination of predictor variables that could donate to the relationship with the dependent variable.

Table 4. Coefficients for Predictors of JS

	Models	Unstandardized		Standardized	t	Sig
		Coefficients		Coefficients		
		β	Std.Ef for	Beta		
1	Constant	-.698	1.086		-.643	.523
	Green HRM	.323	.170	.334	1.892	.064
	HRP	.160	.342	.079	.469	.641
	TND	.404	.164	.354	2.460	.017
	Welfare	-.071	.314	-.056	-.226	.822

Sources: Survey Data

The table-4 shows that Green HRM and RNPS are positively influencing on JS. For Green HRM, the value of t is 1.892 ($p=0.064$, $df=53$), for TND, the value of t is 2.460 ($p= 0.017$, $df=53$). Thus, we accept Hypothesis 2. But for HRP, Welfare which fall in the area of rejection. Hence, it can be determined that Green HRM have significant impact on JS. Therefore, hypothesis-1 is also accepted.

1.9. Conclusions

From the Model, the highest positive value of correlation between Green HRM and JS explains that the establishments of selected industrial enterprises are essential to focus on Green HRM for receiving excellent employees' job satisfaction followed by HRP, TND and Welfare. It is also initiate that Green HRM and TND have substantial influence on JS. The present study only composed perceptual data.

2.0. Policy Implications

While the present study was limited to classify the impact of Green HR practises on job satisfaction, it may be suitable to formal concisely the policy implications for the study. In this perspective, the following policy activities may be careful valuable.

- Organizations should offer extensive training and development programs for the employees
- Organizations should go for thorough Green HRM Practices.
- Organizations should sensibly conduct HRP process.
- Organizations should familiarize appropriate Training & Development systems.
- Organizations should progress good working environment. This simplifies employees to do their work efficiently.
- Organizations should encourage employees to perform well. This can be realized by providing reward, motivations, and other benefits etc.

- Employees should be skilled to implement new technology and or advance their career.
- Organizations should offer dispassionate promotion. That is promotion should be offered based on the qualification of employees and /or experience.
- Organizations should implement equal employment opportunities. That is employees should not differentiate against female, and minority or old worker.

2.1. Limitations

Small sample size was one of the main restrictions of the current study. The study did not cover all the Green HR practices of the surveyed IT Sectors.

2.2. Directions for Future Researches

Numerous proposals that productive for future research developed from this present study. In order to authenticate the findings of this study, case study is another interesting method that can be done by forthcoming research. Furthermore, the research model of this study can be retested in Manufacturing firms or any other sector, so that the research model can be generalized to other fiscal sectors.

REFERENCES :

- [1] Ahmad, S. (2015). Green Human Resource Management: Policies and practices. Cogent Business & Management.
- [2] Arulrajah, O. a. (2014). Green Human Management : Simplified General Reflections . International Business Research , 101-112.
- [3] Ashok Ramachandran, Director HR Vodafone Essar Ltd
- [4] Anjana Nath Regional Head HR, Fortis healthcare Ltd
- [5] Beard, C. and Rees, S. (2000), Green Teams and the Management of Environmental Change in UK Country Council, Environmental Management and Health, Vol.11, No.1, pp. 27-38.
- [6] Gerhart, B., Wright, P. M., McMahan, G. C., & Snell, S. A. 2000, Huselid, M. A., & Becker, B. E. 2000. Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates? Personnel Psychology, 53(4): 803-834.
- [7] Kothari, C.R. and Gaurav Garg, Research Methodology : Methods and Techniques, Third Edition, New Age International Publishers, New Delhi, 2014
- [8] Mandip, G. (2012). Green hrm: People management commitment to environmental sustainability. Research Journal of Recent Sciences, 1, 244-252.
- [9] Robinson, F. (2008). Going green: what does it really mean? [online] Available at: [http:// ezinearticles.com/?Going-green!-What-does-it-really-mean?&id=2267926](http://ezinearticles.com/?Going-green!-What-does-it-really-mean?&id=2267926)
- [10] Renwick, D., Redman, T., Meguire, S.(2008), Green HRM: A review, process model, and research agenda, The University of Sheffield, pp.1-48
- [11] Robinson, F. (2008). Going green: what does it really mean? [online] Available at: [http:// ezinearticles.com/?Going-green!-What-does-it-really-mean? &id=2267926](http://ezinearticles.com/?Going-green!-What-does-it-really-mean?&id=2267926).
- [12] Shaikh, M. W. (2014). Green HRM, A Requirement of 21st Century. Abhinva Journal of Research in Commerce and Management, 122-127.
- [13] SuhaimiSudin (2011), "Strategic Green HRM: a proposed model that supports corporate environmental citizenship", University Tenaga National, Malaysia, 2011.
- [14] Shallu Sehgal (2012), Job satisfaction of employees in Shimla – A comparative study, International Journal of marketing, financial services and management research, Vol 1, Issue 7, July 2012
- [15] WCED, 1987 as cited in Cohen, E., Taylor, S., & Muller, M. (2004). Hrm's role in corporate social and environmental sustainability. SHRM Foundation's Effective Practice Guidelines Series, 3.
- [16] SPSS 24.0



HIGH-PERFORMANCE WORK SYSTEM: IMPACT ON ORGANIZATIONAL PERFORMANCE

JYOSHNA PANDA

ABSTRACT:

Skill development and knowledge are the two driving forces of economic growth and social development of any country. They have become even more important with the increasing pace of globalization and technological changes. People with higher level of skill and competency can be good entrepreneurs and adjust more to the challenges and opportunities of globalization. The size of the current technical training infrastructure is much smaller than what is required. India is currently having the capacity of imparting training to 3.1 million people per year. However, this is insufficient, because every year, 12.8 million new people enter into the workforce. The distribution of training capacities is unbalanced, with the industrially-advanced states of Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka, accounting for 48 percent of recognised technical training institutions.

Keywords: *Skill, competency, Capacity, Challenges, opportunity*

INTRODUCTION

The Indian economy grew at an advanced rate of 7.1 percent year in the quarter July – Sep 2018, thereby making it a fastest economy to grow. India's demographic profile is helping the country to aim for an accelerated economic growth. India is expecting a huge growth in the labour market by having 64.8 percent of the population as the working population. It gives a lot of benefit to the country in the labour market. Skill India is a campaign launched by Prime Minister Narendra Modi on 15 July 2015 which aim to train over 40 crore people in India in different skills by 2022. It includes various initiatives of the government like “National Skill Development Mission”, “National Policy for Skill Development and Entrepreneurship, 2015”, Pradhan Mantri Kaushal Vikas Yojana (PMKVY)” and the “Skill Loan scheme”. The MAKE IN INDIA program laid the foundation of India's latest policy to bring an economic revolution by making India a global manufacturing hub and welcoming both domestic and international industrialists to invest in India that will generate employment and overall development of India. Manufacturing sector is the strength of an economy as it fuels employment generation, better quality of goods and services at cheaper rate, economic growth & development along with helping the growth of other sectors also.

LITERATURE REVIEW

Anita Singh and Rinku Sanjeev (2016) “Need for Re-Skill training towards Make in India Initiative” carried out exploratory factor analysis to identify the factors affecting employee's attitude

towards re-skilling training programmes in IT sector. Factors identified are need orientation, appropriate re skill training, soft skill training, value addition, updated knowledge, and advance growth on which factor matrix was created and tested by KMO and Bartlett's test which depicts 0.585 KMO measures of sampling adequacy and 892.952 of chi values. The findings suggested attitude of employees is influenced by the factors tested.

Sushendra Kumar Misra (2015) in his study on "Skill Development: A Way to Leverage the Demographic Dividend in India" stated his objective of the study to understand the present skill development policy and through skill development schemes finding out the way to produce world class skilled manpower. The paper discussed about the policies of National Skill Development Council, National Skill Development Coordination Board, and National Skill Development Agency and concluded that existing skill development policy should be modified in accordance with the need of the industry and global market and should promote the private partnership to accomplish the skill targets.

Sanjay S. Kaptan (2014) in his study on "Skill Development and Capacity Building-Role of education Institution" discussed about the importance, role, and need of skill development and capacity building programme as the principal purpose of education. The paper briefed about the suitability of education to meet the requirement of industry and labour market, improving the quality and competency of labour through skill development programme as conventional education system lack synergy between industries and institutions. The paper finally concluded that there is a strong need of capacity building & skill development programmes and there should be strong active participation of educational institution to accomplish the mission.

Sanjeeb Hazarika (2016) in his study on "Skill Development for Rural Entrepreneurship: A study on State Institute of Rural Development (SIRD), Assam" attempted to find out the different skill development facilities provided by State Institute of Rural Development for rural entrepreneurship and to examine the motivational role of training provided by the institute in assam. The paper discussed about various, infrastructural facilities like resource centre, development and management of growth centre and common facility centre, resource centre in IT motivational infrastructure, SATCOM and training programmes conducted by the state institute rural development. The study also found out that due to lack of awareness, growth of enterprise in Assam is comparatively low.

Seema Pandey (2016) in his paper on "Improvising Skill Development & Employability Potential through Higher Education, Research & Innovations in India" studied policies framed for skill development and identified the gap between the government and private programmes. The paper discussed on the current scenario of skill development programme, vocational education and women, private and public sources of skill development, initiatives under ministry of skill development and entrepreneurship.

OBJECTIVE OF THE STUDY:

1. To study the present skill capacity of India.
2. To study the challenges faced by skill development system in India.
3. To suggest possible solutions or ways forward.

RELEVANCE OF THE STUDY

In today's age of globalization and technically mutated world, skill building is an important weapon to boost the efficiency and the quality of services for the advanced productivity and economic growth. India is today one of the youngest nations in the world with more than 62% of

the population in the working age group (15-59 years), and more than 54% of the total population below 25 years of age. The opportunity to reap the benefits of “demographic dividend” has to be utilized only with the skilled workforce.

METHODOLOGY

The proposed study is descriptive and explorative in nature. It is based on secondary data and information collected from different sources as per need of the research. The relevant books, documents of various ministries/departments and organizations, articles, papers and web-sites have been referred in this study.

NEED FOR SKILL DEVELOPMENT

Livelihood opportunities are affected by supply and demand side issues. On the supply side, India is failing to create enough job opportunities; and on the demand side, professionals entering to the job market are lacking in skill sets. This is resulting in a scenario of rising unemployment rates along with low employability.

Job Creation: Between 1999-2000 and 2004-05, the number of jobs increased by 59.9 million persons against an increase in labour force of 62 million. Though, the increase in employment kept pace with increase in labour force for the next 5 years, the total increase in jobs was only 1.1 million. Employment generation picked up from 2009-10, with 13.9 million people finding jobs in 3 years. However, 14.9 million people entered the job market during this period. Currently about 26 million people enter the working age group every year with about 65% of them looking for jobs.

Youth Skilling: While keeping pace with employment generation is one issue, employability and productivity of those entering the labour market is another issue. As per the India Skills report 2017, only 37.22% of surveyed people were found employable, 34.26% among male and 37.88% among female. NSSO (2017) showed that only 10.1% of the labour force had received vocational training, with only 25.6% among them receiving a formal vocational training. India ranked last among 60 countries on labour productivity (World Competitiveness Yearbook, 2015).

Demand for Skilled Workforce: CII (2009) had projected Incremental Human Resource Requirement till 2022 at 201 million, making the total requirement of skilled work force by 2022 at 300 million. A major share of these jobs was to be added in the manufacturing sector, with the National Manufacturing Policy (2011) targeting 100 million new jobs in manufacturing by 2022. The National Skill Development Policy (2009) had set a target of skilling 500 million people by 2022. More recently, study reports commissioned and released by Ministry of Skill Development assessed an incremental human resource requirement across **24 sectors as 109.73 million by 2022.**

CHALLENGES IN SKILL INDIA

India is facing a lot of challenges keeping in view the current infrastructure and the policy framework. The Challenges faced in skill development have been discussed below:

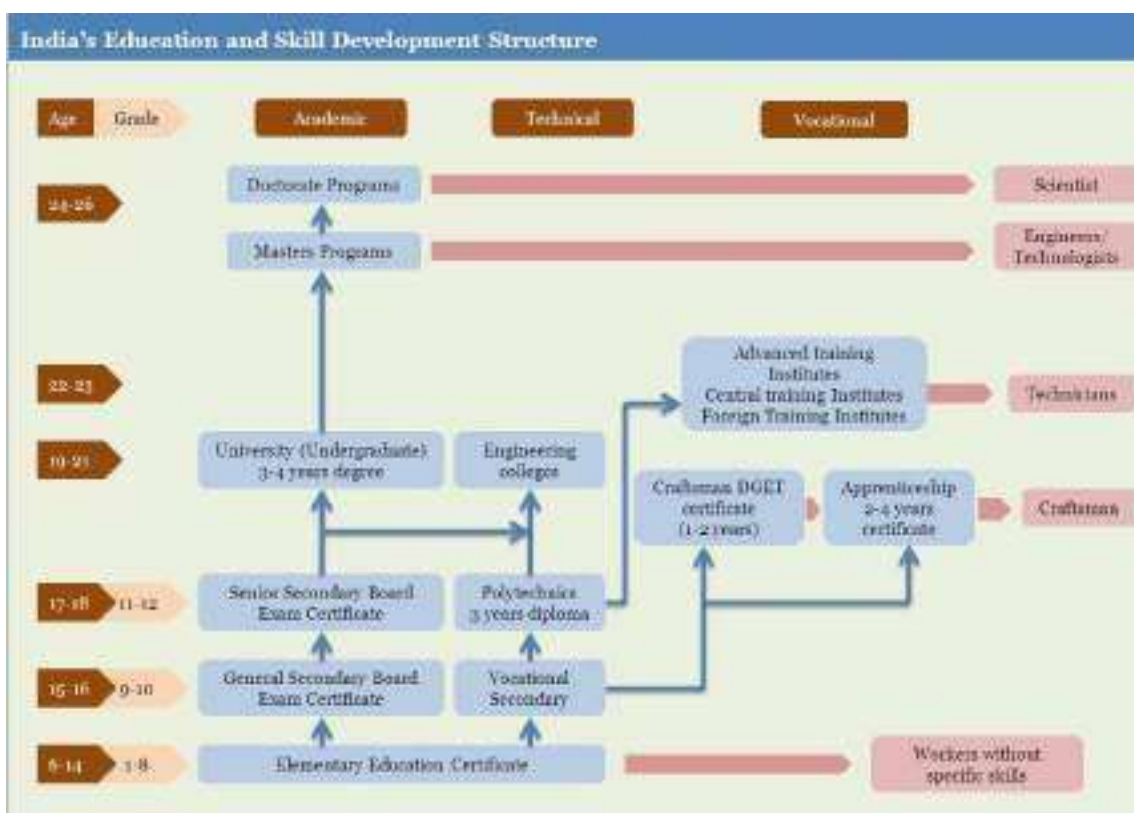
1. Insufficient Scale and Restricted Capability : The current infrastructure facility available in the educational institutions is inadequate considering the huge demand of labour. Not many trained and highly skilled trainers available in this sector.

2. Mobilization: The enrolment of the students for vocational education and training become an extremely challenging task. The outlook of the people associated with the skill development is still very traditional. The students would move on to managerial roles as the technical trade positions are associated with low salaries and lack of recognition.

3. Employer’s buy-in: The industry doesn’t distinguish whether the person has acquired the skills through on the job training or has gone through a formal training. Many companies make their own skill centres through which they develop the people. Though the Skill Development also focuses on the Public Private Partnership Model but it needs a lot of effort from both the players in development of skills.

4: Scalability: Since there is very limited buy-in from the corporate sector the progress of such initiatives is reduced. Skill development had not been a priority of the Government of India earlier and hence this area has always been ignored .

PRESENT SCENARIO OF SKILL CAPACITY OF INDIA



Source: World Bank

In order to capitalize the demographic dividend, India will need to empower its workers with the right type of skills. Thus this section depicts the present skill levels of the Indian workforce in the age group of 15-59 years in the form of their general educational levels and vocational training levels.

1. The drop-out rates of educational institution was estimated to be 50% in the age group of 5-14 years and 86% after 15 years of age and in contrast to this the participation rate of the workforce rises rapidly after 14 years of age and it results in a semi-literate workforce which finds it difficult to absorb higher form of skills.
2. 38% of Indian workforce is illiterate, 25% has education below primary or up to primary level and remaining 36% has an education level of middle and higher level.

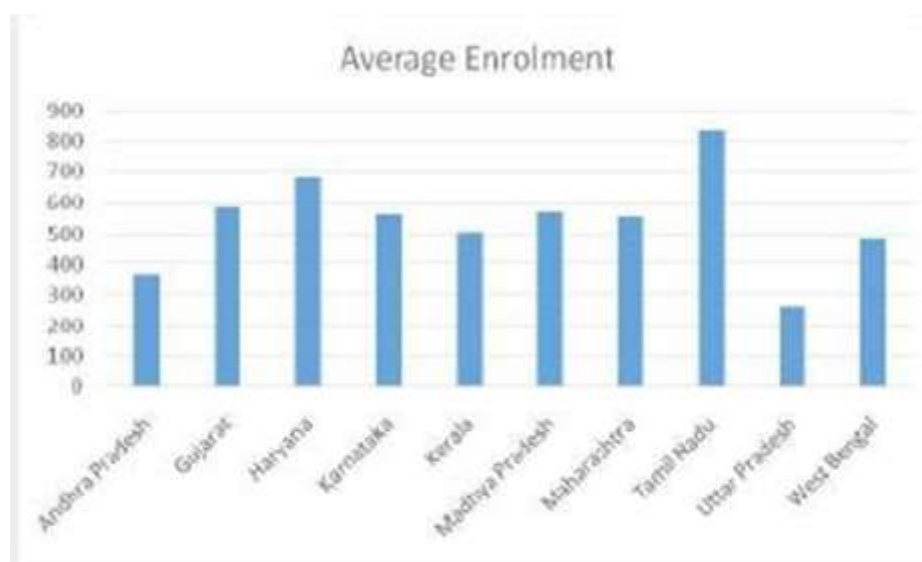
3. 80% of Indian workforce does not possess any marketable skills.
4. Only about 2% have received formal vocational training and 8% non-formal vocational training, thereby implying that very few new entrants to the work force have any marketable skills as compared to developed economies such as Korea (96%), Germany (75%), Japan (80%) and United Kingdom (68%).

AVERAGE ENROLMENTS IN INDIA'S TOP TEN POLYTECHNIC STATES

State	Enrolment (no.)	Polytechnics (no.)	Average Enrolment
Andhra Pradesh	51,204	140	366
Gujarat	42,735	73	585
Haryana	23,112	34	680
Karnataka	1,00,274	179	560
Kerala	28,284	56	505
Madhya Pradesh	24,970	44	568
Maharashtra	1,07,232	194	553
Tamil Nadu	1,74,238	209	834
Uttar Pradesh	27,963	107	261
West Bengal	19,404	40	485

Source: Ministry of Human Resource Development, Government of India,

GRAPH



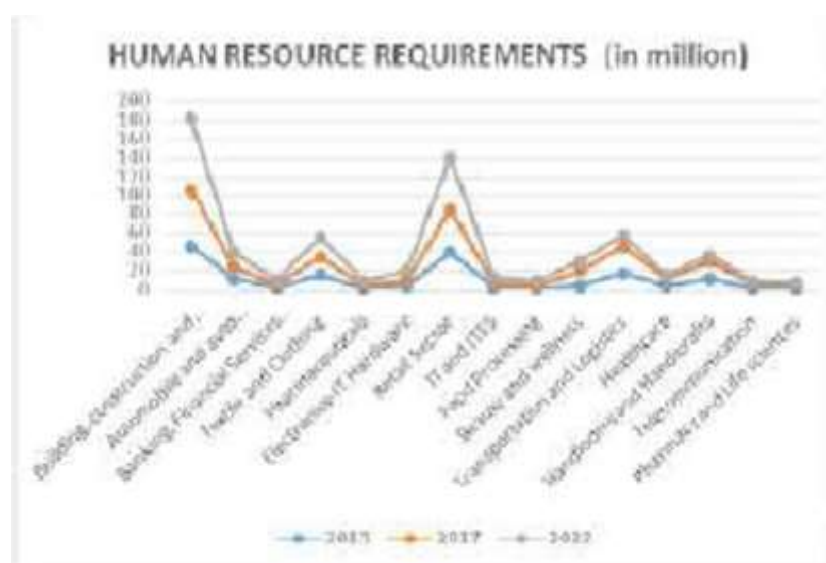
Analysis:

It clearly states that Average enrolment is highest in Tamilnadu and lowest in UP. It is only possible because of Govt. support, by opening more polytechnic institutions. Tamilnadu Govt. also focus more to attract the matric students to build a career in technical area. Odisha Govt. should focus more attention for the development of Polytechnic institutions.

INCREMENTAL HUMAN RESOURCE REQUIREMENTS ACROSS SECTORS BY 2022

Segment	Employment base in million		
	2013	2017	2022
Building, construction and real Estate	45.42	59.40	76.55
Automobile and auto component	10.98	12.18	14.88
Banking, Financial Services Insurance	2.55	3.20	4.21
Textile and Clothing	15.23	18.06	21.54
Pharmaceuticals	1.86	2.60	3.58
Electronics-IT Hardware	4.33	6.24	8.94
Retail Sector	38.6	45.11	55.95
IT and ITES	2.96	3.86	5.24
Food Processing	1.75	2.65	4.40
Beauty and wellness	4.21	14.27	10.06
Transportation and Logistics	16.74	28.4	11.66
Healthcare	3.59	7.39	3.8
Handlooms and Handicrafts	11.65	17.79	6.14
Telecommunication	2.08	4.16	2.08
Pharmacy and Life sciences	1.86	3.58	1.72

Source: Ministry of Skill Development and Entrepreneurship

GRAPH

Analysis

The above graph clearly indicates that in future, more employment opportunities will be created in real estate sector. Simultaneously there is low growth aspect on Pharama Company as it is reduced in future years. There is high requirement in real estate means youth should focus more on the skill training related to construction works and real estate business.

SCHMES IMPLEMENTED BY VARIOUS MINISTRIES

YEAR	TARGET (INLAKH)	PERSON SKILLED	ACHIEVEMENT
2013-14	46.53	45.58	98%
2014-15	72.53	51.88	72%
2015-16	73.42	76.37	104%
2016-17	105.07	51.50	49%

Source: Lok Sabha Questions 2017

Case Study: Kaushalya Vardhan Kendras (KVK) in Gujarat



The concept of *Kaushalya Vardhan Kendras* in Gujarat was launched in 2010. The idea behind KVKs was to promote entrepreneurship and strengthen skill development especially among the youngsters in rural areas. The program has reached 13 lakh people since inception through a network of 400 KVKs established in 4 phases. About 60% of the trainees were women and 63% are from SC / ST / OBC backgrounds. KVKs adopt a decentralized, cluster based approach for skill development that is responsive to local cultures, traditional skills and industry needs. Courses are designed on the basis of the participatory approach of *Kaushalya Sabhas* based on the *WISH* concept:

- W** – Women Oriented Courses,
- I** -Industry Oriented Courses,
- S** -Soft Skill and Service Sector Related Courses,
- H** -Hard Core Traditional Courses.

The Courses also promotes home-based employment and entrepreneurship. 455 courses were initially designed, with another 1980 life skill courses added later on.

Some of the successful elements of KVK included:

- Utilization of existing institutions and infrastructure – available Government buildings were identified and infrastructure upgraded.
- Awareness campaigns were launched to advertise the program through a host of meetings held at local schools and panchayats.
- The KVK staff also establishes key linkages with industries, companies and job providers in the proximity of KVK and helps the trainees acquire jobs.
- Apart from funding from the State Government, a nominal fee of Rs. 50 is charged from the candidates and no fees taken for SC/ST/Women/Specially abled and BPL candidates.
- There is no upper age limit for candidates.

The scheme was conferred the Prime Minister's Award for Excellence in Public Administration for the year 2011-2012

LIMITATIONS AND SCOPE OF THE STUDY

This research study is mainly based on the reliable data available during the period from 2013 to 2017. Here we consider 16 sectors for the employment creation aspect during the said period. More number of sectors can also be explored for more employability among youth.

The Study leaves the scope for researchers who wish to take up further research in the field of entrepreneurship development, and initiation of different startups. The detail analysis of manpower demand and supply gap can be done and also various initiatives need to be taken up for filling the gap through more training and development opportunities.

RECOMMENDED STRATEGIES FOR PROMOTION OF SKILL DEVELOPMENT PROGRAMMES:

The various strategies need to be adopted for smooth progress and functioning of skill development programmes are as follows.

1. Creating and enhancing the skill development infrastructure.
2. When construction of schools, institutions and other establishments take place, there should be adequate measures for skill development to take place such as usage of technology.
3. Current institutions, ITIs, acquire mechanisms and equipment required for vocational training of the individuals.
4. Establishment of skill development centres in rural and urban areas, especially where there were not any.
5. Finance has been a major issue especially for the economically weaker sections of the society; hence some measures have to be formulated to finance their skill development programs.
6. Involvement of private organizations, profit as well as non-profit in activities implemented by the CSR cell, CSR activities make skills a responsible activity and they are really useful.
7. Initiatives are to be taken up to increase the number of skilled personnel within the country and on the basis of their skills they should be able to accomplish something for themselves and find employment not only in industries but in all kinds of sectors like education, transport, manufacturing etc.

8. Differential wages should be offered for the skilled and certified workforce to encourage recognition of the skill development programs by the society so that more and more youth can join.

CONCLUSION

To make India globally competitive and to boost its economic growth, a skilled workforce is very much essential. As India is now moving towards the Knowledge Economy, it is increasingly important to focus on skill development, and placement for better employability, sustainability and growth. For transformation of its demographic dividend, skill development is the need of the hour. Therefore to achieve its ambitious skilling target, it is imperative to have holistic solutions of the challenges instead of piecemeal interventions.

REFERENCES:

1. Dahlman, C., & Anuja, U. (2005). *India and the Knowledge Economy: Leveraging Strengths and Opportunities*. Washington, D.C: World Bank.
2. Federation of Indian Chamber of Commerce & Industry. (2013). *Knowledge paper on skill development in India*. Global Skills Summit 2013. New Delhi: Ernst & Young Pvt. Ltd.
3. Federation of Indian Chamber of Commerce & Industry. (2014). *Reaping India's promised demographic dividend —industry in driving seat*. New Delhi: Ernst & Young Pvt. Ltd.
4. Government of India (2012). *Reports and Publications*. Ministry of Statistics and Programme Implementation. Government of India. New Delhi.
5. Hazarika, S. (2016) : "Skill Development for Rural Entrepreneurship: A study on State Institute of Rural Development (SIRD), Assam"
5. International Labour Organization. (2012). *Global employment trends- Preventing a Deeper Jobs Crisis*. Geneva: ILO.
6. Kaptan, S.S (2014) : "Skill Development and Capacity Building-Role of education Institution"
7. Misra, S.K. (2015): "Skill Development: A Way to Leverage the Demographic Dividend in India"
8. National Sample Survey Organization. (2010). *Employment and Unemployment Situation in India (66th Rounds)*. Ministry of Statistics and Plan Implementation, Government of India. New Delhi.
9. Pandey, S (2016) "Improving Skill Development & Employability Potential through Higher Education, Research & Innovations in India"
10. Singh, A and Sanjeev, R (2016), "Need for Re-Skill training towards Make in India Initiative"
11. UNESCO. (2010). *reaching the marginalized: Education for All*. Global Monitoring Report. Paris: Oxford University Press.
12. World Bank. (2012). *More and Better Jobs in South Asia*. The International Bank for
13. <http://www.oecd.org/document/20/>
14. <http://dget.nic.in/coe/main/100ITIs.htm>
15. <http://planningcommission.gov.in/data/datatable/data>
16. <http://nsdcindia.org/knowledge-bank/>
17. www.ficciskillforum.org

A STUDY ON THE IMPACT OF DIGITALISATION TOWARDS CASHLESS ECONOMY IN INDIA

KENGUA ASHOK KUMAR

Abstract :

Contemporary changes in traditional communication to technostic communication in business environment which enhance the productivity with speed process. Due to globalization each and every function are now changes towards digital platform. To respond to these challenges HR professionals are looking accelerate digitization effectively, manage services and requirements in a more streamline way. Now traditional HR functions are restructuring to digital platform. Operational, Rational and Strategic HR function are now takes place through digital process. It makes the function fast, accurate and user friendly. Digital HR has a huge productivity effect, as it frees up HR professionals time, enabling them to focus on activities that are of more strategic value to the businesses. The aim of the study is to know the various digital HR functions adopted in different industries and also to know the possible challenges and opportunities, which aligned to HR strategy with respect to organizational goal.

Key Words: Technostic, Operational, Rational, Strategic, opportunities, Challenges.

Introduction:

In order to augmentation of digital India platform and present technological changes in this globalized market the HR professionals responds these challenges to make digital platform for Human Resource Management by adopting Artificial Intelligence, Cloud based Computing, Machine Learning, Virtual Reality, Social Media platform, Mobile technology etc. So, digitization of HR is the combination of technology and human, which create magic in organization. Technology has the objectives but human have the purpose to find the solution, when both joined they create fantastic result which benefits both to employee and organization. Use of this technological advancement in terms of Digital HR increases employee efficiency, improvement in employee relation, enhancement in customer satisfaction, achieving organizational goal and rises productivity. Digital HR is technology enabled mode of effort that leverages new age serious to construct HR matter and decision intuitive, informed and stirring to facilitate organizational efficiency. In recent years, many organizations are adopted digital HR systems to improve organizational efficiency and influence the role of human resource as a strategic business partner. Digital India initiative introduced by Indian Govt. has contributed a lot to boost the economy of the country. In the digital age every civilian has a bright prospect to transform the lives in many ways by using digital information. Many organizations came forward to contribute their hands for achieving India a digitally equipped country and coming forward to spread digitalization among rural areas.

Literature Review:-

Stolterman and Fors, (2004) described digital transformation as digitalization, it's a business model driven by 'the changes associated with the application of digital technology in all aspects of humansociety'.

Piccinini et al. (2015) conducted a literature study to determine, amongst others, how customer behavior is hanging due to digital technologies. Consumer information has greatly increased due to increased accessibility and availability of products and services through digital devices, anytime, anywhere to everybody.

People like Kognuramath and Angadi (2010) and Srivastava and DevKanungo (2010) have examined that, the optical character recognition (OCR) software used and its advantages over other OCRs, the search interface used, browsing and searching facilities, navigation facilities provided in the CD, etc.

BP Biddappa (2016) in his article "Role of HR in digital information journey at uniliver says that, this help us tremendously in a couple of ways enhanced transparency and efficiency. Digitization has also enabled culture change.

AkshayKanchan, George sheba (2017) in his article "A study on the impact of digitization on human resources: HR professionals, says that in this era of technological advancement, every field is transforming itself towards digitization.

Priyank Kumar (2016) in his article says digitization clearly associates itself with the overall business goal of an organization as it implies that HR is not an administrative function but is accountable for delivering more strategic and revenue driven results.

Wokday staff writers (2016) in his research paper "How to Digitize HR" says that social Mobil, analytics and cloud tools are only useful if employees adopt them. It must begin with employeeneeds and the user experience.

Research Methodology

Sampling is the process of obtaining information about entire population by examining only part of it. The researcher opted a convenience sampling method in which it was convenient to select samples for the study. A sample of 50 employees HR department from various sectors like Education Institute, Manufacturing Organization, Service and construction sectors etc. were taken. The data were collected both primary and secondary sources. The secondary data which are available from online sources such as company reports, blog of experts, websites, research papers and magazines have been used.

Objective of the study:-

1. To study different methods of digitization in HR.
2. To analyze the opportunities and challenges of HR digitization in industries.

Digital HR implemented by different Indian organization:

Reliance Jio, the 4G telecommunications, and digital services company is the perfect example of digital transformation. Which was came up with a vision to build a national 4G network across 18,000 cities and towns in India to serve hundreds of millions of customer. They have started with an employee value proposition strategy that supports employees, candidates, and business managers and the service they offered was easy to use, quick to buy and come with safety. Digital-first HR programme was used which allowed staff members to complete the tasks with the help of real-time

apps and cloud-based services. Secondly, they streamlined their all hr processes, technologies (including SAP and a series of cloud apps such as Salesforce.com,) policies into one single application. They have automated and streamline almost all of their major activities. All these activities helped reliance to build a strong HRIT enabled the network to promote its services and help in making its successful.

People Strong:-Human resources solutions and technology company people strong developed India's first HR Chabot 'Jinie. It acts the role of an employee's personal work assistance and helps in work-related queries such as applying for leaves, collating and completing employee data, answering company policy-related questions and many more.

Hero Motor Cop has implemented a SAAS(software as a service)-based Talent Management Platform, which not only appreciate and understand the internal talent pool but also touches the available talent pool outside the company.

Jindal Steel and Power Limited (JSPL) is constantly learning and adapting new technologies. Their key interventions in HR are as follows:-

- **On boarding touch points** its starts working whenever a new employee accepts the offer letter, a link is sent to him/her to update all personal information, which automatically updated the SAP employee data. This is saving their time from hiring to On boarding.
- **Online Performance Management System (PMS)** which sets the goals, records KRAs and competency mapping. The key feature is that it is a paperless process.
- **Online Employee Self Service'** platform provides basic information for the employee, payroll, attendance, leave, and entitlements etc. on a single click.
- **Learning and Development System- Gyandrishti**, it provides skill enhancement training material on the functional, behavioral and technical field. It is just-in-time training where the employees are empowered to choose the pace and content of learning.
- For employee engagement, they have an intranet portal called '**JSPL Connect**' which showcases company information to employees like policies, recent achievements, awards received, important announcements, messages to employees from the leadership team, posting of internal jobs, provision for any suggestions that employees would want to give to management etc.
- Analytics tool called '**Click View**' which has a direct crossing point with SAP systems to underline metrics, dashboards & trends. With the help of this data-driven approach, talent practices in an organization have become one of our strategic capabilities and talent data is always integrated with the organization's business data.

Kaya Limited is using a platform called **kaya café**, which starts working automatically whenever anew candidate joins, keep a check on on-boarding and provide access to policies. They are using a system called **Wooquer**– which is used to deliver refresher training programs.

Tata Steel Ltd. is continually adapting new technologies in HR are as follows:-

- Use of cloud technology for data prevention.
- Employees punch time and biometric records.
- Mobility of HR portal.
- Leave management through mobile.
- Travel management through cloud.

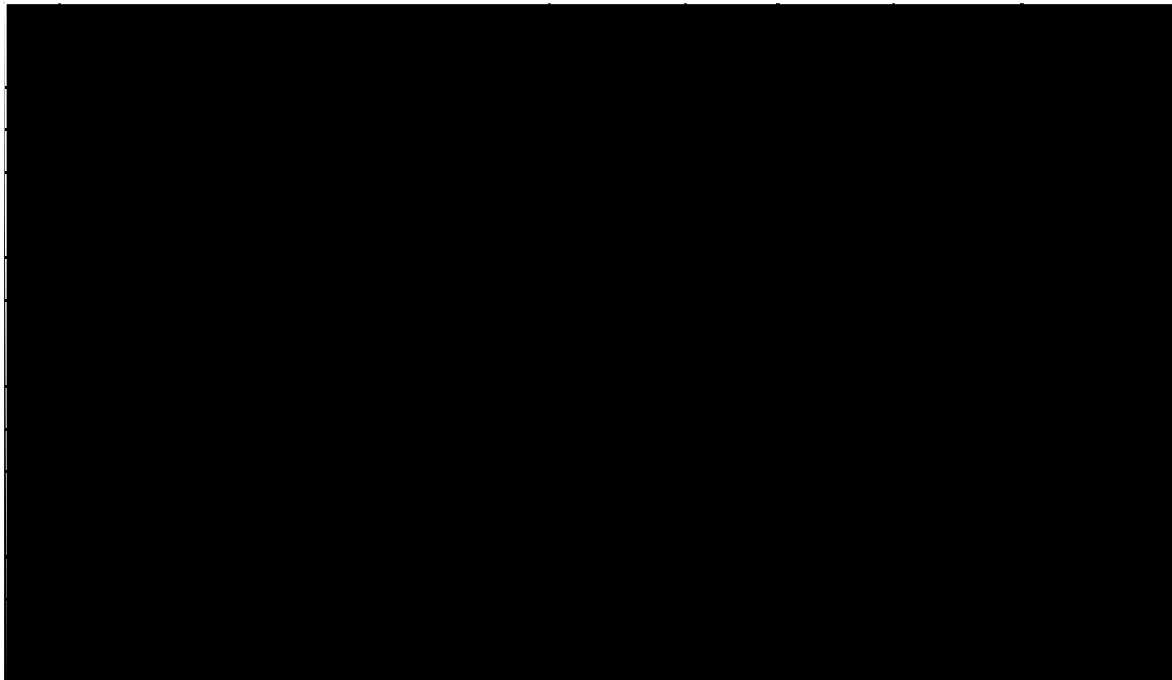
- Online learning and training.
- Social network through mobile.
- Analytical report in HR for better strategy.
- Manpower planning with cloud based tools using artificial intelligence.
- Employee search & Pay slip download through mobile.

Odisha Power Transmission Corporation Ltd. (OPTCL)- :

OPTCL is one among the few states to implement Gas Insulated Substation (GIS) and Digital GRID technology. OPTCL also bagged outstanding award in the category of "Best Overall Recruitment and Staffing Organization" "In the last five years the Corporation has recruited 1210 professionals. Among the criteria for selecting the winners in the category are the exemplary initiative in Talent OPTCL is the first state PSU to conduct online Computer Based Test (CBT) for recruitment of best and niche candidates." After getting opportunity to lead the Human Resource Department in OPTCL, transparent and technology driven recruitment was one of my top priorities. The volume of applicants during the recruitment drives itself speaks the Brand OPTCL which is the best place to work for the young aspirants. We have adopted the mantra of 3C in our work culture i.e Connect, Collaborate and Communicate with the people for overall development of the organization" said Sri Rajendra Senapati , Director , HRD , OPTCL after receiving his individual award of "Pride of Bhubaneswar Award" for excellence in HR. OPTCL Bags Best Employer Brand Award-2017 The Award Nominations were selected by Employer Branding Institute -India (EBI) an organization which connects senior leaders in Industry Sectors to share their best practices throughout the country. The Awards are hosted by the World HRD Congress.

Data Analysis and Interpretation:

To study the opportunities and challenges data analysis and interpretation is essential for the research.



The above analysis indicates that digital HRM is relevant and useful for functions like recruitment & selection of employees. Most of HR professionals are strongly agree that it helps on reducing cost of production and develop the economy of country. By digital HRM practices, it helps HR to become proactive than reactive. 60% strongly agree digital HR practices plays vital role in success of organization. Most of them disagree about digital HR reduces the job opportunity where as it enhance the work efficiency of HR practitioners.

Opportunities:

- HR leaders today understand the function's impact on the business top line. They are no longer focused on cost cutting; they are looking to solve real world business problems through HR technology.
- A well developed digital HR strategy requires a cultural mind shift and a social change management frame work.
- The radical changes in function does not eliminate the need for HR departments, however instead, HR professionals have the opportunity to take on a more expensive and strategic role within their organization.
- Analyzing employee data and using this information to create strong company brand and custom talent offerings will be the functions of HR department that fully embrace the digital transformation.
- Digital HR valued job security and a relaxed work atmosphere.
- Digital HRM can influence the employee HR relationship.

Challenges:

In this futuristic, era the technologies are making waves in the Human resource department, the future of HR is challenging because employee comprehends any form of cognitive tech as a threat to their job security. Some of the possible challenges which an enterprise has to face are given below:-

- a) **Resistance to change:** - New technology is not the panacea that will magically clear us of all the trouble. It can't solve any problem unless we change the fundamental mindsets people normally don't support change unless and until it became the urgency. So it is necessary to change the mindsets of the people by re-skilling/up-skilling and HR should work towards supporting wellness management, Wellness programs, counseling sessions, employee-sharing groups, etc. can help create a sense of bonding and change of mindset.
- b) **Managerial support:-** A manager should always there to support and inspire the new technology as most of the companies won't able to pursue digitization as their managers or leader were not supportive enough. So it is a necessary thing to have good managerial support that encourages innovation.
- c) **Hiring the right talent:** - One of the crucial things to support digital transformation is the group effort of interdepartmental employees. Don't let the splitting up to harm the system and for that make sure the right technical superiority at the right place. It will link the gap between the developer and communicator. Organizations need to recruit or re-skill/up-skill for the future with job skills that they have not considered to meet forthcoming changes in digital technology.

Conclusion:-

In the next few years, digital is modifying the way the organisation operate and is here to radically break up the old HR system and redefine the future of the human resources function. Digitalization is not merely automation of transactional systems and processes, but is inherently a mindset change that seeks to adapt, upgrade and modify our working process through front end technology. Accelerating digital adoption is changing the way organizations are working for inclusive growth and sustainability. The primary intent of this paper was to find out the meaning of digital transformation in Human resource management and how HR functions are taking benefit of it. Artificial intelligence, Data analytic & Cloud base etc are some of the tools that companies are using in making their HR functions and employees, stronger, quicker and smarter. The papers also have talked about the opportunities and challenges of it. Most of HR professionals are strongly agree that digital HR helps on reducing cost of production with increasing of productivity and develop the economy of country as well as enhancing the efficiency of the HR professionals without cutting the job opportunity. It can be conclude that digitization and digital transformation in human resources should be implemented for sustainable growth of the organization.

REFERENCE :

C.R Kothari, GauravGarg "Research Methodology- methods and techniques "Third edition (New age international (P) Ltd. 2014). Page-5

Digital Transformation.In 12th international conference on Wirtschaftinformatik (pp. 1634–1648).

Dr S.S. Khanka "Human Resource management test and cases" C.S. Chand & Company Ltd. Delhi 2003. Page -385.

Gary Dessler "Human resource management 10th ed. (Prentice Hall of India, New Delhi, 2005). Page 10.

Oxford economics "The digital transformation of people management" March 2012.

Piccinini, E., Gregory, R., & Kolbe, L. (2015). Changes in the Producer-Consumer Relationship-Towards

Stolterman, E. and A. C. Fors (2004)."Information Technology and the Good Life." In: Information

Systems Research: Relevant Theory and Informed Practice. Ed. Kaplan, B. et al., London: Kluwer

Academic Publishers.



EMPLOYEE PERCEPTION TOWARDS TECHNOLOGY ADOPTION – A STUDY IN SELECTED ORGANIZATIONS OF BHUBANESWAR

LAXMIPRIYA DASH

ABSTRACT

The use of information technology in service sector is driven by the need to improve and redefine customer service. However, technology up-gradation would not be successfully implemented if employee's factors are overlooked. Increased globalization has exerted pressure on organizations over the past decades have forced organizations worldwide to face unprecedented levels of competition and operate in a dynamic business environment. In an effort to remain competitive, there has been an increasing need in organizations to connect and integrate the information supplied by each department in a single Information Technology (IT) infrastructure. This study was to explore employees' perception and behavior towards technology adoption and not just assumes psychological validation of technology adoption rather; it provides a profound understanding by way of exploring how employees at grass root levels perceive certain influential factors in relation to their adoption and acceptance of technology. Four key determinants influencing employees' perception namely, improved performance, job favorableness, practicality of use and ease of use were identified and their corresponding relationships were analyzed.

Keywords: *Information Technology, Employee Perception, Technology Adoption.*

Introduction

Increased globalization has exerted pressure on organizations over the past decades have forced organizations worldwide to face unprecedented levels of competition and operate in a dynamic business environment. In an effort to remain competitive, there has been an increasing need in organizations to connect and integrate the information supplied by each department in a single Information Technology (IT) infrastructure. The development and implementation of information and communication technology (ICT), has undeniably permeated its tentacles in almost every levels of the society, especially during the last few decades. With the advent of ICT, the geographic perimeters have expanded beyond the

physical workplace and at the same time the flow of information has fastened the information flow. Individual lives as well as the society as a whole, a histrionic change as a resultant effect of ICT. The nature of job duties is changed to a large extent and even many of the jobs those which had been existent since ages have become obsolete. Advances in technology are triggering the interest of companies to consider the management of information more essentially through an information system (IS) acquisition. Drucker (1999) pointed out that a new information revolution is under way. It is not a revolution in technology, machinery, techniques, software or speed. Information is undeniably considered as a treasured resource for enterprises. Information-category as well as Information-complexity is a major characteristic in every function of a typical business environment. Managing information within the organizations has become an indispensable and a powerful driver intended for business performance and sustainable organizational growth. Undoubtedly, information should be systematically arranged and managed to minimize business uncertainty with maximizing profits. The implementation of modern technology avenues is one of the most persistent transformations that has taken place across several organizations in the last decade. As a major module of enterprise systems, it seeks to regulate, rationalize and assimilate managerial operations and information-flow by way of synergizing an organization's financial, operational and human resources through Information Communication Technology (ICT) infrastructure. IT systems aim to consolidate business operations of every kind into a uniform and enterprise-wide system environment. It also serves as a tool for data sharing, cost reduction and precision of business processes. ERP systems if efficaciously implemented, will yield positive effects on an employees' efficiency, thereby accentuating organisational productivity. There are several factors on which the consequence of any technological implementation would depend upon, including the activities of policy-makers and users' receptiveness. Owing to the adoption of information technology as a strategic tool for business operations by many organisations, yet it cannot be neglected that its benefit cannot be achieved unless there has been appropriate execution. The success of any technology adoption depends on its successful implementation and the successful implementation depends upon the users' perception and satisfaction. Organisations having deployed considerably larger chunks of resources into the IT projects still encounter unexpected challenges. Employee perception is one of such challenges which acts as a major influencer of technology implementation success. Employee perception can be understood as the sum total of user sensitivity, user satisfaction and user responsiveness in context of any organizational change. The effectiveness of any technological change as adopted by an organisation directly depends upon the user dynamics. User sensitivity refers to the inner drive of the users, employees in this case, signifying their insight and awareness to accept and adopt a new technology. User satisfaction can be referred to as the affective component of attitude towards a specific technological transformation by an employee who interacts with the application interface directly. User responsiveness specific ability of an employee by using ERP system to complete assigned tasks within a stipulated time.

This study was to explore employees' perception and behaviour towards technology adoption. The study does not just assume psychological validation of technology adoption rather, it provides a profound understanding by way of exploring how employees at grass root levels perceive certain influential factors in relation to their adoption and acceptance of technology. This paper provides further insights for practitioners, investigating user perceptions will provide organisations with a tool

to manage users' perspective better during technology adoption. Highlighting these differences, if any, will bring in new strategies that enable organisations to overcome difficulties during different stages such as stabilising, improvement and post-implementation of adoption of novel technology at organisation. Keeping in view the objective to identify the determinants of employee perception towards technology adoption in modern organisations, demographic variables such as age, gender, level of qualification, designation and user profile that is whether key-user or end-user have been precisely focused upon. The use of information technology in service sector is driven by the need to improve and redefine customer service. However, technology up-gradation would not be successfully implemented if employee's factors are overlooked. Increased globalization has exerted pressure on organizations over the past decades have forced organizations worldwide to face unprecedented levels of competition and operate in a dynamic business environment. In an effort to remain competitive, there has been an increasing need in organizations to connect and integrate the information supplied by each department in a single Information Technology (IT) infrastructure. This study was to explore employees' perception and behavior towards technology adoption and not just assumes psychological validation of technology adoption rather; it provides a profound understanding by way of exploring how employees at grass root levels perceive certain influential factors in relation to their adoption and acceptance of technology. Four key determinants influencing employees' perception namely, improved performance, job favorableness, practicality of use and ease of use were identified and their corresponding relationships were analyzed.

LIMITATIONS OF THE STUDY

Limitations are common for studies based on sample survey methods. The present study faced certain uncontrollable external factors such as respondents' biases regarding accuracy of information provided. Secondly, being a preliminary study of pilot nature, there are possibilities where certain vital aspects may have been excluded in the questionnaire.

OBJECTIVES

To assess employee perception towards technology adoption in banking sector.

To determine the underlying factors to employee perception.

LITERATURE REVIEW

Many researchers have identified perceived beliefs in usefulness, ease of use. Perceived usefulness reflects users' perception of utility of a specific application system. In addition, Perceived ease of use encapsulates the degree to which a potential adopter views usage of an information technology to be relatively free of effort (Rogers, 1995). The attitude towards behaviour is resultant of individual behavioural belief as well as its associated outcomes. The subjective norm is an individual's perception regarding the performance of behaviour, which is again influence by the normative beliefs and individual motivation. (Fishbein and Ajzen, 1975). the technological acceptance model (TAM) developed by Davis in 1989 is one of the most widely used models for explaining the actual usage and can improve our understanding of how influence on actual usage could help increase efficiency and effectiveness of ERP system use (Shih & Huang, 2009). User training and organizational support can be considered to play a critical role in influencing this perception. Hence, managers and executives should promote and give close attention to these activities during EIS implementation and operation

(Costa CJ, Ferreira E, Bento F, Aparicio M., 2016). Finally, a corpus of literature studies the perspectives, the perceptions and the behavioral expressions of the main participants and stakeholders (management staff, ERP users, ERP vendors) in an ERP project (Amoako-Gyampah, 2004; Ifinedo, 2007).

RESEARCH METHODOLOGY

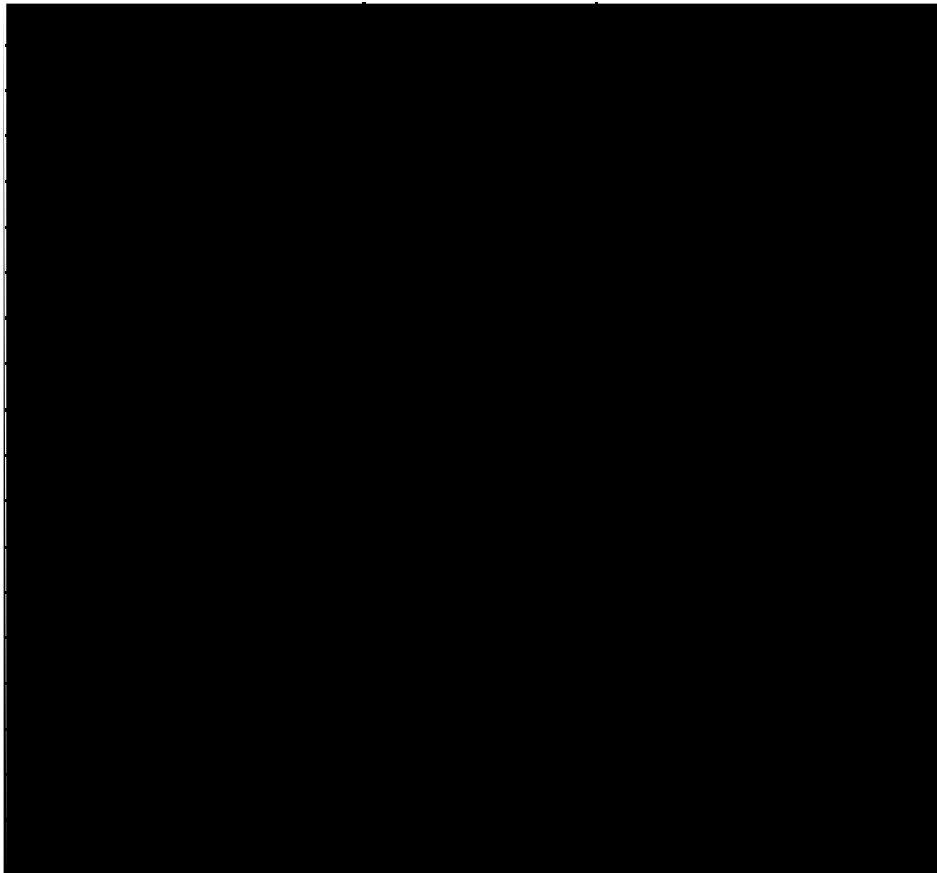
For the purpose of data collection, extensive use of both primary and secondary techniques has been used which were collected systematically. The secondary sources of data included been procured from various journals, articles and newspaper archives. This research is also based on the referred sources – published, unpublished and electronic. First-hand information as regards users' sensitivity as regards ERP usage were collected by way distributing pre tested questionnaires to both key users and end users in both executive as well as non-executive levels of management.

DATA ANALYSIS

A total of three hundred questionnaires were distributed out of which two hundred and twenty usable responses were analysed to obtain further insights. The relevant primary data was then analysed using descriptive statistics and factor analysis technique through SPSS software.

Descriptive Statistics

Table 1: Demographics



Respondents' gender was not quite as evenly distributed. As can be seen majority of the respondents were male i.e. 193 were male respondents and 27 were female respondents. A majority of the respondents were in the age group of 40-50 and less number of respondents were in the age group of 30-40. As regards the educational levels a majority of the respondents were post-graduates and professional degree holders.

Factor Analysis

The statistical tool used in this study is that of factor analysis which is a statistical measure used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. 220 replies were used to conduct factor analysis. Barlett's test of sphericity and Kaiser-Meyer- Olkin (KMO) tests are the two statistical tests determining the suitability of data for factor analysis. The test Kaiser-Meyer-Olkin Measure of Sampling Adequacy reflects the sum of partial correlations relative to the sum of correlations. It varies between 0 and 1, where a value closer to 1 is better. 0.5 is considerably suggested to be a minimum requirement. Thus, if the value is lower than 0.5, factor analysis may be inappropriate. The KMO measure can range between 0 and 1 (Pett et al., 2003) The Bartlett's Test of Sphericity is a test of hypothesis indicating that the correlation matrix is an identity matrix, signifying that there are no correlations between the variables. Thus, the test needs to be statistically significant (i.e. $p < 0.05$) so we are able to reject this hypothesis. Exploratory factor analysis was used to find out the underlying factors affecting employee perception to technology use. Cronbach's alpha is a measure of internal consistency, signifying the closeness of relativity of the items in a data set. Cronbach's Alpha is not a statistical test it is a coefficient or reliability i.e., consistency. The Cronbach's Alpha value is 0.747.

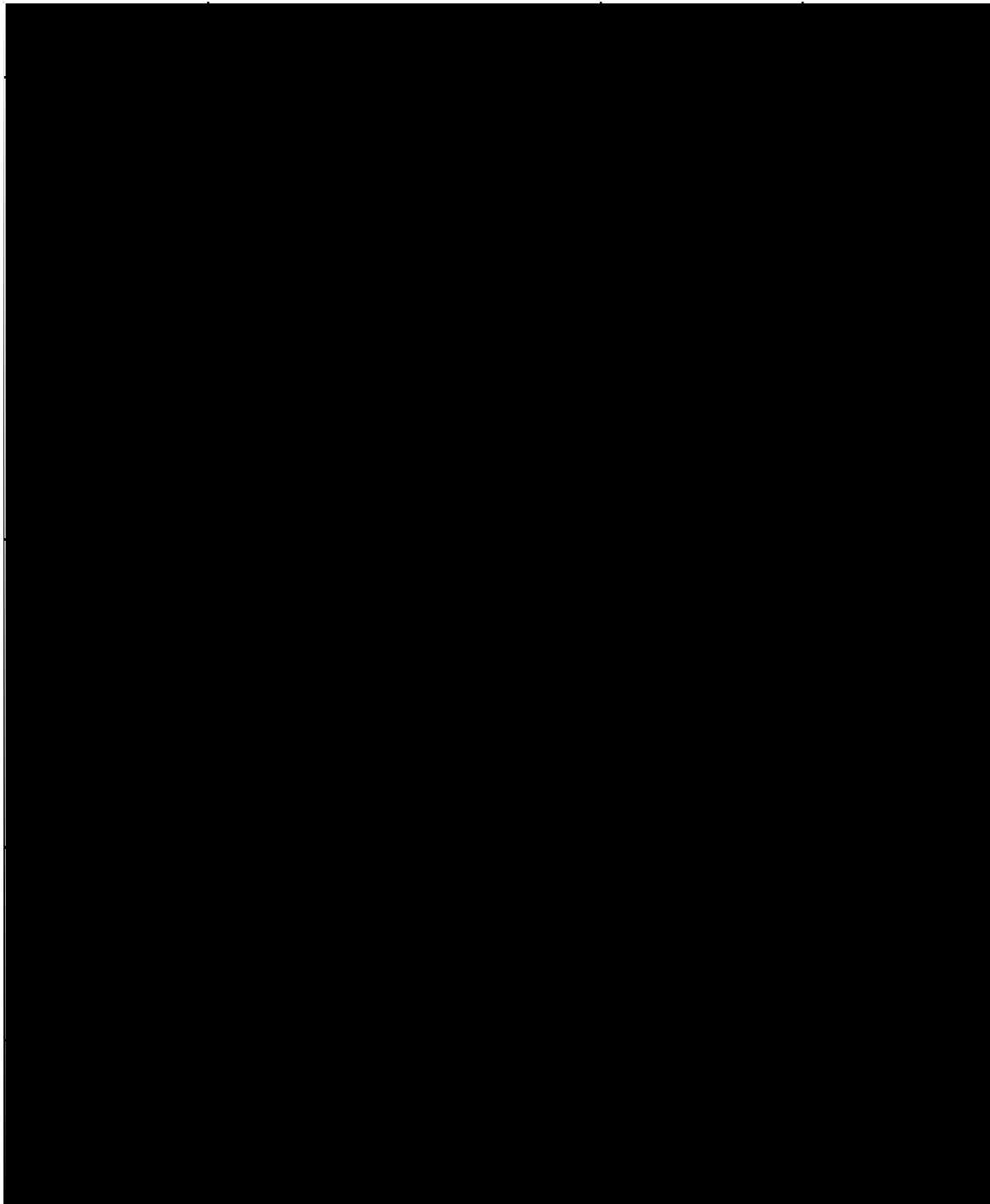
Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	2567.212
	Df	496
	Sig.	.000

Eigenvalues are indicators of variance as described by a factor. This part of factor analysis assesses the eigenvalues that determine the linear components within the data set. The eigenvalue is a measure for discovering whether predictors are dependent or otherwise. The eigenvalues with each factor represent the variance explained by that particular linear component and using the SPSS tool eigenvalue can be reached in terms of the percentage of the variance (for instance, component 1 explains 18.568% of total variance). Eigenvalue actually reflects the number of extracted factors whose sum should be equal to number of items which are subjected to factor analysis. The total variance shows all the factors extractable from the analysis along with their Eigen values, the percent of variance attributable to each other, and the cumulative variance of the factor and the previous factors. The first factor accounts for 18.568 percent of the variance, the second 12.785 percent, the third 7.785 percent and the fourth one 5.915 percent.

The idea of rotation is to reduce the number factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier. These factors can be used as variables for further analysis.

Table 3: Consolidated Factor Table



Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Factor 1 (Improved Performance): A total of thirteen variables have been loaded to factor 1 with factor loadings ranging from 0.847 to 0.379. This factor comprises of items such as organizational needs and design, developmental needs, flexible and adaptable, right information, quick decision making, improved workforce management, value added effort, improved performance appraisal, up-to date information, return on investment, training needs, remarkable results and hence has been named as “improved performance”.

Factor 2 (Job Favorableness): A total of eight variables have been loaded to factor 2 with factor loadings ranging from 0.546 to 0.708. This factor comprises of items such as increased productivity, enhanced job effectiveness, ease of doing job, ease in job accomplishment, clear interaction, skill improvement, useful in job, user friendly and hence has been named as “job favorableness”.

Factor 3 (Practicality of Use): A total of five variables have been loaded to factor 3 with factor loadings ranging from 0.349 to 0.772. This factor comprises of items such as satisfied system quality, satisfied service quality, satisfied service quality, enjoyable to use, satisfied knowledge management, satisfied efficiency and hence has been named as “practicality of use”.

Factor 4 (Ease of Use): A total of four variables have been loaded to factor 3 with factor loadings ranging from 0.554 to 0.727. This factor comprises of items such as remarkable and secure, facilitate proper communication, short response time, simplifies internal process and hence has been named as “ease of use”.

CONCLUSIONS

The competitive climate in the banking sector has dramatically transformed over the last decades. Alongside, there is even the dynamic technological transition significantly affecting employees' perception and behaviour. The success of technology implementation depends on the employee dynamics comprising of willingness to adapt and accept. Most of the respondents belong to the middle age group between 40 to 50 years of age, which emphasises on the adaptability issues, resistance to change and at the same also focusses on the inclusion of highly-user friendly interfaces. Further research need to be done in the view of probing deep into causes of resistance if any, and the relationship between each of the identified factors with that of employee perception.

REFERENCES :

- Amoako-Gyampah, K. and Salam, A.F. (2004), “An Extension of the Technology Acceptance Model in an ERP Implementation Environment”, *Information & Management*, Vol. 41, pp. 731–745.
- Costa C.J., Ferreira E., Bento F. and Aparicio M. (2016) “Enterprise Resource Planning Adoption and Satisfaction Determinants”, *Computers in Human Behaviour*, 63(October 2016):659–671.
- Ifinedo, P. (2005), “Do Organisational-Technological Contingency Factors Influence the Perception of ERP Systems Success? An Exploratory Study in the BalticNordic region of Europe”, In: K. Soliman (Ed.), *Proceedings of 4th. International Business Information Management Association (IBIMA) Conference*, Lisbon, Portugal: IBIMA Press, 427-437.
- Shih, Y. Y., & Huang, S. S. (2009), “The Actual Usage of ERP Systems: An Extended Technology Acceptance Perspective”, *Journal of Research and Practice in Information Technology*, 41(3), 263–276.
- Venkatesh, V., & Davis, F. D. (2000), “A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies”, *Management Science*, 46(2), 186–205.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003), “User Acceptance of Information Technology: Toward a Unified View”, *MIS Quarterly*, 27(3), 425-478.

IMPACT OF ORGANIZATIONAL CLIMATE ON WORKING ENVIRONMENT AND EMPLOYEE PERFORMANCE

NIRANJAN BIDIKA

Abstract :

The paper examines the impact of the organizational climate on employee performance. Organizational climate is defined as the shared perceptions, feelings and attitudes that Organizational members have about the fundamental elements of the Organization, which reflect the established norms, values and attitudes of the Organization's culture and influences individuals' behaviour positively or negatively. The key is to improve the employee performance within the organization, as we know that employee is the most crucial capital that can support the sustainability of an organization. The study aims to find out the impact of organizational climate on employee performance in BSNL. The study aims at the objective of the relationship between organizational climate and employee performance on the basis of job satisfaction and to determine whether employees' perceptions of the work environment influence their level of job satisfaction.

Key words: Organizational climate, Employee Performance, Working Environment

Introduction

Organizational climate can be defined as a set of attributes specific to a particular organization that may be induced from the way that organization deals with its members and its environment. Over the years, many researchers, professionals and academicians have studied the behavior and approaches of organizational climate and group dynamics for different organizations.

Organizations in the 21st century are trying to have competitive advantage more than ever before. These challenges are not unique to any specific Organization or industry, but affect all Organizations, regardless of their structure or size. Organizational climate in particular is constantly challenged by changes impacting Organizations today (Nair, 2006). To survive and outdo their competitors, Organizations are constantly seeking to improve their performance. Authors such as Brown and Leigh (1996) think that Organizational climate is becoming more important than ever before because Organizations need to ensure that those individuals who add value to the bottom line will want to stay in the Organization and will want to continue pouring their effort into their work to the benefit of the Organization. Thus it generates organizational loyalty among employees.

Organizational climate is defined as the shared perceptions, feelings and attitudes that Organizational members have about the fundamental elements of the Organization, which reflect the established norms, values and attitudes of the Organization's culture and influences individuals' behaviour positively or negatively.

Organizational Climate reflects a person's perception of the organization to which he belongs. It is a set of characteristics and factors that are perceived by the employees about their organization. These factors may include job descriptions, organizational structural format, performance and evaluation standards, leadership style, challenges and innovations, Organizational values and culture and so on. . Hodgetts (1991) has classified organizational climate into two major categories. He has given an analogy with an iceberg wherein there is a part of the iceberg that can be seen from the surface and another part that is under water and is not visible

Individuals in the organization have certain expectations and fulfillment of these expectations depends upon their perceptions as to how the organizational climate suits to the satisfaction of their type of needs. These organizational climates provide a type of work environment in which each individual employee feels satisfied or dissatisfied since satisfaction of individual goes a long way in determining his / her efficiency. Organizational Climate can also be said that, it is directly related with his / her performance in the organization.

Organizational climate in different organizations revealed that the general climate in the organization is average. A general indifference on the part of the employees towards their own development was found to be the reason for this (TV Rao, 1999). The effects of general organizational climate on safety climate and safety performance are major concern for employee performance (Neal, et al). To improve the level of productivity in the organization, it helped to analyses and to identify the suitable organizational climate for improving the satisfaction level of the employees. It helped the organizations by providing a better work environment for its employees so that they are motivated and work efficiently (Venkatesh). The present study has been designed suitably to study the organizational climate in BSNL, Odisha circle.

Methodology

Objectives of the Study

The primary objectives of the study are:

- To explore the relationship between organizational climate and job satisfaction and to determine whether employees' perceptions of the work environment influence their level of job satisfaction.
- To examine the member's perception and influence of organizational climate on group dynamic.

Hypothesis:

- There is no relationship between working environment and organizational climate (overall)

Data Collection & Tools for Data Analysis

The study is based on primary data only. The different statistical tools and techniques used in the analysis of data are: Regressions analysis, Analysis of Variance, Correlations Coefficient, Statistics of t-Test, etc.

Result and Discussion

Table-1: Model Summary of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the	Change Statistics				
					R Square Estimate	F Change	df 1	df 2	Sig. F Change
1	0.13	0.03	0.007	4.19	0.02	1.69	6	143	0.11

a. Predictors: (Constant), Designation, Gender, marital status, Qualification, Experience, Age

Source: own compilation

The regression analysis made for examining the importance of all the independent variables with Organizational Climate. The above tables indicate the regression analysis. The above table represents the method of analysis and also indicates that the adjusted R square 0.007 and it reveals that this model accounts for 7% variance in the job performance scores. Therefore, it is not a very good model. It was also ascertained by the above table that on the whole that this model was not significant. Further, the analysis is made through the ANOVA which shows the relationship between the entered variables within the organizational climate.

Table-2 : ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.19	6	31.03	1.69	0.11
	Residual	7908.59	447	18.11		
	Total	8094.78	453			

Source: own compilation

The ANOVA table shows that the F value of 1.713 is not significant at the 0.116 level. There is no significant difference in the organizational climate and other independent variables. The next table title Coefficients helps to see which among the independent variables influence most the variable in Organizational climate. The calculation of regression coefficient is made in the below given table.

Table-3 : Coefficient of Variables

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	97.823	0.798		122.62	0		
	Age	-1.017	0.565	-1.08	-1.80	0.073	0.006	165.4
	Gender	0.464	0.642	0.03	0.72	0.47	0.989	1.0
	Marital status	1.675	1.654	0.04	1.01	0.312	0.961	1.0
	Qualification	0.589	0.533	0.06	1.10	0.27	0.588	1.7
	Experience	-0.058	0.08	-0.06	-0.72	0.468	0.303	3.2
	Designation	1.152	0.549	1.28	2.09	.037*	0.006	169.5
a. Dependent Variable: organizational Climate								

Source: Own Complid

According to the above table the standardized beta scores indicated that the most of the predictor variables do not have any impact on the criterion variable, i.e., organizational climate. However, designation ($p > 0.05$) seems to be the significant predictor for organizational climate. All the other variables were not significant predictors of organizational climate.

Table- 4

The Correlation Coefficients between the Variables and Overall Organizational Climate

		V1	V2	V3	V4	V5	V6	V7	V8	Overall
V1	Pearson r		.080	-.259**	-.246**	.005	.028	-.054	-.033	.222**
	Sig.		.091	.000	.000	.911	.551	.255	.480	.000
V2	Pearson			-.149**	-.179**	-.137**	.019	-.101*	-.062	.746**
	Sig.			.002	.000	.004	.695	.032	.186	.000
V3	Pearson r				.236**	-.236**	.066	-.010	.114*	.074
	Sig.				.000	.000	.165	.835	.016	.116
V4	Pearson r					-.170**	.051	.081	.077	.347**
	Sig.					.000	.280	.085	.101	.000
V5	Pearson r						-.062	.007	-.035	-.194**
	Sig.						.191	.875	.463	.000
V6	Pearson r							-.020	.087	.290**
	Sig.							.673	.065	.000
V7	Pearson r								-.011	.136**
	Sig.								.808	.004
V8	Pearson r									.078
	Sig.									.097
Over- all	Pearson r									
	Sig.									

* Correlation is significant at the 0.05 level (2-tailed).

Source: Own Compiled

[Variables: Training & Development, Work Environment, Management Efficiency and Effectiveness, Competence Development Leadership Performance Skill, Support and Feedback Mechanism, Reward and Recognition, Power and Uncertainty.]

Thus, it is concluded that there is no relationship between Uncertainty & Power conflict and Organizational climate in BSNL and hence proved. Hence, uncertainty, the degree to which a job lacks well-specified responsibilities, is likely to decrease work motivation and affective commitment. Thus Power and Uncertainty is well defined and hence it does not have any impact on organizational climate in BSNL.

Findings and suggestion

In the study it was found that there is significant relationship between organizational climates with respect to performance of employee. There is a positive relationship among variable. The analysis found that variables such as Training & Development, Work Environment, Management Efficiency and Effectiveness, Competence Development Leadership Performance Skill,

Support and Feedback Mechanism, Reward and Recognition, influences the performance of employee. The company should give more importance to innovation in order to increase employee performance in future.

Findings and suggestion

From this study it was found that there is significant relationship between organizational climates with respect to performance of employee. There is a positive relationship among variable. The analysis found that orientation, interpersonal relation, managing problem, managing conflict, reward management, risk taking, management of change variables influences the performance of employee and the variables supervising, managing mistakes, communication, decision making and trust does not impact the performance of employees towards organizational climates. Based on the findings of this present study some of the suggestions were given. This was to improve the ability of the overall organizational climate factors such as orientation, interpersonal relation, managing problem, managing conflict, reward management, risk taking, management of change in enhancing the intrinsic motivation of employees. The company should give more importance to innovation in order to increase employee performance in future.

Conclusion

It was observed that different factors of the organizational climate affect different aspects of employee performance. The management of the company should ensure effective implementation of those programs in order to enhance the quality of organisational climate and there by employee performance. Importance should be given for enhancing the intrinsic motivation of employees, among the factors of organisational climate. It is suggested to

Conclusion

It was observed that different factors of the organizational climate affect different aspects of employee performance. The management of the company should ensure effective implementation of those programs in order to enhance the quality of organizational climate and there by employee performance. Importance should be given for enhancing the intrinsic motivation of employees, among the factors of organizational climate. It is suggested to execute effective managerial policies for strengthening and maintaining the relationship between climate and employee performance. The top management should give its support to the employees and make communication with them. In this study is a useful starting point to gain a deeper insight into organizational climate factors and their influence on the employee performance.

REFERENCES :

- Herbert, L. Lyon and John M. Ivancevich (1974), "An Exploratory Investigation of Organizational Climate and Job Satisfaction in a Hospital", *Academy of Management Journal*, Vol. 17 (4), pp. 635 - 637.
- Schneider, B. and Bower, D. E. (1985), "Employee and Customers, Perception of Service in Banks Replication and Extension", *Journal of Applied Psychology*, Vol.70, pp. 423 - 433.
- Minwir, M. Al-Shammari, *Organizational Climate, Leadership and Organization Development Journal*, Vol. 13, Issue 6, pp. 30-32.
- Peter Kangis, Gordon D. Williams S. (2000), "Organizational Climate and Corporate Performance: An Empirical Investigation", *Management Decision*, Vol. 38, No. 8, pp. 531 - 540.
- Radha (2002), *Job Satisfaction of Men and Women*, *Indian Journal of Applied Psychology*, Vol. 29 (2), pp. 92 - 96.
- Maira Clark (2002), "The Relationship Between Employees' Perceptions of Organizational Climate and Customer Retention Rates in a Major UK Retail Bank", *Journal of Strategic Marketing*, Vol. 10, pp. 93 - 113.
- Malcolm Patterson, Peter Warr and Michael Wast (2004), "Organizational Climate and Company Productivity: The Role of Employee Affect and Employee Level", *Journal of Occupational and Organizational Psychology*, Vol. 77, No. 2, pp. 193 - 216.
- Christine M. Riordan, Robert J. Vandenberg, Hettie A. Richardson (2005), "Employee Involvement Climate and Organizational Effectiveness", *Human Resource Management*, Vol. 44, Issue 4, pp. 471 - 488.
- Panda et. al., "School Organizational Climate on Students Academic Achievement," *Indian Journal of Applied Psychology*, (2007), pp. 34 - 39.

CONTEMPORARY RELEVANCE OF MANAGEMENT EDUCATION STATUS IN INDIA: ISSUES AND CHALLENGES

NIRANJAN NAIK

ABSTRACT

With the introduction of the new economic policy (LPG) in 1991, the business world has gone through a revolutionary change. Highly professional managers are the need of the hour to fulfill the emerging dynamism of business world. The present management education loses its relevance contemporary to meet the changing need of the internal and external stakeholders as well as the demand of global business world. This paper analyses the present status of the management education in India, different issues and challenges. It also tries to identify the bottlenecks in the up gradation and improvement of process and pedagogy to meet the global challenges. The main purpose of this paper is to throw light on the urgency of paradigm shift of management education pedagogy to produce competitive professional managers to cater the needs of the global industry. Specific literatures are reviewed and historical data are analysed in a systematic manner for this paper.

KEY WORDS: *Management education, Issues and challenges, Relevance, Global Business World*

Introduction:

It is truly said that if you want to destroy any nation destroy its education system, so the country collapse of its own accord if its education system collapses. If we traced back to history Indian is treated as one the hub of knowledge and education across the world. During the british rule India could not achieve a significant growth in the education prospective as the britisher have the prime objective to train the people who can handle the official and documentation work. After getting independence as he first prime minister of independent India Nehru dreamt of a nation in terms of industrialization and this industrialization get its fuel after the introduction of LPG in 1991.

The concept of management can go long ago of human civilization as the human is managing and organizing the activities when they started living in groups but management as a discipline is very recent in its origin. The World war I, world war II and the emerged complex situations thereafter to maximize the output with limited resources forced to manage the business houses to in a systematic and organized way to increase their efficiency. Furthermore during late 19th the management gurus developed some theories and approaches like classical approach which includes scientific management

and operational management, neo classical approach including human relation movement, management scientist approach and human behavior approach, modern approach including modern approach. Another milestone may be treated as the emergence of company form of organisation where the ownership is separated from the operation of the organisation, in which the manager has to be truly accountable for the shareholders interest with maintaining adequate transparency. These factors attract the attentions of the intellectuals and philosophers to create a need to study the organisation system and process extensively through a separate discipline so that survival and growth of the organisation can be ensure the recent competitive world.

The emergence of management education as a separate field can be traced back to 18th century. During the period of 18th to the 21th it has seen a phenomenal change in terms of its application, use and implications. The concept of management education has come from the western management practice and thought, few B-schools in India has added some inference in their discipline from Indian mythologies and sastras. Management as a separated branch draws heavily from Psychology, sociology, anthropology, law, political science, mathematics, economics, accounting, statistics and industrial engineering. After introduction of liberalization, privatization and globalization the world became a single village in the scene of not only trade, industry and business but also in the scene of education and internationalization of education. The liberalization and globalization also posed a pressure on small and medium scale industries either to make their product and service cost effective without compromise the quality to meet the global competition or vanish from the market. This new urgency imposed after LPG lead the business house to manage their business in a systematic and effective manner to achieve their objectives of survival and profit maximization and this changed dimension of business operation gave the management education globally a new dimension. India as a developing country also paves the way to identify the need of emergence of management education with establishing the Indian institute of social science in the year 1948 as the first B-school.

Literature Review:

Management education in India was initiated just after independence with establishment of Indian Institute of Management since then various changes, challenges issues and implication has been pointed out .Sangeeta Sahney et al (2004) pointed Indian educational system has been subjected to fast, radical, and ever revolutionary change over recent years. Panandiker, V. A (1991) pointed out that Knowledge and knowledge-creation will be far more central to the management education of the future rather than technology. He further added that humans will live not by bread and car alone but far more by knowledge, wisdom and ideas. This fundamental transformation of management education is both inevitable and necessary because the present consumption patterns of mankind can only take him thus far in its evolution and no further. We are therefore going to experience in the next decade altogether different focus of organizations and management systems. It will, therefore, be necessary to anticipate and study some of their contours so that we design appropriate system of management education as early as possible. Sahu K.C(1991) emphasized that values are of utmost importance and are inseparable irrespective to any form of education Management education should produce persons with such value orientation, who, through example of dedicated hard work in a spirit of service, can change the attitude of the people they manage towards work, and towards each other to ensure quality of life and of work life.

Margaret MacNamara and et al.(1990) stressed on action learning in management education as management institutes are often criticized for focusing more on theory and on quantitative analysis while neglecting interpersonal relationship and quantitative finding. It is often stated that management education should be experience-based, active, problem oriented and modified by feedback and action

learning serves the purpose. A.Gill (2003) emphasized due to globalization and advancement in information technology the role played by management education in enhancing country knowledge base has been placed under a sharper focus thus it has become imperative to look at management education from the market oriented perspective and take a strategic view to better align business education with the requirement of the global market. Basu Sharma et al(1996) pointed out that internationalization of management has been promoted along several dimensions such as curricula challenge, research activities with both contents and outlet being relevant and executive development programs. It seems that educational institutions and supplementary providers of management education have no choice but to rise to the challenge of global competition.L.R.Irala (2006) was of view that management education in India is at cross roads with the dawn of new millennium there has been

Exceptional growth in management institutes, to upgrade their competencies the financial autonomy will be the key and academic autonomy the major drivers

Chowdhry, K. (1977) wrote in his article that after independence, a combination of events, people and government policies came together in a unique way to professionalize management education in India. As a result of this unique interaction several institutions of management came into being in the 1950s and 1960s.Since the very first institute for imparting management education was set up almost five decades has passed, during this period management education has been subject to radical and revolutionary changes Management education can be more meaningfully viewed as a process, rather than a programme with twin objectives first, change in role behavior and second, effective influence of individual practicing managers upon their organization. Management education in India today has acquired the characteristics of a commodity, to be bought and sold in markets like other commodities.

Objectives:

From above review of studies we have taken following research issues which are different from earlier management thinkers, practitioners and researcher

1. To find the present situation of management education in India after financial turbulence of USA and the case like Satyam in India
2. To study the trends prevailing in management education in India.
3. To find out implication of management Education of India on Industry and individuals .
4. To study emerging issues of management education and its approach towards the development of curriculum needs of Industry
5. To find implementation of possible direction and policy towards improvement of management education in India.

Origin and growth of management education in India

The history of management education in India dates back to the late 1950s (see Table 1). This was a fascinating period in country's history which witnessed the building up of a new nation. A number of industrial and commercial enterprises were set up in accordance with the Nehruvian vision and there was a need to manage those enterprises (Anubhai, 2008). The existing commerce colleges emphasised only on the theoretical aspects of finance, banking and accounting with hardly any practical work or research and commerce students were considered 'low level functionaries' (*Ibid.*). Hill *et al.* (1973) wrote in their pioneering book about institution building in India that the All India Council for Technical Education (AICTE), a national level advisory body for management education set up in 1947, advised the Government of India in 1953 on 'the expansion of educational facilities to implement

planned industrialization, heavily discounted the resource potential of the commerce colleges and recommended the establishment of an entirely new set of management studies programme.’

The First Few Institutions

In the 1950s, the Sloan School of Management, Massachusetts Institute of Technology (MIT) and the All India Management Association (AIMA) ran short term management programmes for senior administrators and managers during summers in Kashmir (Report and Recommendations of the Committee to Review the Functioning of IIM, 1992).

Table 1: History of Management Education in India

Decade	Event
1940s	· First management institute, XLRI, started few courses in management (1949)
1950s	· Short term programmes by MIT and AIMA · First full time management programme started by IISWBM (1953) · 3 year part-time post graduate management programme in DSE, University of Delhi (1954) · First diploma programme for public sector executives started by IISc (1954) · Diploma in business management, DMS, University of Madras (1955) · Management training by IIPA (1954), ASCI (1956) and NPC (1958) · Prof. George Robbins, University of California invited by Ford Foundation (1959)
1960s	· IIMC and IIMA set up (1961) · NITIE for engineers (1963) · Full time management programmes in JBIMS, University of Bombay (1965), MoNIRBA, Allahabad University (1965), FMS, Banaras Hindu University (1968), Department of Commerce and Business Management, now UBS, Punjab University(1968)
1970s	· IIMB set up (1972) · DIME, IIT Kanpur (1974)-School of System and Management Studies, IIT Delhi (1976) · MDI, Gurgaon (1973), SIBM, Pune (1978), IRMA, Anand (1979), LIBA, Chennai (1979)
1980s	· IIML set up (1984) · IMT, Ghaziabad (1980), TAPMI, Manipal (1980), KJSIM, Mumbai (1981), IMI, New Delhi (1981), BVB’s SPJIMR, Mumbai (1981), IBS, Hyderabad (1985),BIMT, Greater Noida (1988)
1990s	· DMS, IIT Delhi (1993) · VGSoM, IIT Kharagpur (1993) · Management school in IIT Bombay (1995) renamed as SJMSoM (2000) · DoMS, IIT Roorkee which was then University of Rookee (1998)
2000s	· 189 institutes set up on an average every year from 2000-2006 (Dayal, 2002)

The government also sent industrialists and civil servants to institutions in Europe and the United States to learn about 'different approaches to management education' and 500 engineers were sent abroad for training in management and production methods when the first three steel plants were being set up (*Ibid.*). Management training for working executives, in one form or the other, was also offered by institutes like the Indian Institute of Public Administration set up in 1954 (IIPA, 2013), the Administrative Staff College of India set up in 1956 (ASCI, 2013) and the National Productivity Council set up in 1958 (NPC, 2013).

The first management institute established in India was the Xavier Labour Relations Institute (XLRI), founded by Father Quinn Enright in 1949 in Jamshedpur. Father Enright envisaged XLRI to be a 'partner in the liberation and development journey of independent India with a vision of renewing the face of the earth' (XLRI, 2013). Initially, in 1949, it offered only a few courses in management. A two year full-time programme in the industrial relations welfare, a two years part-time and a two year full time programme in business management were started in 1953, 1966 and 1968 respectively (*Ibid.*).

The first full-time management programme in India started in 1953 at the All India Institute of Social Welfare and Business Management (later changed to the Indian Institute of Social Welfare and Business Management in 1958) set up by a resolution of the syndicate of the University of Calcutta. Pandit Nehru and Dr. B.C. Roy, the second Chief Minister of West Bengal in India, laid the foundation stones for two buildings of the institute (IISWBM, 2013).

A diploma programme in management started at the Indian Institute of Science (IISc), Bangalore in 1954 was designed solely for public sector executives. This was the earliest diploma programme designed for Indian industrial enterprises (IISc, 2013).

Present Situation in India

Today managers are in great demand in every sector of economy. India needs a huge reservoir each year of people who are trained for business and for management and demands is to last for coming years. But it is matter of concern whether the demand is for what they have been taught. In management education, quality has become a necessity. To make India an intellectual capital of the world, we have to create a dynamic environment, which can encourage superior quality management education colleges and effort should be made to breathe life into management education. Government has taken initiatives in this direction by giving node to 7 more IIMs taking the total number of the premier management school to 14. India already has 11 functional IIMs in Ahmedabad, Bangalore, Kolkata, Lucknow, Indore, Kozhikode, Shillong, Tiruchirappalli, Ranchi, Raipur and Rohtak remaining three are to setup in state of J&K, Uttarakhand and Rajasthan. Apart from IIMs management education is offered by university's own department in campus, affiliated colleges of universities in same place or the whole State, now technical universities have been given this role. Moreover autonomous institutes approved by AICTE ,universities running distance education program and open mode like IGNOU, Delhi University, Kurukshetra University, ICFAI and several others are also offering courses in management. Some recognized institutes and universities are also offering 3 years part time program in evening faculty for working executives. Foreign universities having collaborations in India and those having students exchange program with limited-time studies abroad are also imparting management education. New private universities like ICFAI (a national brand), Amity and several others are now coming up.

Trends in Management Education in India

The management education plays an essential role in today's dynamic business environment. The rapid trend of globalization and technological changes have made difficult for organizations to

survive in the competitive world. As a result the importance of management education has been increased many folds. There are more than 2000 B-schools in India where students pay a massive sum hoping to find their dream career after completing their program. Unfortunately these business schools are not even able to place more than 50% of student except few top B schools. This is really an issue for concern and various reasons can be attached to it. These reasons can be explained from institutes imparting education, from student seeking education, and affiliating authorities. Quality has deteriorated from both ends Institutes imparting education and student gaining education. There are fundamental issues of student input quality. In addition, there are fundamental issues of academic delivery quality as most run-of-the-mill colleges spend less than 10 per cent of their revenues on actual academic delivery.

Most college owners complain of not being able to have enough admission in spite of investing on college infrastructure and startup costs. And those that are able to fill capacity they admit anyone who applies for admission thus resulting in poor input, leading to poor placements. After the introduction of ranking system for business schools, business schools opted proactive approach in making changes, although they focused primarily on product tinkering, packaging and marketing. A study on management education has shown that there will be a fundamental shift in business school product offerings away from traditional MBA programmes and the trends of evolution of management education indicate that knowledge creation is becoming more student based (Friga, Bettis and Sullivan, 2003). This will result in various changes such as closer interaction among industry, students and faculty. It is clear that management education will emerge as one of the main distinct of higher learning, due to its growing demand. It has been stated that business schools, if they have to survive, have to focus on research to solve problems of enduring importance and to build such curricula that can actually prepare students to be effective in practicing the profession.

Emerging Issues of Management Education in India

This section discusses a number of issues that are relevant to management education in generally and management education in India in particular. Management education in India has not changed as per the requirement of the industry need and before this gaps widen enough; proper steps need to be taken. In this section we aim to discuss various emerging issues of Management Education in India which can help us getting rid of this gap and produce managers as per requirement of Industry and society, respond to challenges that comes with dynamics of internationalization There have been various committees that suggested improvements in management education, their has been no noteworthy changes

Dedicated Governmental Body for Management Education

In India governance of technical and management education is looked after by All India Council for Technical Education and its subsidiary the Board of Management Studies. Since both technical and management education have different requirement, so it definitely call for different body which could specifically look for issues related to improvement in management education which should be accountable for enabling independent institutional mechanism to specifically deal with management education that could lead to enhancement of standard of management education and give a new drive to management education. As stated in an article by Mr. R. Gopalakrishnan, a National Task Force on Management Education should be appointed that could look into the possibility of formation of All India Council of Management Education quite independent of AICTE. Issues like quality of faculty and research, interaction with industry and academia to produce world class managers, and other issues of importance should also be addressed.

1. Quality of Faculty

AICTE and University Grant Commission has given sanctioning and affiliation to large number of institute, but were unable to produce competent faculty to teach in management courses, which created a demand supply gap and resulted in low standard quality of faculty. Institutes are engaged in appointing new faculty member on low salaries and heavy teaching load which further deteriorate their quality and they are left with no time for further development, and involving part time faculty which had little or no involvement with the institutes Generally, they give lecture prepared from textbooks or their company based experience The quality of management remained inferior in the sense that they paid not enough attention to application of knowledge, understanding of concepts, development of managerial skills institutions.

2. Curriculum Design and Developing Material Relevant to The Indian Context

Developing a curriculum is a challenging task and has to be continuously updated to keep pace with the advancements. Curriculum should be change driven and periodically reviewed to match the industry needs. But in most of Indian universities and B School it takes years to get syllabus revised due to bureaucratic setup and private B School also don't show much enthusiasm towards revision of syllabus because it may call for appointing new faculty and updating existing faculty which could be a costly issue. Institutes imparting management education should ensure to revise their syllabus .Course content need not just be latest but also country specific it has been observed phenomena that many of ideas and theories have been successful in the countries of their origin. We don't have much of Indian specific case studies which could help in bringing the congruence and rationality between what is taught and what is practice.

3. Emphasizing Research

The management institutions do not provide conducive environment that is supportive to research. Management institutes needs to work in this direction. Research not only leads to updation of knowledge in concerned subject, but also leads to knowledge creation. Promoting a research culture in a management institutes requires change of mind setup on the side of management. They need to look beyond just making money. Management institutes should inculcate proper motivation and interest among faculty for research. This can be done by providing incentives to faculty involved in research, giving due weight age to research activities and providing a good library support system. University Grant Commission has already taken step in this direction by giving due weight age to research and publication for promotions.

4. Corporate Governance for B-Schools

Corporate Governance has been buzz words for last few months especially after financial turndown in U.S.A and Satyam case in India. Lack of corporate governance system in management institutes is one of the major reasons for fall of quality management education corporate governance has to be made a part of accreditation. Government must take the governance of management education away from AICTE and a strong monitoring system and statutory reporting on the lines of SEBI, handled by independent management specialists should be enforced. There is a need to introduce independent audit committees for managing the B-Schools. Corporate governance should include mandatory disclosure by institutions on faculty qualification, books and journals in library, computer labs, placement records and other required information that could be useful for student while choosing institutions. According to UGC norms institutes have to display this all information on internet but there is big difference between actual and information displayed on internet or filed with concerned statutory bodies. Corporate Governance should ensure a heavy penalty for any such deviation. . The

AICTE has little muscle to discover these and other misdeeds. Very rarely have disobedient institutions been made answerable or penalized. Institutes are imparting courses on corporate governance, but they hardly practice.

5. Triad of Academic-Industry

Development of industry interaction is an evolutionary process. Industry interaction has to be emphasized to greater extent so that student can be exposed to real problems and exposure of industry. In present curriculum student are exposed to six to eight weeks training which is not adequate to understand dynamics of industry in this world of liberalization and globalization. Assessment should also be based on internship authenticity and learning. As stated earlier Enhancement of industry exposure which will lead to enhancement of experiential learning. Exposing students to real life situations which are more complex, demanding, critical, messy, will bring them closer to reality. Faculty interaction with executives should be enhanced by increasing participation of industry experts in academics either by appointing them as full time faculty or part time faculty. Institutions should be encouraged to arrange tie ups with business houses. If you talk about top notch B Schools their strengths lies in their industry liasioning.

6. Customization of Specialization

Customization is need of a day. Every industry has its on set of challenges & dynamics, and it requires specific skill set and expertise. This could be only done by bringing specialization in concerned field. Management Education today is not just confined to areas as Marketing, Finance and Human Resource © Research Journal of Internatýonal Studýes - Issue 18 (January, 2011). Management, its requirement is felt in growing areas of business such as hospital management, disaster management, infrastructure management, ITES which needs faculty specialization curricula customization, specific material development. Though some B-Schools has taken initiative in extending boundaries of management education by introducing courses in disaster management. aviation management, financial services, but their course contents is questionable as they are using material designed for other context in these courses without examining its contextual validity. These business need customized course content specially designed for the course, specialized faculty and material development. These factor are hardly paid any heed thus contributing to poor quality management education in India

7. Multiple Perspectives

Management education is value laden field, but its value is deteriorating not just because way it is imparted, but also due to its nature. Management education need to inculcate multiple perspectives since technological, organization and personal perspectives could differ. Linstone pointed out management is all about grappling with multiple perspectives. Management education need reconstruction with emphasis on explicitly imparting education in regard to political, ethical and philosophical nature of management practice and managers need to attend to interpersonal relationships, feeling, stress, emotional outburst, politics, and difference in opinion and like. Above discussion tells us need for manger to connect to wide array of duties which can only be done if management education is imparted aiming multiple perceptive

8. Exposing to Real Business Issues

As stated earlier there is need for enhancing industry exposure which will lead to enhancement of experiential learning. Exposing students to real life situations which are more complex, demanding, critical, messy, will bring them closer to reality. When it comes to decision making, experience that lies with decision maker is detrimental. One of the issues that management education has to consider is the manner in which experiential learning elements could be enhanced.

9. Inculcating a Global Mindset

Learning is a relative concept. Today success depends how fast you are enhancing your knowledge, sharpening your skills and pace of your learning. In Globalization era where information is increasing at pace of Pico seconds mastering knowledge and skills have become essential. If India needs to compete globally we need manager with world class talent which calls for developing a new approach of imparting teaching and learning. Global mindset need to be developed .This means that each business school should create a differentiated mix of teaching and training to develop not managers but global mangers

Conclusion

In above sections we discuss present scenario prevailing in management education in India, trends and contemporary issues faced by management education in India. The outcome of all this is that management education appears to be more relevant than ever in the “global era”. The ultimate challenge of management education approaches is to become more practical oriented and industry focus reason being theory-based developments and teachings are worthless, due to the fact that they will be of little use in concrete situations when a management issue arises. Management education need to be holistic, targeted and customized with aim to remove the gap that exist between industry requirements and academic curriculum focusing on attitude, corporate awareness, grooming and developing managerial skills. Industry interaction has to be strengthened by inviting senior person from industry to deliver.

REFERENCES :

1. Angehrn, A. & Nabeth, T., (1997) “Leveraging Emerging Technologies in Management Education: Research and Experiences”, *European Management Journal*, Vol.15, No.3, pp.275-285.
2. Bandyopadhyay, R.,(1991) “Indian Management Education: Need for a Constructive Debate”, *Economic and Political Weekly*, Vol.26, No.48, pp.M118-M122.
3. Baumgartel, H.J., Pathan, R., Roy, B., Khandelwal, G. & Rahman, A., (1984) “Changes in Organisational Climate and Management Education, 1968 to 1981: Some Warning Signals”, *Economic and Political Weekly*, Vol.19, No.8, pp.M15-M21.
4. Bowonder, B. and Rao, S.L., (2004) “Management Education in India its evolution and some contemporary issues”, available at :http://www.aima-ind.org/pdf/Director_Conclave_9_Paper.pdf (accessed 25 October 2010).
5. Cornuel, E., (2005) “The role of business schools in society”, *Journal of Management Development*, Vol.24, No.9, pp.819-829.
6. Crowther, D. and Carter, C., (2002) “Legitimizing Irrelevance: management education in higher education in institutions”, *The International Journal of Educational Management*, Vol.16, No.6, pp.268-278.
7. D’Mello, B., (1999) “Management Education: A Critical Appraisal”, *Economic and Political Weekly*, Vol.15, No.22 (May 31, 1980), pp. Published, Vol.34, No.48, pp.M169-M176.
8. Dr. Priya,A., (2007) “Global World & Quality of Management Education in India”, available at :http://www.indianmba.com/faculty_column/fc631/fc631.html(accessed 25 October 2010).
9. Engwall, L., (2007) “The anatomy of management education”, *Scandinavian Journal of Management*, Vol.23, pp.4– 35.
10. Ganesh, S.R.,(1980) “Performance of Management Education Institutions: An Indian Sampler”, *Higher Education*, Vol.9, No.3, pp.239-253.
11. Gill, A. & Lashine, S., (2003) “Business education: A Strategic market-oriented focus”, *The International Journal of Educational Management*, Vol.17, No.5, pp.188-194.
12. MacNamara, M., Meyler, M. & Arnold, A.,(1990) “Management Education and the Challenge of Action Learning”, *Higher Education*, Vol.19, No.4, pp.419-433.

13. Matthai,R. J.,(1980)"The Organisation and the Institution: Management Education in India", Economic and Political Weekly, Vol.15,No.22,pp.M69-M72.
14. McNulty, N.G., Katkov, A.& McNulty, N.C., (1992) "Management Education in Eastern Europe: Fore and After", The Executive,Vol.6, No.4, pp.78-87.
15. Pai Panandiker, V.A., (1991) "Management Education: A Long-Term View", Economic and Political Weekly ,Vol.26, No.48, pp.M131-M132.
16. Patel, I., (1996) "India", International Review of Education , Vol. 42, No. 1/3 (1996), pp. 75-96.
17. Patry, M., (2010) "Business Education and the Current Economic Crisis: An Institutional Perspective", available at :http://www.gfme.org/business_schools/business_education.htm (accessed 20 October 2010).
18. Powell, N.K. and Westwood, J. B., (1978) "Buyer-Behaviour in Management Education", Journal of the Royal Statistical Society. Series C (Applied Statistics), Vol.27, No.1, pp.69-72.
19. Pylee, M.V., (1967) "Management Education in India",Management Science, Series C, Vol.13, No.10, pp.C209- C217.
20. Ravichandran,N.,(2009)"A perspective on management education in India",available at:<http://www.financialexpress.com/printer/news/527793>(accessed 24 October 2010)
21. Roy, S.K., (1970) "Management Education: A Perspective for Its Evaluation", Economic and Political Weekly, Vol.5, No.9, pp.M19-M22.
22. Sahu, K.C., (1991) "Reorienting Management Education", Economic and Political Weekly,Vol.26,No. 48, pp. M133-M136.
23. Saxena,N.,(2009) "How to improve management education in India?", available at :<http://timesascent.in/article/83/2009091020090910145228171479914ef/How-to-improve-management-education-in-India.html>,(accessed 20 October 2010),.
24. Sharma, B.and Roy, J.A., (1996) "Aspects of the internationalization of management education", Journal of Management Development,Vol.15,No.1,pp. 5-13..
25. Sheth, N.R., (1991) "What Is Wrong with Management Education", Economic and Political Weekly, Vol.26, No.48, pp.M123-M128.
26. Thorat, S., (2005) "Higher Education in India Emerging Issues Related to Access, Inclusiveness and Quality", paper presented at the Nehru Memorial Lecture, 26 November,University of Mumbai,Mumbai, available at: http://www.ugc.ac.in/chairman_nehru_lecture.pdf (Accessed 29 October2010).
27. "Management Education in India.", available at <http://www.sooperarticles.com/education-articles/international-studies-articles/management-education-india-30505.html> (accessed on 24 October 2010)
28. <http://www.education.nic.in/stats/statpub.asp> (accessed on 8 December 2010)
29. <http://www.aicte-india.org/misappgrowth.htm> (accessed on 8 December 2010)



Finance

REACTION OF INDIAN STOCK MARKET TO ANNOUNCEMENT OF DEMONETISATION: A SECTORAL ANALYSIS

PRANAB KISHORE BEHERA

Abstract :

The performance of banking sector has improved in relation to decline in bad loans. Banking sector considered an effective measure to examine the financial health of a countries economy. Financial mix is a term used in the corporate world to define a mix of equity to debt in a firm. In other words, this term is used to describe the concept that defines how much capital is being raised by debt and how much is being raised by equity. It is a general perception among financial experts that financing mix plays a pivotal role with respect to success of a business. The primary objective of any firm is to continuously increase the value of the firm or in other words maximize the value of the firm and maximize the value of the shareholders. Financial mix is a useful tool to increase the value of the firm but, at the same time, nothing comes without a cost. Financial mix increases the risk of bankruptcy. It is because higher the level of debt, higher would be the fixed obligation to honour the interest payments to the debt providers. The present study aims at the effect of financing mix on the performance of the firm and analyze the inter-sectoral relationship between financing mix and financial performance of Banking Sector.

Key Words: Financing Mix, performance of banks, ratios.

Introduction

Financial mix is a term used in the corporate world to define a mix of equity to debt in a firm. In other words, this term is used to describe the concept that defines how much capital is being raised by debt and how much is being raised by equity. It is the general consensus of the financial expert that financing mix has a strong bearing on the increasing or decreasing value of the firm. The study aims to add empirical evidence to the financing mix literature by looking at financing issues relating to inter industry comparison of Indian banking industries.

Analysis of Financing Mix: an analysis in Banking sector

The financing mix conceptualizes the impact on earnings per share of the company. The present study undertakes to interpret the impact of financing mix on the EPS of the Banking sector. The present chapter focuses on ratio measure of financing mix and determining the appropriate mix of debt to be used along with equity in the capital structure discusses the important factors which have a bearing on designing capital structure of a firm.

Impact of capital structure

The impact of capital structure on firm performance has been a few, and in most of the cases has been carried out in developed economies on large firms. It is in this vacuum that a study was conducted by Gay, et al. (1994) to find out the relationship between the industry and its financial mix. Employing a sample of 183 debt issue announcements, they classified the firms' leverage ratios as being above or below their industry average prior to the announcement.

To test the sensitivity of both the industry classification and the components of the leverage ratio, Gay and his co-researchers used Value Line as sources of industry averages and defined the leverage ratio in terms of market value for equity and the book value for equity. Then they tested whether this has an effect on the stock market returns for shareholders. But their study did not find a statistically significant market reaction to announcements of new debt issues for either group of firms, nor a significant relationship between a firm's debt level and its industry's debt level.

These results do not support Masulis (1983)'s argument that a firm can increase its value by moving towards the industry's debt average. Masulis has argued further that when firms, which issue debt, are moving toward the industry average from below, the market will react more positively than when the firm is moving away from the industry average.

Chowdhury and Chowdhury (2010) observe that the debate over the significance of a company's choice of financial mix is esoteric. But, in essence, it concerns the impact on the total market value of the company (i.e., the combined value of its debt and its equity) of splitting the cash flow stream into a debt component and earn equity component.

Financial experts traditionally believed that increasing a company's leverage, i.e., increasing the proportion of debt in the company's capital structure, would increase value up to a point. But beyond that point, further increases in leverage would increase the company's overall cost of capital and decrease its total market value.

Panigrahi (2011) says that financial mix decisions of a firm is determined by various internal and external factors. The macro variables of the economy of a country like tax policy of government, inflation rate, and capital market condition, are the major external factors that influence the capital structure of a firm. The characteristics of an individual firm, the micro factors (internal), also affect the capital structure of an enterprise.

Despite decades of intensive research, there is a surprising lack of consensus even about many of the basic empirical facts. This is unfortunate for financial theory since disagreement over basic facts implies disagreement about desirable features for theories. This is also unfortunate for empirical research in corporate finance; if an empirical researcher wants to offer new empirical insights, it may be unclear what other factors need to be controlled.

Both theoretical and empirical evidence is hardly conclusive on whether or not capital structure matters.

Banking Sector:

The concept of Banking in India dates back to the first half of 18th century. The first bank that was established in the country was The General Bank of India founded in 1786. After that came the State Bank of India in Kolkata in 1806 which was then known as The Bank of Bengal. The operations of all the banks in India are controlled by the Reserve Bank of India. All the Indian banks are governed by the Reserve Bank of India. This governing body took over the responsibility of formally regulating the Indian banks in 1935. The Reserve Bank of India was announced as the official Central Banking

Authority for the smooth supervision of the banking industry in India. Banks in India are classified into two broad categories namely, Public sector banks and Private sector banks.

The banking scenario in India has already gained momentum, with the domestic and international banks gathering pace. All the banks in India follow the 'cost', determined by 'revenue minus profit' model. This means that all the resources should be used efficiently to improve the productivity and ensure a win-win situation. To survive in the long run, it is essential to focus on cost saving. Previously, banks focused on the 'revenue' model which is equal to cost plus profit. Post the banking reforms, banks shifted their approach to the 'profit' model, which meant that banks aimed at higher profit maximization.

Public sector banks in India: Banks such as State Bank of India, Bank of Baroda, Syndicate Bank and Canara Bank are known as Public sector banks, which are controlled and managed by the Government of India. They have been serving the nation for over centuries and are well known for their affordable and quality services.

The banking sector in India is mostly dominated by the Public sector banks. The Public sector banks in India alone account for about 75 percent of the total advances in the Indian banking industry. Public sector banks have shown remarkable growth over the last four or five decades. The following five banks have been taken into consideration for the present study.

(a) State Bank of India

The State Bank of India, the country's oldest Bank and a premier in terms of balance sheet size, number of branches, market capitalization and profits is today going through a momentous phase of Change and Transformation – the two hundred year old Public sector behemoth is today stirring out of its Public Sector legacy and moving with an ability to give the Private and Foreign Banks a run for their money. With about 8500 of its own 10000 branches and another 5100 branches of its Associate Banks already networked, today it offers the largest banking network to the Indian customer. The Bank is also in the process of providing complete payment solution to its clientele with its over 21000 ATMs, and other electronic channels such as Internet banking, debit cards, mobile banking, etc. The bank has a market capitalization of Rs.2,96,921.83crores.

(b) UCO Bank

Founded in 1943, UCO Bank is a commercial bank and a Government of India Undertaking. Its Board of Directors consists of government representatives from the Government of India and Reserve Bank of India as well as eminent professionals like accountants, management experts, economists, businessmen, etc. We are in the Service of Community since 1943. We have nearly 2000 Service Units spread all over India and operate in two Major International Financial Centres namely Hongkong and Singapore. We have our Correspondents/Agency arrangements all over the world and undertake Foreign Exchange Business in more than 50 Centres in India and Foreign Exchange Dealing Operations at 4 Centres. The UCo bank has a market capitalization of Rs14,659.61crores.

(c) ICICI Bank

ICICI Bank is India's second-largest bank with total assets of Rs. 4,062.34 billion (US\$ 91 billion) as at March 31, 2011 and profit after tax of Rs. 51.51 billion (US\$ 1,155 million) for the year ended March 31, 2011. The Bank has a network of 2,752 branches and 8,003 ATMs in India, and has a presence in 19 countries, including India. The Bank currently has subsidiaries in the United Kingdom, Russia and Canada, branches in United States, Singapore, Bahrain, Hong Kong, Sri Lanka, Qatar and Dubai International Finance Centre and representative offices in United Arab Emirates, China, South Africa, Bangladesh, Thailand, Malaysia and Indonesia. Our UK subsidiary has established

branches in Belgium and Germany. ICICI Bank's equity shares are listed in India on Bombay Stock Exchange and the National Stock Exchange of India Limited and its American Depositary Receipts (ADRs) are listed on the New York Stock Exchange (NYSE). The ICICI bank has a market capitalization of Rs3,47,464.47crores.

(d) IDBI Bank

IDBI Bank Ltd. is a Universal Bank with its operations driven by a cutting edge core Banking IT platform. The Bank offers personalized banking and financial solutions to its clients in the retail and corporate banking arena through its large network of Branches and ATMs, spread across length and breadth of India. We have also set up an overseas branch at Dubai and have plans to open representative offices in various other parts of the Globe, for encashing emerging global opportunities. As on March 31, 2011, the Bank had a network of 816 Branches and 1372 ATMs. The Bank's total business, during FY 2010-11, reached Rs. 3,37,584 Crore, Balance sheet reached Rs. 2,53,377 Crore while it earned a net profit of Rs. 1650 Crore (up by 60 %). The IDBI bank has a market capitalization of Rs39,965.29crores.

(e) Canara Bank

Widely known for customer centricity, Canara Bank was founded by Shri AmmembalSubba Rao Pai, a great visionary and philanthropist, in July 1906, at Mangalore, then a small port in Karnataka. The Bank has gone through the various phases of its growth trajectory over hundred years of its existence. Growth of Canara Bank was phenomenal, especially after nationalization in the year 1969, attaining the status of a national level player in terms of geographical reach and clientele segments. Eighties was characterized by business diversification for the Bank. In June 2006, the Bank completed a century of operation in the Indian Banking Industry. As at June 2010, the Bank has further expanded its domestic presence, with 3057 branches spread across all geographical segments. Keeping customer convenience at the forefront, the Bank provides a wide array of alternative delivery channels that include over 2000 ATMs- one of the highest among nationalized banks- covering 732 centers, 2681 branches providing Internet and Mobile Banking (IMB) services and 2091 branches offering 'Anywhere Banking' services. Under advanced payment and settlement system, all branches of the Bank have been enabled to offer Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) facilities. The bank has a market capitalization of Rs. 17,173.98crores.

Objective of the Study :

The main objective of the study are :

- (a) To study the effect of financing mix on the performance of the firm
- (b) To analyze the inter-sectoral relationship between financing mix and financial performance of Banking Sector.

The Scope and Selection of Samples of the Study:

- The scope of the study is confined to the impact of financing mix on financial performance of the industry.
- In the study, it is tried to analyze financial mix parameters having influence on EPS.

Hypothesis:

- Hypothesis-1: Debt Equity Ratio (DER) is the significant predicator of the EPS in all banking sectors;
- Hypothesis-2: Current ratio (CR) is the major determinants of EPS.
- Hypothesis-3: Total Debt to Owners Fund Ratio (TDOFR) is the major determinants of EPS.

Analysis and Interpretation of results:

The regression model table reveals that the only one independent variable such as total debt to owners fund is entered into the regression model, whereas other variables are removed. The impact of EPS with its corresponding independent variable of all the sectors is investigated through the following statistical analysis.

Table – 1: Output Table

R	R²	Adjusted R²	Std. Error of the Estimate	R² change	F change	df1	df2	Sig. F Change	Durbin-Watson
0.96	0.93	0.907	2.425	0.930	39.986	1	3	0.008(a)	2.854

(a) *Predictors: (Constant), Total Debt to Owners Fund*

(b) *Dependent Variable: Earning per share*

Method: Stepwise (Criteria: F-to-enter \geq 3.840, F-to-remove \leq 2.710).

In the regression output table-1 reveals that only one independent variable (TDOF) is entered into the regression model and R (0.964) is the correlation of the one independent variable (TDOF) with the dependent variable (EPS), after all the inter-correlations among the one independent variable is taken into account. The coefficient square (R²) is 0.93 explains the significant variations in earning per share due to change in the other independent variables. The mean value is 93% of the variance (R-square) in EPS has been significantly explained by the independent variables. The Durbin Watson value is 2.854 which is near to the value of 2, which indicates a non-autocorrelation or insignificant trend in the variables taken in the study. The mean is 93% of the variance (R-square) in EPS has been significantly explained by the Total debt to Owners Fund. Thus this independent variable, TDOF is significantly explaining the variance in EPS. Further, the analysis is made through the ANOVA which shows the relationship between the five companies within the Banking sector.

Table – 2: Output Table

ANOVA		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	235.295	1	235.295	39.986	0.008(a)
	Residual	17.654	3	5.884		
	Total	252.949	4			

(a) *Predictors: (Constant), Total Debt to Owners Fund ratio*

(b) *Dependent Variable: Earning per share*

The ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that is not accounted for by the model. The regression and residual sums of squares are equal, which indicates that about no change or variation in EPS is explained by the model. The F value of 39.986 is significant at the 0.008 level, which means that the variation explained by the model is due to the change in the variables. The model summary table reports the strength of the relationship between the model and the dependent variable. Further, to find out the most influential independent variable on EPS, the calculation of coefficient is made in the below.

Table – 3 : Output Table

COEFFICIENT	Un-standardized Coefficient		Standardized Coefficient	T Value	Significance
	B	Std. Error	Beta		
1(Constant)	-42.527		12.010	-3.541	0.038
Total Debt to Owner Fund	4.718	0.746	0.964	6.323	0.008

(a) *Dependent Variable : Earning Per Share*

This COEFFICIENT table-6.35 shows which among the independent variables influence most the variable in EPS. It states that the expected EPS is equal to $-42.527 \times \text{Total Debt to Owner Fund} + 4.718$.

The beta in standardize coefficients of 0.964 is significant at 0.008 levels. It implies that the relative influence of TDOF on the EPS with a strong significance level is the standardize score of the independent variable. There are several insignificant coefficients indicating that these variables such as current ratio; debt equity ratio, long term debt to equity and interest coverage ratio do not contribute much to the effect for change in earning per share. The Beta (un-standardized) value is 4.718 which indicate less of EPS with the total factors taken in the study to evaluate the finance mix in the companies. Again, the t-value shows 6.323 which is also higher and it indicates the TDOF, which is strong and significant.

Table – 4 : Output Table

EXCLUDED VARIABLES	Beta In	T	Significant	Partial Correlation	Co linearity Statistics Tolerance
Current Ratio	-0.292	-1.413	0.293	-0.707	0.408
Debt-Equity Ratio	-0.03	-0.032	0.341	-0.247	0.002

(a) *Predictors: (Constant), Total Debt to Owners Fund ratio*

(b) *Dependent Variable: Earning per share*

The above table indicates that the variables mentioned in the table are excluded from the regression model. The impact on EPS as the relationships are insignificant as performed in 't' value and partial correlation column. In this respect, this value implies a weak correlation between the variables (both for dependent and independent). So EPS from financing mix activities has a much less effect while the change in current ratio and debt equity ratio occurs.

Conclusion:

From all the table values and measurements, it can be concluded that the total debt to owner ratio is the only ratio has an impact on the change of the value of earning per share in banking sector. It has been observed that the total debt to owner fund is the only ratio that has impact on the change of the value of earning per share in **Banking sector**. It implies that the influence of TDOF on EPS has a significant relationship in banking sector.

In the sector wise analysis, the following conclusions were made :

The correlation coefficient (R) is 0.96, implying a strong relationship and the coefficient square (R^2) is 0.93 which connotes the significant variations in earning per share due to change in the other

independent variables. The Durbin Watson value is 2.854. The mean is 93% of the variance (R-square) in EPS has been significantly explained by the Total debt to Owners Fund. Thus this independent variable, TDOF is significantly explaining the variance in EPS. The F value of 39.986 is significant at the 0.008 level. The standardize regression coefficient value Beta is 0.964. It implies that the relative influence of TDOF on the EPS with a strong significance level is the standardize score of the independent variable. The t-value shows 6.323 which is also higher and it indicates the TDOF, which is strong and significant.

The debt to capital ratio is a liquidity ratio that calculates a company's use of financial leverage by comparing its total obligations to total capital. In other words, this metric measures the proportion of debt a company uses to finance its operations as compared with its capital.

This ratio is really a measure of risk and allows us to calculate how well a company can handle a down turn in sales because it highlights the relationship between debt and equity financing. Financing operations through loans carries some level of risk because the principal and interest must be paid to the lender. Thus, companies with higher ratios are considered more risky because they must maintain the same level of sales in order to meet their debt servicing obligations. A down turn in sales could spell solvency issues for the company.

Investors use the debt-to-capital metric to gauge the risk of a company based on its financial structure. A high ratio indicates that the company is extensive using debt to finance its operations; whereas, a low metric means the company raises its funds through current revenues or shareholders. Likewise, creditors use this measurement to assess whether the company is suitable for a loan or is too leveraged to afford one.

REFERENCES :

- Bowen, R.M., L.A. Daley and C.C. Huber (1982). Evidence on the Existence and Determinants of Inter-Industry Differences in Leverage, *Financial Management*, Winter Issue, pp. 10-20.
- Flannery, M.J., Rangan, K.P. (2006). Partial adjustment toward target capital structures, *Journal of Financial Economics*, 79(3), 469-506.
- Hadlock, C. J. and James, C. M. (2002), Do banks provide financial slack?, *Journal of Finance*, Vol. 57, pp. 1383-420.
- Panigrahi, Ashok Kumar (2010). Capital Structure of Indian Corporate: Changing Trends, *Asian Journal of Management Research*, Online open access @ <http://ipublishing.co.in/ajmr.html>.
- Shun-Yu Chen and Li-Ju Chen (2011) Capital structure determinants: An empirical study in Taiwan African, *Journal of Business Management* Vol. 5(27), pp. 10974-10983, 9 November, 2011. <http://www.academicjournals.org/AJBM>
- Simon Kwan (2009), Capital Structure in Banking, FRBSF Economic Letter 2009-37 December 7, 2009, Revealed from <http://www.frbsf.org/publications/economics/letter/>

Web search:

www.rbi.org.in/
www.statebankofindia.com/
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AN ANALYSIS ON IMPACT OF BEHAVIOUR ON INVESTMENT DECISION OF INVESTORS IN TWIN CITY OF ODISHA

RUPA SWETA ANAND

Abstract :

Finance is used in the household segment, industrial segment, a commercial division and in many government organizations. The citizen took abundant efforts to earn money for their survival and for their future prospect. There are numerous choices for an individual, where they can invest their money. Investment helps an individual to raise their finance for the future. While investing, risk and return works at the same track, “high-risk, high-return and low-risk, low-return” slogan is to be followed. Here, behavioural finance plays a crucial role for investors, while taking investment decisions. Behavioural finance has the power to convert the decision of investor on their investment from one financial investment product with other financial investment product or physical investment product, just by offering suggestions or advice.

This paper will illuminate about behavioral finance and focuses on an influence on investment decision of an investor by the suggestion or advice. This paper will also demonstrate how an investment decision of investors of Bhubaneswar and Cuttack (Twin City) city changes by the suggestions or advice of their respective advisors. The foremost purpose of this paper is to know the reasons for changes in an investment decision by accepting the suggestions and advice by investors of Twin city. The study will also focus, whether investors are satisfied or not from the advice they take. It is also one of the key purposes of the paper is to create an awareness of behaviour finance among people.

Keywords: *-Twin city; behavioural finance; financial management; investment decision.*

1. Introduction

To run any business organization finance is mandatory. Finance plays a vital part of every business organization. Finance is the process of working with money. Finance has distributed in two areas mainly (1) financial services and (2) financial management. Financial services deals, to provide advice and financial products. Financial products include insurance plans, bank and post office accounts, securities and bonds, mutual funds etc. While financial management includes decisions, which are related to financing, investment and dividend [15]. Businesses are varied according to forms of business organization like sole trading concern, partnership firm, Hindu undivided family

(HUF) or a company; it may be changed by different characteristics of products and services. The study of financial management is top most important for any business organization, irrespective of the forms of business. Financial management helps all types of business organizations. Even any trading or commercial business and any type of industrial organization, financial management is a prime activity of all types of organizations[16].Some important questions in front of the business organization are: -

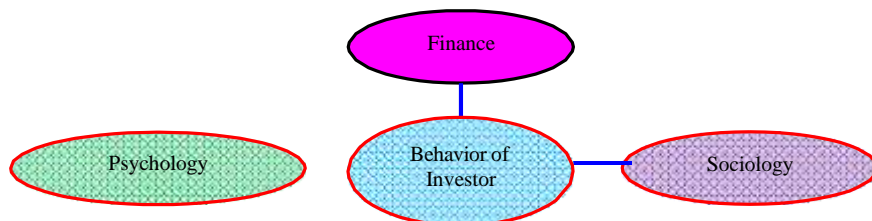
1. What should be the source of finance?
2. How much money will require?
3. Where to invest available finance?
4. How to run repetitive ideal manufacturing procedure and marketing channels?
5. What should be the retention and dividend payout ratio of business?

All the above questions are related to financing decision, investment decision, and dividend decision. The prime objective of financial management is to the maximization of profit and wealth of shareholders. The financing decision, investment decision, and dividend decision are the components of financial management [16].

Investment is an activity to employ available finance or money somewhere (with available options) to generate some return from the invested money. Investors want to earn more return by taking a very low amount of risk, even investor wants to generate a higher return with risk-free investment options. Investment has a parallel relationship between risk and return. Investor wants to produce higher return then, they must take high-risk and vice versa. That's why high-risk high-return slogan is to be followed. With a view to earning higher return with less or zero risks, investors make irrational decisions often [18].

The term behaviour defines in psychology literature as “all reactions of the organisms as a response to stimulants”. Dictionaries and Encyclopaedia define as “the mode of action, or the way humans react.” Behaviour in an inner state of psychology and an action replicated to the outer globe [4].

Many people unable to understand the proper concept of behavioral finance. Abundant books are available in the market, which shows the psychology of investors but most of them have not cleared the concept of behavioral finance. The term behaviour finance is a popular topic in recent years [4] and a psychological term, when the psychology is applied into finance it may be treated as behavioral finance. It is also called as behavioural science, investor psychology, etc [3]. Behaviour finance focuses on how an investor entertains and analyses his facts and data/information for their investment-related decisions [4].Behaviour finance is measured in the field of finance and is useful to understand the conduct of investor in financial markets. The reasons that use their psychosomatic conduct those ensuing choices of individual investors, while transacting in stock in the financial market that changes the prices of securities [5].Behaviour finance examines the impact of sentiments of individual on their investment decision, that's why sentiments are essential factors of investment decisions of the individual[4].



The rest of the paper organized as follows: Section II presents a literature review on behaviour finance; research methodology is provided in section III. Section IV comprises the objective of the study, result analysis is given in section V and section VI represents the conclusion of the study.

2. Review of Literature

Murat Kiyilar & Okan A car (2009) study revealed that the nature and concept of behavior finance & human behavior. The study also focuses, to know the behavioral model of investors and to ascertain an impact of design as well as the color of a credit card. Here, researchers gathered the data through survey documents, which were distributed through email to 130 people and all the respondents were credit card users [4].

Reshma Sheikh (2017) study states that the role of behavioral finance on investment decision of investors and its significance. The researcher conducted the survey through a review of 65 studies on behavioral finance [5].

Ishola Rufus Akintoye, (2008) conducted the review on efficient market hypothesis and behavioural finance. In this paper, the impact of accounting information on prices of scripts and performance of mutual fund were publicized. The study concludes that a person with inside information can generate a high-return and when block traders purchase new equities at block prices, they can generate a good return and volatility in the market arises without any clarified reasons sometimes [1].

Avanidhar Subrahmanyam (2007) study concludes that the study of behavioral finance has grown in recent years, but a lot of work is still pending in this field, hence a lot of portion can be analyzed in behavioural finance and market microstructure. It also concluded, an impact of disposition & overconfidence forces the market and the individual can assume events of corporate like splits, securities offerings, Merger & Acquisitions, etc with the attention of CEO characteristics and profile [2].

Kavita Shah (2014) study exhibited, due to some psychological factors, investors became irrational with their investment and to overcome these irrational decisions, behavioural finance provides detailed information about financial markets [7].

Amlan Jyoti Sharma (2016) study unveiled the limitations of traditional finance theories and the progress of behavior finance discipline for investors in the financial market. It also shown the principles of behavioral finance and the paper were based on secondary data and it was descriptive & conceptual in nature [8].

Marina Nikiforow, (2010) study displayed the training of behaviour finance influences the perception of professional fund managers of Germany. The data was collected through a structured questionnaire from 100 German fund managers for the study [13].

3. Research Methodology

Sampling design is imperative in nature, hence the researcher decided to collect the data through both the methods namely primary and secondary data. A structured questionnaire has been prepared for this study and it was distributed to the investors of Twin city of Odisha and simple random sampling technique was used for the collection of primary data. Data for the study collected through 100 investors from diverse income group and occupation. Few questions on “investment option, advisors and satisfaction from the advice” were designed in the questionnaire. The secondary data have been collected through references [1-18].

4. Objectives of the study

The objectives of the present study were

- (1) To understand the perception of investors of Twin city, regarding advice from their respective advisors while investing
- (2) To determine the various reasons of changes of investment decision by accepting the suggestions and advice by investors of Twin city
- (3) To identify whether investors of Twin city are satisfied from the advice they take
- (4) To know, from whom investors of Twin city take advice
- (5) To create awareness about the behaviour finance among people of Twin city.

5. Findings and Discussion

(i) Occupation of investors:

Income of investors affects the saving and investment of an individual, if a person is a high-income earner then saving & investment will be more of that individual and vice-versa, hence occupation of investors is valuable for the study. Fig. 2 focuses on the occupation of investors in the study.

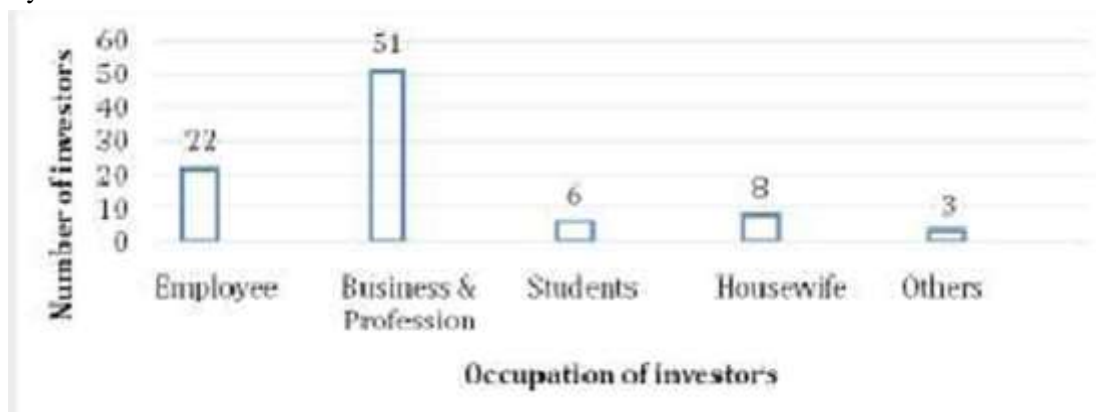


Fig. 2:- Occupation of investors (Source-Primary data)

(ii) Investment according to income:

Generally, the person who earns more, invest more and the person who earns less invest accordingly. So, the income of people directly affects their investment decision and income is one of the chief factors for this survey. The classification of investors income-wise is shown in Fig. 3.

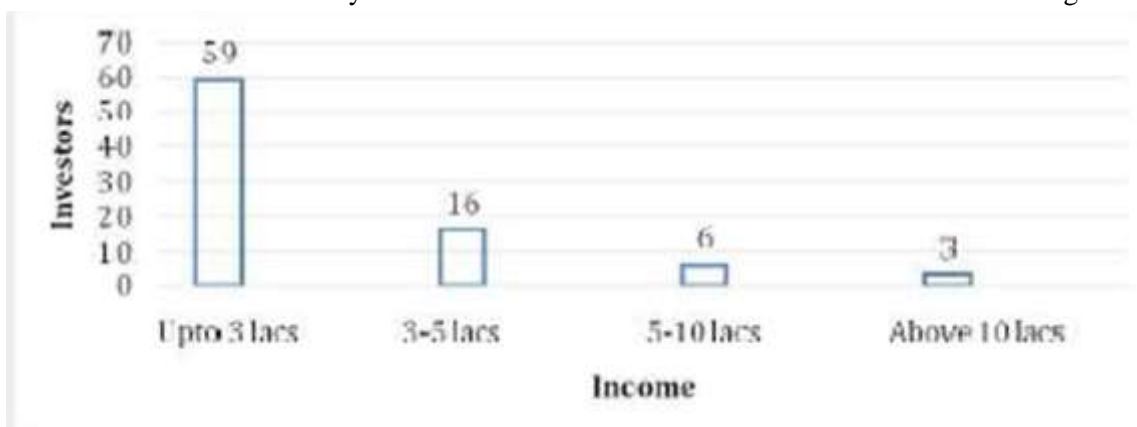


Fig. 3-Investment as per an income of investors (Source-Primary data)

(iii) **Investment options:**

It is essential for the study to analyze an alternative of investment for the investors of Twin city. Fig. 4 depicts the information on alternatives of investment for investors.

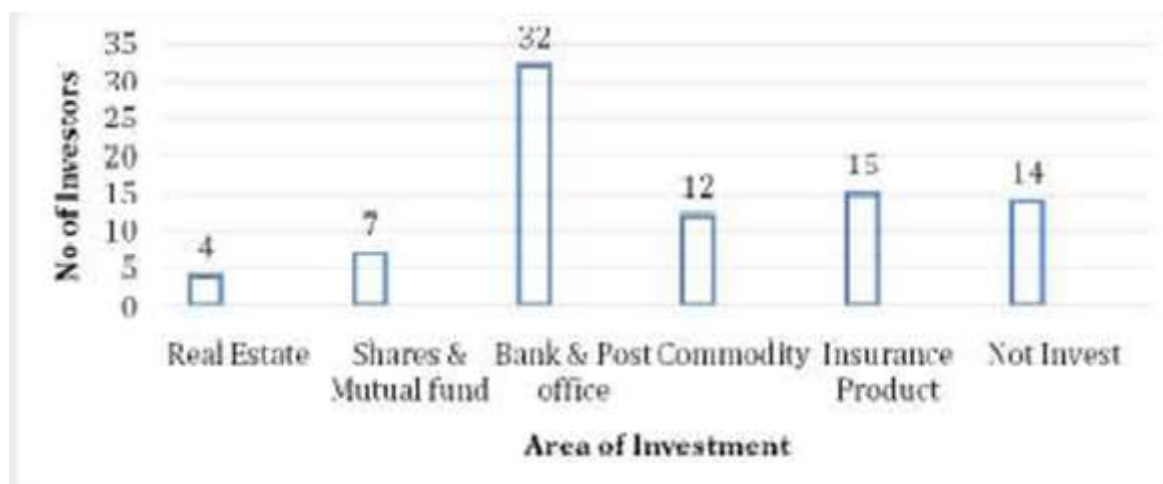


Fig. 4- Choices of investment. (Source- Primary data)

(iv) **Acquisition of advice:**

The study shows that some investors of Twin city do not take any kind of tips from anyone, but we have analyzed that, majority of investors receive the suggestions from their respective advisors before investing their money. The detailed analysis of the acquisition of advice is shown in Table I.

Table-I Acquisition of advice. (Source-Primary data)

Sl. No	Acquisition of advice	Total number of respondents	
		Numbers	Percentages
1	Yes	62	62.00
2	No	22	22.00
3	Not investing anywhere	16	16.00
Total	100	100.00	

(v) **Reasons for the acquisition of advice:**

Earlier in this paper, it was observed that most of the investors took advice from their advisors. This section focuses on the reasons for the acquisition of advice. Fig. 5 shows various reasons for acquiring advice from investors before investing.



Fig. 5- Causes of taking advice (Source- Primary data)

(vi) **Advisor:**

Investors found numerous options, from whom they can take advice for their investment. In this study, it has analyzed that, out of 100 investors 84 people were going for investment and 16 investors do not invest their money anywhere. It has also analyzed that, out of 84 investors (those who invest), 62 investors took advice from respective advisors and 22 people do not go for any advice. Therefore, the total numbers of investors were 62 as shown in Fig. 6.



Fig. 6- Advisor of investment (Source- Primary data)

(vii) **Satisfaction level of investment:**

Customer satisfaction is one of the most vital elements for determining the perception of the investor on investment. Perception can be judged by satisfaction. In this study, it has analyzed that, 66% of investors were satisfied and 34% of investors were not satisfied with the advice of respective advisors.

6. Conclusion

This study proved that behaviour finance effects an investment decision of investors in Twin city of Odisha; due to fear of losing their money, lack in financial knowledge by most of the investors and investors believe more on their advisors.

This paper illustrates that, out of 100 investors, 84 make an investment and 16 investors of Twin city, do not invest anywhere. Majority of investors of Twin city invest their finance in banks, post office schemes, and insurance products. It was also observed in the study that, out of those 84 investors, 62 investors took advice from their respective advisors and 22 investors don't take any advice for their investment. The study demonstrates that the majority of investors (those, who took advice) took advice from Chartered Accountant and financial advisor. The Study also reveals that 66% of investors (those, who took advice) were satisfied with the advice they take from their respective financial advisors and Chartered Accountants.

References

- [1] Akintoye, I. R. (2008). Efficient market hypothesis and behavioural finance: A review of literature. *European Journal of Social Sciences*, 7(2), 7-17.
- [2] Subrahmanyam, A. (2008). Behavioural finance: A review and synthesis. *European Financial Management*, 14(1), 12-29.
- [3] Pompian, M. M. (2012). *Behavioral finance and investor types: managing behavior to make better investment decisions*. John Wiley & Sons.
- [4] Kiyilar, M., & Acar, O. (2013). Behavioural finance and the study of the irrational financial choices of credit card users. *Annales Universitatis ApulensisseriesOeconomica*, ISSN, 1454-9409.
- [5] Sheikh, R (2017). A Systematic Review on Applicability of Behavioural Finance in Individual Investment Decisions. *Scholarly research journal for interdisciplinary studies*, 4(30), 4701-4714.
- [6] Byrne, A., & Brooks, M. (2008). Behavioral finance: Theories and evidence. The Research Foundation of CFA Institute.
- [7] Shah, K. (2014). Study of Behavioural Finance with Reference to Investor Behaviour. Available at SSRN 2534318.
- [8] Sharma, A. J. (2016). Role of Behavioural Finance in the Financial Market. *International Journal of Business and Management Invention*, 5(1), 01-05.
- [9] Bikas, E., Jurevièienë, D., Dubinskas, P., & Novickytë, L. (2013). Behavioural finance: The emergence and development trends. *Procedia-social and behavioral sciences*, 82, 870-876.
- [10] DeBondt, W., Forbes, W., Hamalainen, P., & GulnurMuradoglu, Y. (2010). What can behavioural finance teach us about finance? *Qualitative Research in Financial Markets*, 2(1), 29-36.
- [11] Fakhry, B. (2016). A Literature Review of Behavioral Finance. *Journal of Economics Library*, 3(3), 458-465.
- [12] Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. *Review of Behavioural Finance*, 4(2), 68-80.
- [13] Nikiforow, M. (2010). Does training on behavioural finance influence fund managers' perception and behavior? *Applied Financial Economics*, 20(7), 515-528.
- [14] Kannadhasan, M. (2006). Role of behavioural finance in investment decisions. Retrieved December, 29, 2014., 1-7.
- [15] M.Y Khan, P.K Jain (2011), *Financial management: text, problems, and cases*. New Delhi: Tata McGraw Hill Education Private Limited.
- [16] R. Srivastava, A. Misra, (2009), *Financial Management*. New Delhi: Oxford University Press.
- [17] R. Parrino, D. Kidwell, (2012), *Fundamentals of Corporate Finance*. New Delhi: Wiley India Pvt. Ltd.
- [18] Pandian, P (2009) *Securities Analysis and Portfolio Management*. New Delhi: Vikas Publication.



A STUDY ON AWARENESS OF E-BANKING SERVICES IN COLLEGE STUDENTS OF BOTAD

SANTOSH KUMAR BARAL

Abstract:

E-banking (Electronic Banking) or online banking means any user with a personal computer and a browser can get connected to his bank by bank website to perform any of the virtual banking functions. People don't have much time to go and visit the banks on regular basis that is why the services of E-banking are more popular among them than other services. The main difficulty for using the E-banking facility is less knowledge about the operations of banking facility. Respondents also feel the services of E-banking too complex to use and respondents also believe the E-banking to be risky. Customer apply can use number of facilities by e-banking. It can be Operative Account Statement, D-MAT, VISA Transfer, Fund Transfer, RTGS and NEFT, Mobile Recharges etc. This paper is an attempt to study the Awareness of E- Banking facilities amongst the college students between age group of 18 to 25 and studying in Botad district, This Study focuses on Awareness, Convenience, Security and Satisfaction of electronic banking among college student.

Key words: Technology, E-Banking, Student's awareness, satisfaction and security.

A STUDY ON AWARENESS OF E-BANKING SERVICES IN COLLEGE STUDENTS OF BOTAD

1. Introduction

E-banking is the term that signifies and encompasses the entire sphere of technology initiatives that have taken place in the banking industry. E-banking is a generic term making use of electronic channels through telephone, mobile phones, internet etc. for delivery of banking services and products. The concept and scope of e-banking is still in the transitional stage. E-banking has broken the barriers of branch banking. Electronic banking is the concept of new millennium. It is the process of performing banking transaction with the use of electronic technology. E-banking means providing banking services to customer at his home, office travelling with the use of electronic technology. It means provide banking services to customer at anywhere and anytime, there is no limitation of place and no limitation of time. It is a conveyance services to customers. Electronic banking services Have provided ease to the people in terms of time, cost etc. people does not have enough time to Go their banks and wait for their turn to do any transaction therefore they prefer to attain electronic services of their banks. Banks have provided customer convenient facilities like ATM, Debit Card, Credit Card, Virtual Banking, Virtual Cash to attract and retain their customers.

2. Different E-Banking Services Provides in Banks

- **A.T.M :** ATM is a very popular service in this world. The Automated Teller Machine is an effective delivery channel, which play a vital role in consumer satisfaction and cost control of transaction of banks. ATM are emerging as the most useful tool to ensure "Any time Banking" or Any Time Money. ATM card is magnetic stripe card which operate with particular PIN

Number. ATM card is Used for balance enquiry, Cash withdrawal Fast cash Updating of cash book, utility bill payments etc. Key advantages of ATMs include:

- 24-hour availability
 - Elimination of labor cost
 - Convenience of location
- **NEFT/RTGS :** NEFT means national electronic fund transfer system and RTGS means Real Time Gross Settlement System which enables an effective service, economical and reliable system of transfer of funds from bank to bank as well as from remitter's account in a particular bank to beneficiary's account in another bank across the country. IT is useful to customers to transfer funds from one bank branch to another branch and also another bank.
 - **Mobile Banking:** Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet. Unlike the related internet banking it uses software, usually called an app, provided by the financial institution for the purpose. Mobile banking is usually available on a 24-hour basis. This service is provided with secure ID and password to customers mobile banking offer Fund transfer, immediate payments service, cheque book request, bill payments, mobile and DTH recharge, M - Commerce transactions etc.
 - **SMS Banking:** SMS banking is a form of mobile banking. It is a facility used by some banks or other financial institutions to send messages (also called notifications or alerts) to customers' mobile phones using SMS messaging, or a service provided by them which enables customers to perform some financial transactions using SMS. It offers balance enquiry, last three transactions Statements, cheque status, Alert for password generations etc.
 - **Telephone Banking:** Bank provides this service with the help of telephone to customer's services is provided with secure ID and TPIN number. Telephone banking provides balance enquiry, last three transaction statements, cheque status enquiry, change of TPIN etc service.
 - **Internet Banking:** Internet banking is the most convenient way to bank- anytime, any place, at your convenience. You can access Online SBI from any computer that has connectivity to the Internet. Banking provides Fund Transfer, Online bill payments, open PPF Account, Request For loan, utility bill payments etc services.

3. Objectives of the Study:

- To study awareness about e-banking in collages students.
- To know whether students using e-banking services provided by the banks, also to know that which e-banking services students use more and why ?

4. Limitations of the Study:

- This research is related with students in different collages in Botad District only.
- Research is based on the information provided by the students.
- Researcher taken sample only those students who use e-banking service.

5. Research Methodology

The study is intended to cover the awareness and satisfaction about E-banking facility provided by banks in Botad district. Primary data is collected with the help of the questionnaire and interview of the students aim different collages in Gadhada, Barwala and Botad. Data for this investigation were collected from primary data. The sample chosen consisted of 100 sample respondents representing the student whose customers of E-banking. The data was collected during the months between October 2019-. It is hypothesis That ATM is a popular service and generally maximum students use ATM service only.

Data Analysis and Interpretation

Table No: 1 (A).Students Profile of the Respondents Based on Education Streams

<i>Sr.No.</i>	<i>Streams of Education</i>	<i>Numbers of respondents</i>	<i>Percentage</i>
1	Commerce	33	33%
2	Arts	24	24%
3	MSW	18	18%
4	BCA	25	25%
	Total	100	100%

From the above table it is clear that 38% of the respondents belong to Commerce stream, 24% of the respondents belong to Arts streams and 18% of the respondents are in the Social works stream and last 25 % of the respondents are in BCA streams.

Table No: 1 (B).Students Profile of the Respondents Based on Gender

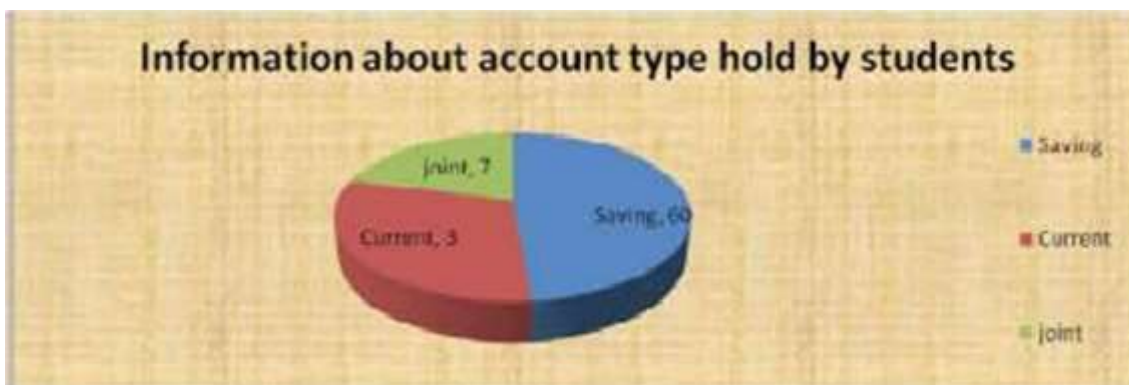
<i>Sr.No.</i>	<i>Gender</i>	<i>No.of Respondent</i>	<i>Percentage</i>
1	Boys	52	52%
2	Girls	48	48%
	Total	100	100%

From the above table it is clear 52% of the respondents belong to Boysgroup and 48% of the respondents belong to Girls group.

Table No: 2.Information about account type hold by students.

(in number of std.)

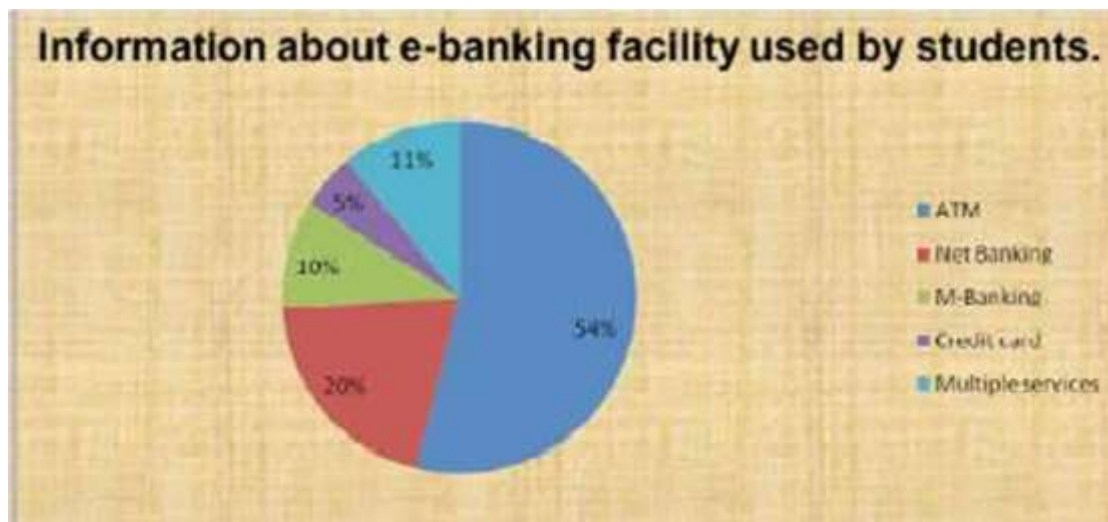
<i>Sr.No.</i>	<i>Streams of Education</i>	<i>Saving</i>	<i>Current</i>	<i>Joint</i>	<i>Total</i>
1	Commerce	28	02	03	33
2	Arts	22	-	02	24
3	MSW	15	01	02	18
4	BCA	20	-	5	25
	Total	85	03	12	100



From the above tables/chart shows that maximum students open saving account in nationalized bank. And few commerce and MSW students also open current account. 0.07 % students have a joint Account; their purpose is to benefit from the joint account holder.

Table No: 3.Information about e-banking facility used by students. (In percentage)

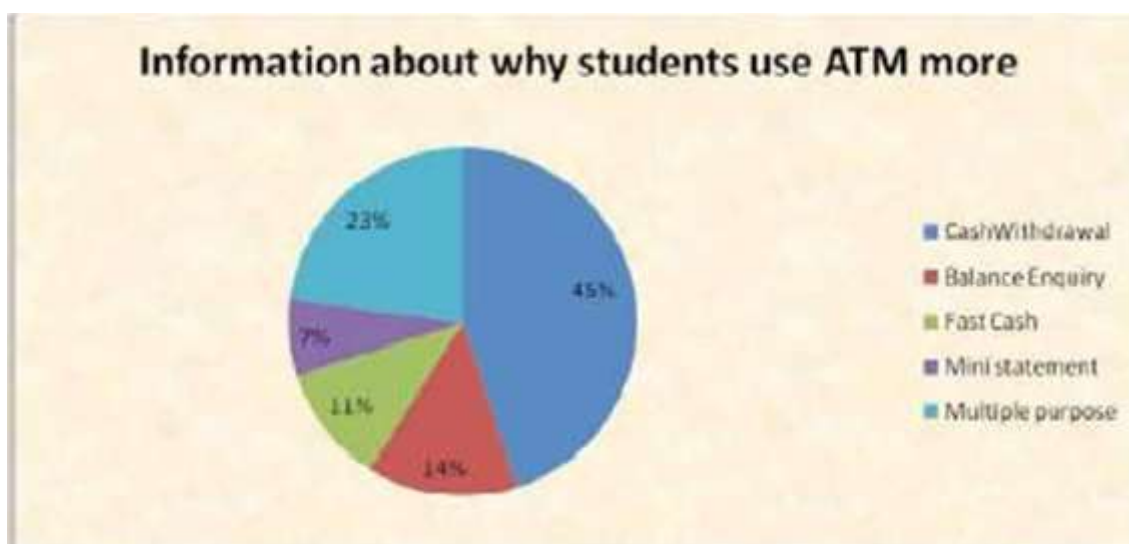
Sr.No.	Streams of Education	ATM	Net Banking	M-Banking	Credit card	Multiple services	Total
1	Commerce	19%	06%	04%	00%	06%	35%
2	Arts	15%	02%	03%	00%	02%	22%
3	MSW	8%	02%	01%	01%	03%	15%
4	BCA	12%	10%	02%	04%	0%	28%
5	Total	54%	20%	10%	05%	11%	100%



From the above table/chart it is clear that 54% students use ATM services, 20% students use net banking,10% student use m-baking ,only 5 % student use credit card facility and 11% student use more than one services like ATM and m-banking etc. So from all the servicesATM services is a popular service in new generation students.

Table No: 4.Information about why students use ATM more.
(In percentage)

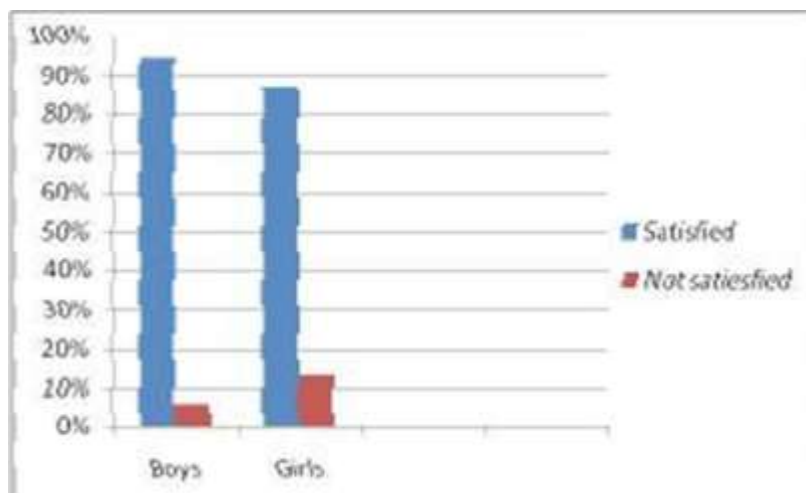
<i>Sr. No.</i>	<i>Streams of Education</i>	<i>Cash Withdrawal</i>	<i>Balance Enquiry</i>	<i>Fast Cash</i>	<i>Mini statement</i>	<i>Multiple purpose</i>	<i>Total</i>
1	Commerce	13%	03%	03%	01%	15%	35%
2	Arts	12%	04%	02%	02%	02%	22%
3	MSW	08%	03%	01%	02%	01%	15%
4	BCA	12%	04%	05%	02%	05%	28%
	Total	45%	14%	11%	07%	23%	100%



Above table/chart shown that 45% students use ATM for cash withdrawal ,14% students use ATM for Balance enquiry, 11% students use ATM for fast cash and 7% student use ATM for mini statement. It is clear that 23% students use ATM for Multiple purpose, it means they use ATM for utility bill payments, cash withdrawal, balance inquiry etc.

Table No: 5.Information about satisfaction level of students

<i>Sr.No.</i>	<i>Gender</i>	<i>Satisfied</i>	<i>Not satisfied</i>	<i>Total</i>
1	Boys	94%	06%	100%
2	Girls	87%	13%	100%



From the above table /chart informed that 94% boys students are satisfied with e-banking services and 87% girls are satisfied .it further cleared that 10% student are not satisfied with e-banking services.

6. Conclusion

The study report is based on primary data. According to the study the researcher concludes that most students are aware of banking services and getting benefits from these services. It is believed that electronic banking is secured and reduces stress of the people especially in the developing countries. Students do not need to visit the bank physically to pay their fee, to transfer their funds, to do other transactions of banks. So it has reduced cost and saved time of people. This research paper proves that Botad district colleges students prefer to open a savings accounts and ATM services are the most popular among students from the other banking services offered by the bank. Therefore, banks will have to take necessary steps to educate students about new technologies and other services offered by banks. There is no awareness about secure transaction because maximum students(80%) do not have idea about change PIN so There is need to create awareness about e-banking security.90% students satisfied with e-banking Services but remaining 10% students believe that it is difficult to maintain secrecy in E-banking services.

7. References

- 1) <https://www.ukessays.com/essays/information-technology/importance-of-e-banking.php>
- 2) https://en.wikipedia.org/wiki/Online_banking
- 3) <http://shodhganga.inflibnet.ac.in/bitstream/10603/89802/7/chapter%205.pdf>
- 3) <http://indianresearchjournals.com/pdf/apjmmr/2012/december/2.pdf>
- 4) <https://www.researchgate.net>



EFFECT OF SELECTED MACROECONOMIC VARIABLES ON FINANCIAL PERFORMANCE OF AIRPORTS AUTHORITY OF INDIA: A REVIEW

SASMITA SAHOO

Abstract :

Over last few years, one of the fastest growth is recorded in civil aviation industry in India which is now third biggest domestic civil aviation market in the world and will be third largest air passenger market by the end of 2024. The FDI inflow to the aviation sector over last 18 years is amounting to US\$ 1,817.23 million and will be expected for an additional investment of US\$ 4.99 billion in the next four years. To cope with international standards the Indian government is planning to invest US\$ 1.83 billion for development of airport infrastructure by 2026. With increase in jet fuels and little support from Govt. of India the service providers in India incurring losses even if with increase in the demand for domestic air travels. The failure is reflected in both the Govt. and Private players of aviation industry in India. The current research is an attempt to identify the literatures in support of effect of macroeconomic variables on the financial performance of aviation sector. For the above purpose 100 articles were referred out of which 30 articles are found suitable for the current study. By analyzing the literatures the gap is identified and research questions are developed.

Keywords: Macro economic Variables, Financial Performance, Aviation Industry

EFFECT OF SELECTED MACROECONOMIC VARIABLES ON FINANCIAL PERFORMANCE OF AIRPORTS AUTHORITY OF INDIA: A REVIEW

Introduction

India's aviation industry is on a high-growth path. India aims to become the third-largest aviation market by 2020 and the largest by 2030. The Civil Aviation industry has ushered in a new era of expansion, driven by factors such as low-cost carriers, modern airports, increasing number of airports, Foreign Direct Investment in domestic airlines, advanced information technology interventions and

growing emphasis on regional connectivity. India is the ninth-largest civil aviation market in the world, with a market size of around US\$ 16 billion. According to Mr. Tony Tyler, Director General and CEO, International Air Transport Association “The world focus is on Indian aviation – from manufacturers, tourism boards, airlines and global businesses to individual travelers, shippers and businessmen. If we can find common purpose among all stakeholders in Indian aviation, a bright future is at hand”.

India is among the five fastest-growing aviation markets globally with 275 million new passengers. The airlines operating in India are projected to record a collective operating profit of Rs 8,100 crores in fiscal year 2016. Passenger traffic during FY 2015-16 increased at a rate of 21.3 per cent to 85.57 million from 70.54 million in the FY 2014-15. During January-May 2017, domestic air passenger traffic rose 17.36 per cent as compared to the same period in 2016. International aircraft movements increased by 8.2 per cent and domestic aircraft movements increased by 15.8 per cent in July 2016 as compared to July 2015. Indian domestic air traffic is expected to cross 100 million passengers by FY2017, compared to 81 million passengers in 2015, as per Centre for Asia Pacific Aviation.

To cope up with the huge growth in aviation sector Government agencies have projected that around 500 brown-field and green-field airports would be required by 2020. The private sector is being encouraged to be actively involved in the construction of airports through different Public Private Partnership models, with substantial state support in terms of finance, concessional land allotment, tax holidays and other incentives. India’s aviation industry is largely untapped with huge growth opportunities, considering that air transport is still expensive for majority of the country’s population, of which nearly 40 per cent is the upwardly mobile middle class.

The Government of India constituted the International Airports Authority of India (IAAI) in 1972 to manage the international (Metro) airports in India while the National Airports Authority (NAA) was constituted in 1986 to look after domestic airports. In the year 1995 these two different entities (IAAI & NAA) were merged into a single nodal organization: the Airports Authority of India (AAI) which is solely responsible for managing the entire aviation infrastructure & airspace of the country. The major functions of AAI are:

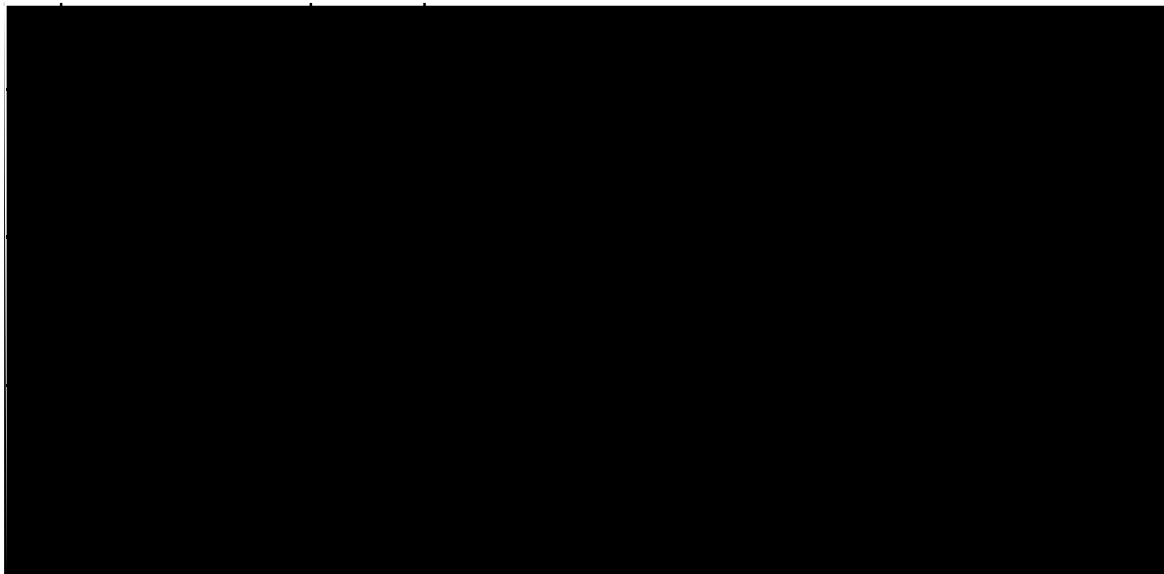
- a) Designing, Construction, Development, Operation and Maintenance of international, domestic airports and civil enclaves.
- b) Control and Management of the Indian airspace extending beyond the territorial limits of the country, as accepted by ICAO.
- c) Construction, Modification and Management of passenger terminals,
- d) Development and Management of cargo terminals at international and domestic airports,
- e) Provision of passenger facilities and information system at the passenger terminals at airports,
- f) Expansion and strengthening of operational area, viz. Runways, Aprons, Taxiway etc,
- g) Provision of visual landing-aids and Provision of Communication and Navigation aids, viz. ILS, DVOR, DME, and Radar etc.

Airports Authority of India manages 125 airports in India, which include 18 International Airport, 07 Customs Airports, 78 Domestic Airports and 26 Civil Enclaves at Defense airfields. AAI provides air navigation services over 2.8 million square nautical miles of air space. Airports Authority of India is declared as ‘A-Miniratna-Category-1-Public sector enterprise’.

The steady growth of any economy is possible because of the interaction of the companies within it, both with each other and with industries. Studies suggest that the overall performance of companies as well as failure of companies is due to the macroeconomic condition within which companies are operating. An effective and efficient functioning with a steady growth of the any sector requires favorable macroeconomic environment in the country. The volatility of macroeconomic condition is increased due to globalization and it is not possible to avoid completely the macroeconomic impact for each of the individual sector. Rapid global economic growth over the past 4 to 5 decades is possible due to industrialization. The dynamics of industrialization played pivotal role in transforming underdeveloped countries to developing countries. The increased importance of industrialization and integration of performance of different sectors with macroeconomic fluctuations require more attention. The survival of any company is dependent on the dynamics of macroeconomic factors that affects the performance of any sector. So, by understanding and estimating the causal effect of the macroeconomic variables, the management, to some extent can manipulate the impact of the unexpected fluctuations and its adverse impact.

Macroeconomic news and firm performance have much been considered in the previous studies but with mixed findings. Macroeconomic environment has a strong impact on corporate sales and profits. McNamara and Duncan (1995) conclude that firm performance is a function of the preceding year ROA and macroeconomic variables. In addition, the economic cycle (and in particular, macroeconomic indicators such as interest rate, unemployment rate and growth in gross domestic product) strongly affect profitability and thereby influence company performance (Brown and Ball, 1967; Machin and van Reenen, 1993; Ackert and Hunter, 1995; Robson, 1996; Hackbarth et al., 2006). In contrast, Oxelheim (2003) shows that unfavorable development of important exchange rates has a negative impact on performance. Higson et al. (2004) show that rapidly growing and rapidly declining firms are less sensitive to macroeconomic shocks than firms in the middle of the growth range. Boyd et al. (2005) find no statistically significant impact of macroeconomic news on earnings growth forecasts. Zhang et al. (2012) show that firm profits decrease after privatization but their output and operating efficiency increase.

Literature Review



			countries. One striking result is that, on average, cross-country consumption correlations have not increased in the 1990s, precisely when financial integration would have been expected to result in better risk-sharing opportunities, especially for developing countries.
4	Cynthia, et, al	2004	Market orientation has emerged as a significant antecedent of performance and is presumed to contribute to long-term success. The findings suggest that the relationship between market orientation and business performance is positive and consistent worldwide. The moderating effects of business objective (profit, not-for-profit), industry type (manufacturing, service), socioeconomic development [gross domestic product (GDP) per capita, Human Development Index (HDI)], and Hofstede's individualism cultural dimension] are examined. Stronger correlations between market orientation and business performance were found for not-for-profit compared to profit firms and service compared to manufacturing firms.
5	Barro and Ursúa	2009	The likelihood of a depression (defined as a decline of Real GDP by at least 10%) increases by 20% in a stock market crash (defined as an index decline of at least 25%). A depression is highly unlikely in the absence of stock market crash. The sample consisted of 209 stock market crashes and 59 depressions during peace times.
6	Dimson, Marsh and Staunton	2010	No evidence that investing in growth economies produced superior returns. However, they found that stock markets incorporate predictions of future economic growth. When markets recover, economies tend to follow.
7	O'Neill	2011	Equity markets are a lead indicator of GDP growth and react strongly to expectations about the future. Changes in consensus GDP expectations are likely to influence equity prices. While there is considerable diversity across countries, in general the sensitivity of equity returns to future growth forecast revisions appears to be much higher in the growth markets than in the advanced world.
8	Tan, Y., & Floros, C	2012	A positive relationship between bank profitability, cost efficiency, banking sector development, stock market development and inflation in China. The authors report that low profitability can be explained by higher volume of non-traditional activity and higher taxation. Moreover, the authors confirm that there is a competitive environment in the Chinese banking industry. Furthermore, the authors propose policy actions that should be taken to improve bank profitability in China.

9	Karim, B. K., Sami, B. A. M., & Hichem, B	2010	Bank characteristics, financial structure and macroeconomics variables are important in explaining African Islamic banks' profitability. Bank's capital and size increase bank's profitability whereas credit risk and operating efficiency reduce it. With regards to the macroeconomic indicators, higher economic growth and inflation spur banks' profitability.
10	Bhardwaj	2012	117 companies consistently posted earnings growth higher than the nominal GDP growth and 129 companies that posted earnings growth lower than nominal GDP growth consistently during the same period. He concluded that some stocks like YES Bank, Rural Electrification Corporation (REC) are growing faster than the economy.
11	Irimia, E., & Stancu, I.	2013	The results reflect that social responsibility has a small positive impact on financial performance, while macroeconomic variables have a marginal influence on company's performance.
12	Tobback, E., Martens, D., Van Gestel, T., & Baesens, B.	2014	The incorporation of macroeconomic variables significantly improves the prediction performance of the model. The downturn impact ranges up to 5% depending on the data set and the macro economic conditions defining the downturn.
13	Adeola, O	2016	Exchange rates, oil prices, domestic credits, total consumption expenditures, and federal tax revenues have a significant impact on sales performance.
14	Lee	2017	Interest rate is found to be significantly negative associated with firm performance but changes in GDP and firm performance are positively related. Additionally, due to socialist market economy reforms, state-owned enterprises are still dominant influence in firm performance.

Research Questions

- Does overall financial performance of Airports Authority of India is consistent over the period of study?
- What is the impact of liquidity and solvency on profitability of Airports Authority of India over the period of study?
- What is the association between macroeconomic variables and financial performance of Airports Authority of India?
- Do industry specific factors have any impact on the financial performance of Airports Authority of India?
- How do macroeconomic variables influence the financial performance of Airports Authority of India?

Conclusion :

Number of research work both at international level and national level have been made on financial performance. Further, some amount of research found establishing impact of specific macroeconomic variables on the financial performance of different companies. As regard to aviation industry a little research was found. Further, an infrastructure development company little or no study was found.

The proposed study will be undertaken with a view to evaluate the impact of macroeconomic variables on the financial performance and financial health of Airports Authority of India. The financial performance of Airports Authority of India will be analyzed over a period of 10 financial years including research periods. In macroeconomic variable GDP, interest rate, exchange rate, inflation and flow of FDI will be considered.

REFERENCES

1. P. Brown and R. Ball (1967), some preliminary findings on the association between the earnings of a firm, its industry, and the economy. *Journal of Accounting Research*, 5, 55–77.
2. Fama, E. F. (1981) “Stock returns, real activity, inflation, and money”, *American Economic Review*, 71, pp 545-565.
3. De Santiago, M., Zugarramurdi A., &Parin, M. A. (1987). Inflation and managing profitability. *Engineering Costs and Production Economics*, 11(3), 151 . Retrieved from <https://search.proquest.com/docview/199008125?accountid=175698>
4. Pantelias S. (1991). Inflation, relative price dispersion, and corporate profitability (Order No. 9134394). Available from ProQuest Dissertations & Theses Global. (303953960). Retrieved from <https://search.proquest.com/docview/303953960?accountid=175698>
5. S. Machin and van J. Reenen (1993), Profit margins and the business cycle: Evidence from UK manufacturing firms. *Journal of Industrial Economics*, 41(1), 29–50.
6. L. F. Ackert and W. C. Hunter (1995), rational expectations and security analysts’ earnings forecasts. *The Financial Review*, 30(3), 427–443.
7. R. McNamara and K. Duncan (1995), Firm performance and macro-economic variables. School of Business, Discussion Paper, Bond University, 66, 1-19.
8. M. T. Robson (1996), Macroeconomic factors in the birth and death of U.K. Firms: Evidence from Quarterly VAT registration. *Manchester School*, 64(2), 57-69.
9. Siegel, Jeremy J, 2002, “Stocks for the Long Run” (Third edition) McGraw-Hill.
10. L. Oxelheim (2003), Macroeconomic variables and corporate performance. *Financial Analysts Journal*, 59(4), 36–50.
11. C. Higson, S. Holly, P. Kattuman and S. Platis (2004), the business cycle, macroeconomic shocks and the cross section: The growth of UK quoted companies. *Economica*, 71(282), 299–318.
12. J. H. Boyd, J. Hu, and R. Jagannathan (2005), the stock market’s reaction to unemployment news: why bad news is usually good for stocks. *Journal of Finance*, 60(2), 649–672.
13. D. Hackbarth, J. Miao, and E. Morellec (2006), Capital structure, credit risk, and macroeconomic conditions. *Journal of Financial Economics*, 82(3), 519–550.
14. Barro Robert J. and Ursúa José F., (February 2009), “Stock-Market Crashes And Depressions”, National Bureau Of Economic Research Working Paper No. 14760
15. Karim B. K., Sami B. A. M., &Hichem B. (2010). Bank-specific, industry-specific and macroeconomic determinants

- of African Islamic banks' profitability. *International Journal of Business and Management Science*, 3(1), 39-56. Retrieved from <https://search.proquest.com/docview/873581287?accountid=175698>
16. Dimson, Elroy and Marsh, Paul and Staunton, Mike (February 2010), "Economic Growth", *Credit Suisse Global Investment Returns Yearbook 2010*, pp 13-19.
 17. Saldanha, Conrad (August 2010), "Does Economic Growth in Emerging Markets Drive Equity Returns?", *Neuberger Berman Management Insights*
 18. O'Neill, Jim, (May 2011), "Linking GDP Growth and Equity Returns", *Goldman Sachs Asset Management Monthly Insights*
 19. Bhardwaj, Sameer (February 27, 2012), "Stocks like Yes Bank, REC growing faster than the economy", *The Economics Times*
 20. Ritter, Jay R., (Summer 2012), "Is Economic Growth Good for Investors?" *Journal of Applied Corporate Finance*, Volume 24 Number 3, Morgan Stanley Publication, pp 8-18.
 21. Sandte Holger, (July 2012), "Stock Markets vs. GDP Growth: A Complicated Mixture", *Viewpoint*, BNY Mellon Asset management
 22. Estrada, Javier, (Summer 2012), "Blinded by Growth", *Journal of Applied Corporate Finance*, Volume 24 Number 3, Morgan Stanley Publication, pp 19-25.
 23. Tan, Y., & Floros, C. (2012). Bank profitability and inflation: The case of china. *Journal of Economic Studies*, 39(6), 675-696. doi:<http://dx.doi.org/10.1108/01443581211274610>
 24. X. Zhang, Z. Tang, and J. He (2012), Impact of macro and firm-specific characteristics on post privatization performance evidence from China. *The Chinese Economic*, 45(5), 50-91.
 25. Irimia E. & Stancu I. (2013). STUDY of some Factors influencing company performance. *Metalurgia International*, 18(3), 126 -131 . Retrieved from <https://search.proquest.com/docview/1315318225?accounted=175698>
 26. Tobback E., Martens, D., Van Gestel T., & Baesens B. (2014). Forecasting loss given default models: Impact of account characteristics and the macroeconomic state. *The Journal of the Operational Research Society*, 65(3), 376- 392. doi:<http://dx.doi.org/10.1057/jors.2013.158>
 27. Veronica, M. S., & Anantadjaya S. P. D. (2014). Bankruptcy prediction model: An industrial study in Indonesian publicly-listed firms during 1999-2010. *Review of Integrative Business and Economics Research*, 3(1), 13-41. Retrieved from <https://search.proquest.com/docview/1513215311?accountid=175698>
 28. Adeola O. (2016). The impact of macroeconomic conditions on sales performance in Nigeria. *The Journal of Developing Areas*, 50(6), 31-41. Retrieved from <https://search.proquest.com/docview/1805278586?accounted=175698>
 29. FICCI-KPMG 'India Aviation Report 2016'
 30. Lee, N., Chang, F., Wang, Y., La, D. T., & Su, H. (2017). Impacts of macroeconomic news on Vietnamese SOEs' performance. *Journal of Applied Finance and Banking*, 7(1), 87-102. Retrieved from <https://search.proquest.com/docview/1862030011?accountid=175698>.



A study on investment options and investors attitude towards investment in private insurance companies

SUBHRANSU SEKHAR TRIPATHY

ABSTRACT

There has been enough lapse of time after the announcement of demonetisation to address the many debates going around the event which are shrouded by short sighted and clichéd views. The demonetisation decision had a far-reaching impact on many sectors. However the banking sector came under immense pressure owing to unprecedented surge and withdrawal of cash during the few days after the decision. Though no limits were placed on cash deposits, there was restriction on withdrawal of cash in the initial few days. This led the banks and the public to think about alternate modes of payment systems. The Government and Banks have since then been trying to motivate the public to use digital cash instead of physical cash. The Reserve Bank of India has also taken several initiatives to promote cashless transactions by the introduction of several instruments such as, National Electronic Funds Transfer (NEFT), Real Time Gross Settlement System (RTGS), and Electronic Clearing Services (ECS). This study was undertaken with the view to measure the growth of cashless transaction through Immediate Payment System (IMPS), Prepaid Payment Instruments (PPI), Debit card, Credit card, Mobile Banking, Point of Sale (POS). This paper studies the trend of digital transaction since demonetisation. The results reveal that there has been a positive thrust on e-transactions in terms of RTGS, NEFT and mobile banking both by volume and value. Also the other payment instruments have shown drastic increase in use since the announcement of demonetisation. The paired sample t-test conducted also reveals that there has been significant increase in the digital transaction since the announcement of demonetisation and India is gradually doing away with the habit of dealing in cash. Thus it is concluded that the demonetisation has in fact acted as the much needed catalyst in putting the Indian economy on the path of being cashless and being digital.

Introduction

The Indian economy has been disrupted in recent times quite a lot, demonetisation ranks as the foremost of them all. In his directly broadcast declaration of demonetisation, the Prime Minister of India had announced the government's decision to implement a major change in the economic environment and declaring the high value currency notes – of Rs 500 and Rs 1000 denomination no more as legal tenders. The news became public after the closure of business on November 8, 2016 and the notes ceased to be legal tender from midnight of the same day. People were given up to December 30, 2016 to exchange the notes held by them. This announcement created ripples across all sector of the society as there is a tiny part of India where most activities can be done without cash. The rest of India uses cash for effecting transactions. The country faced severe cash shortages with severe detrimental effects across the economy. People seeking to exchange their bank notes had to stand in lengthy queues, and several deaths were linked to the rush to exchange cash.

This sudden announcement caught the public unaware and unprepared. But the policy makers and the government went ahead with their plan of action. This massive exercise was undertaken for the betterment of the India as a State and its economy. The stated motive behind this decision was multifarious as discussed in the remaining paragraph. First, India as an independent state has always faced cross-border terrorism, naxalite activities and illegal activities. These are mainly financed by counterfeit notes of Rs.500 and Rs.1,000. As a result of demonetisation, it was expected that the supply of counterfeits will stop for anti-national activities. Second, the demon of corruption has grasped the Indian society for ages. This is facilitated by unaccounted cash i.e., black money, particularly the notes of Rs.500 and Rs.1,000, which were stashed away in form of cash, buying real estate properties, donations for education (Mohanty & Pattnaik, 2019). The demonetisation move was intended to unearth black money and curb corruption. And finally, the most important reason for demonetisation was to make the Indian Economy move towards a cashless society. The move was intended to maximize electronic fund transfers and usher a transparent and digital economy.

This paper aims to measure the success of the demonetisation process in achieving the third stated objective i.e. the migration from cash based economy to digital economy. The paper will trace the digital banking transactions that were being done prior to the announcement of demonetisation and compare it with the transactions after the announcement to see if the disruption in fact acted as a catalyst or not. The rest of the paper is organised as follows: the section 2 traces the need for demonetisation by discussing the amount of cash, both accounted for and otherwise, prevalent in Indian economy and the pitfalls of corruption arising out of it. The section 3 presents review of some select literature in this area and also identifies the need to undertake this study. The section 4 and 5 discuss the objective and methodology of the study. Section 6 presents the analysis of data and findings. Finally the last section concludes the study with some important observations.

Need for Demonetisation

India's obsession with cash has been quite legendary. It is evident from the scenario of cash dealings in the various transactions which includes some of the formal sector and all transactions in the informal sector. In fact 90% of all transactions in India are cash based (Shah, A, 2017). This practice of dealing in cash has been the root cause of the growing corruption in India. Corruption has drastically eroded the Government's ability to deliver economic growth and has increased the income inequality among the population. It has severely debilitated the capacity of the administration to collect revenue to perform the core functions and has also encouraged tax evasion. The menace of corruption

has severely impacted the quality and accountability in all spheres of life. No surprisingly, it has been estimated that in India the amount of black money in circulation amounts to 10-30 percent of national income (Singh, 2016).

Financial sector reforms have made little progress in the fields of banking and payments. As a consequence, currency notes continue to dominate transactions. The share of transactions done electronically in total transactions in India is the lowest in the world. The size of cash relative to GDP is the highest in the world. The total currency in circulation as on March 31, 2016 was Rs.16,415 billion of which notes of Rs.1,000 denomination account for 38.6 per cent (Rs. 6,326 billion) and Rs.500 account for 47.8 per cent (Rs. 7,854 billion). The importance of Rs.500 had been increasing over the years, from 4.1 per cent on March 31, 1990 to 47.8 per cent on March 31, 2016. Similarly, the share of Rs.1,000 note had increased from 1.7 per cent in 2001 to 38.6 per cent in 2016. The total amount of Rs.500 and Rs.1,000 notes amounted to Rs.14,180 billion as compared with India's GDP of Rs.1,35,761 billion in 2015-16 or about 11.5 per cent of GDP, increasing nearly threefold from 2.8 percent in 2001. In fact on the day of announcement of the total cash in circulation in the economy, roughly 86% by value was held in Rs.500 and 1000 denomination.

Review of Literature – Select Studies

In the context of India, several quick studies were conducted on demonetisation. These studies could be divided into three basic categories. The first category discussed the motive and rationale for demonetisation and its utility in curbing black money and future direction. The following are the studies in this area- Reddy (2017) attempted to understand the larger picture of the situation and its way ahead through three major strands; explanations and analysis of demonetisation, discussion on the possible alternative that could have been implemented, and examination of new objective of digitalization. Providing valuable reference on cross-sectoral prevalence of corruption, Desai (2017) tried to put forward an action agenda devised in terms of a consistent fact-based diagnostic and analytical approach, on the cumulative and cascading impact of corruption (coming from a legacy of electoral finances) on common citizen. Kapila (2017) investigated impact of demonetisation in terms of rationale, the aftermath, the short and the long term economic impact, and the social and political fallout. Sharma (2017) addressed various consequences, benefits and drawbacks and issues relating to demonetisation in terms of its impact on black money, fake currency issues, industry, business, service class and different segment of the society. Jain (2017) suggested that the move had definitely brought a war on cash and pushing the objective of digitalization and cashless economy will reap long term benefits. Dhingra (2017) argued that demonetisation is a powerful instrument of state policy that works like a divine 'Brahmastra' and has to be used with utmost care and caution.

In the second category, some other researchers conducted interesting study on the demonetisation and unaccounted for money. Vaidyanathan (2017) provided a vivid perspective on estimation of black money and historical analysis of unaccounted money in India. Singh (2017) highlighted the seriousness of black economy situation in India. Mohanty and Pattnaik (2017) using multiple regression found that there is prevalence of unaccounted for money in sectors traditionally not known to deal in cash; such as cement and automobile industry. Mohanty and Pattnaik (2019) used the daily returns data of all the fifty companies listed in NSE Nifty to assess the reaction of stock market to the announcement of demonetization using the event study methodology. The dummy variable regression was used to study the impact on various industry sectors. These sectors like automobiles and cement had reported significantly negative returns across several event windows. The banking sector contradictory to the belief had not performed in outstanding manner as the positive returns had been nullified beyond 5

days of the event. The reaction of other sectors like Pharmaceuticals, telecom, software, oil and natural gas, coal and power and the diversified sector had performed as per expectation without any major shocks.

Third category of studies dealt with the impact of demonetisation on the use of digital cash and online banking. Some of them are as follows: Ahmad (2017) investigated the impact of demonetization on online banking transaction. Neill et al., (2017) examined the use of digital cash and its impact on the work of an organisation and its customers. Tigari (2018) studied the impact of digitalizing Indian economy and understand challenges and opportunities of digitalization. Sheetal et al., (2019) attempted to understand changes in number of online services and usage of mobile applications post demonetization. Dhanalakshmi (2018) discussed the possible scenarios in digital cash transactions in the future.

A preliminary review of the literature suggests that the strategy of demonetisation is currently well poised to fulfil the stated objective of making India a cashless digital economy. However a study discussing the RBIS's initiatives and thrust towards digital economy and statistical discussion of the impact is missing in this context. Hence we have tried to fill in this gap through our paper.

Objectives of the Study

The basic objective of this paper is to study the initiative taken by the RBI to boost digital and online transaction and the track the growth of such transactions in the aftermath of the demonetisation decision. The specific objectives are as follows:

1. To study the trend in digital money transaction both before and after the announcement of demonetisation
2. To study the growth rate in digital transactions in the aftermath of the demonetisation
3. To find out if there is significant increase in digital transaction after demonetisation or not?

Methodology

This is an exploratory study aimed towards presenting chronological data regarding the use of digital payment system. The data used is secondary in nature and has been collected from the RBI's website. All the payments and settlements data are monthly in nature. We have used the data of 18 quarters; 9 quarters before demonetisation and 9 after demonetisation. While studying the trends we have used the complete data from August 2014 to March 2019. However to compute the growth rate we have used two non-overlapping data set. This has been achieved by omitting two months viz. November and December 2016, as they were the period in which the demonetisation was announced and given effect to. To study if there is any significant increase in digital transaction, we have used the paired sample t-test.

Research Hypothesis

The paired sample t-test has been used to find out the differences in means of the two data sets; the first set is the 9 quarters before demonetisation and the second set is the 9 quarter after demonetisation. We have used a one tailed test with the following hypothesis:

$$H_0 : \mu_d = 0$$

$$H_1 : \mu_d > 0$$

Analysis

The demonetisation decision had a far-reaching impact on many sectors. However the banking sector came under immense pressure owing to unprecedented surge and withdrawal of cash during the few days after the decision. According to a study conducted by Reserve Bank of India staff

Bhupal Singh (Director, Monetary Policy Department) and Indrajit Roy (Director, Department of Statistics and Information Management) Excess deposits in the range of Rs.2.8-4.3 lakh crore accrued to the banking system during the demonetisation period, with unusual cash deposits in specific accounts, which were usually less active, estimated to be in the range of Rs.1.6-1.7 lakh crore. Though no limits were placed on cash deposits, there was restriction on withdrawal of cash in the initial few days. This led the banks and the public to think about alternate modes of payment systems. The Government and Banks have since then been trying to motivate the public to use digital cash instead of physical cash.

The Reserve Bank of India has taken several initiatives to promote the digital banking and also facilitated several changes in payment system in India by the introduction of several instruments such as, National Electronic Funds Transfer (NEFT), Real Time Gross Settlement System (RTGS), and Electronic Clearing Services (ECS) and so on. In addition to this, several policy interventions have been taken by the RBI from time to time for providing a hassle-free inter-bank payment environment for the millions of customers.

NEFT is a deferred net settlement system which facilitates individuals to transfer fund electronically from one individual to any other having account with any bank on a batch settlement basis. The maximum transactions limit up to 10 lakhs is permissible on this mode. RTGS which has become much popular for retail customers is basically a high-value payment and settlement system which processes on a real time and gross payment basis from one bank to another. It is basically used for transferring the value which is more than 2 lakhs. It was operationalized in the year 2005. ECS platform also helps the bank customers for receiving the periodic payments like salary, pension, dividends and payments like utility bills etc. is convenient for the banks as well as the customers. Recently many alternative payment modes were introduced in order to foster the digital payments are viz; Immediate Payment System (IMPS), Unified Payment Interface (UPI), Prepaid Payment Instruments (PPI), Debit card, Credit card, Mobile Banking, Point of Sale (POS) and so on. The usage of the more and more electronic modes of payment systems promoted the existing customers to transact through the tech-savvy mode to reduce the time and settlement period.

The trend of the three major indicators of digital payments: RTGS, NEFT and Mobile banking during August 2014-March 2019 are depicted in Graph 1, 2 and 3 respectively. It is seen that the RTGS has registered a 40.7% increase in the 27 months before demonetisation (From 69327.09 to 97554.34) and about 90% increase in the 27 months after demonetisation. In case of NEFT the before and after announcement growth rates are 110% (from 9504.50 to 4520.20) and 124% (from 25470.01 to 11355.08) respectively. Similarly the IMPS registered 876% growth (from 35.20 to 343.57) before and 308% (from 431.92 to 1762.89) growth after the announcement. The figures for mobile banking are 265% (from 4.27 to 1134.93) and 218% (from 1383.05 to 4401.53). So the increasing trend in digital payment persists though out the entire period under study.

The average growth statistics of various digital payment indicators, both by volume and by value, are reported in table 1. It is seen that Mobile banking has registered the highest growth by volume (499%) followed by Pre-Paid Instruments (428%) and IMPS (402%). Similarly the highest growth by value was also registered in case of Mobile banking (573%) followed by IMPS (541%) and PPIs (256%). Whereas all the other variables such as ATM usage, credit card debit card have shown consistent increase as evident for the growth rates.

To find out if the post demonetisation digital money transaction has shown significant increase as compared to pre demonetisation period, the paired sample t-test was employed. The pairs on whom the test was conducted are RTGS and Post RTGS (PORTGS), NEFT and Post NEFT

(PONEFT), IMPS and Post IMPS (POIMPS), Credit card Usage at Point of sale and the post figure (CREDITPOS/PO-CREDITPOS), Debit card Usage at Point of sale and the post figure (DEBITPOS/PO-DEBITPOS), PPIs and post PPIs (POPPIS) Mobile banking and post Mobile banking (PO-MOBILEBANK). Both the credit card and debit card usage at ATM has been excluded as we do not know the purpose of their use at ATM. The descriptive statistics of these parameters has been provided in Table 2. The table 3 presents the paired sample t-test results. It is seen that all the t-values are significant at 5% level of significance. Since we had employed the one tailed t-test it is concluded that the post demonetisation averages of all the above mentioned parameters are significantly higher than the pre demonetisation averages.

In the end, after going through the trend graphs, the growth table and the t test we can safely conclude that the demonetisation has indeed proved to be a catalyst for growth of digital environment in India.

Conclusion

The Indian obsession with cash has been legendary. Indians primarily prefer cash for tax avoidance, due to poor access to financial services and issues related to digital infrastructure and connectivity, thereby triggering a vicious circle in which cash based economy thrives. The high cash circulation in markets pose serious concerns to economy such as the growth of large unorganized sectors, black money, tax evasion etc. However, the payment landscape in India has been changing since the announcement of demonetisation and with the introduction of various new technology driven payment options like m-wallets, UPI, RuPay and the opening of 241 million bank accounts under Pradhan Mantri Jan Dhan Yojana, which has created a base for this paradigm change. Card based transactions, though still a small fraction of cash transactions, have seen substantial growth in the period after demonetisation. The paper studied the trend and growth rate of digital transaction and it was seen that there has been significant increase in the post demonetisation period. The paired sample t-test also reveals that the average value of transaction after the event is significantly higher than the average value before the event indicating that the announcement of demonetisation has in fact been able to change the traditional practice of dealing in cash. Hence it can be safely concluded that the announcement of demonetisation has proved to be the much needed catalyst for putting the Indian economy on the road to digitisation.

References

- Ahmad, S. (2017), "Demonetisation- Its Impact on Banking Online Transactions", *Sumedha Journal of Management*, Vol.6, No.3, July-September 2017
- Shah, A. A monetary economics view of the demonetisation, https://www.business-standard.com/article/opinion/ajay-shah-a-monetary-economics-view-of-the-demonetisation-116111300767_1.html
- Dhanalakshmi, C. (2018). A conceptual study on cashless economy: Digital India. *International Journal of Commerce and Management Research*. Volume 4, Issue 6, Impact Factor: RJIF 5.22, ISSN: 2455-1627
- Dhingra, I.C., (2017), *Demonetisation: First Step Towards a Cashless Economy*, Manakin Press Pvt. Ltd. New Delhi
- Jain. K., (2017), *The War on Cash: Demonetisation*, Educreation Publishing, New Delhi
- Mohanty M & Pattnaik, S.,(2017) " Demonetization from the Perspective of Indian Stock Market", Presented at ISIF, 2017 at VGSOM, IIT Kharagpur

Mohanty M & Pattnaik, S.,(2019) “Reaction of Indian Stock market to Announcement of Demonetization: A Sectoral Analysis”, Journal of Research Innovation and Management Science, Vol.V, Issue. II, Impact factor- 2.5 ISSN: 2454-6542

Reddy, C. R. (2017), *Demonetisation and Black Money*, Orient Blackswan Pvt. Ltd., New Delhi

Sheetal, J. U., Purohit, D. N., & Anup, V. (2019). Increase in number of online services and payments through mobile applications post demonetization. *Advances in Management*, 12(1), 34-38.

Singh, C. (2016), “Demonetisation will Serve India Well”, *The Hindu-Business Line*, November 24, 2016

Singh, C. (2017), *The Black Tiger, Fingerprint- An Imprint* of Prakash Books India Pvt. Ltd., New Delhi

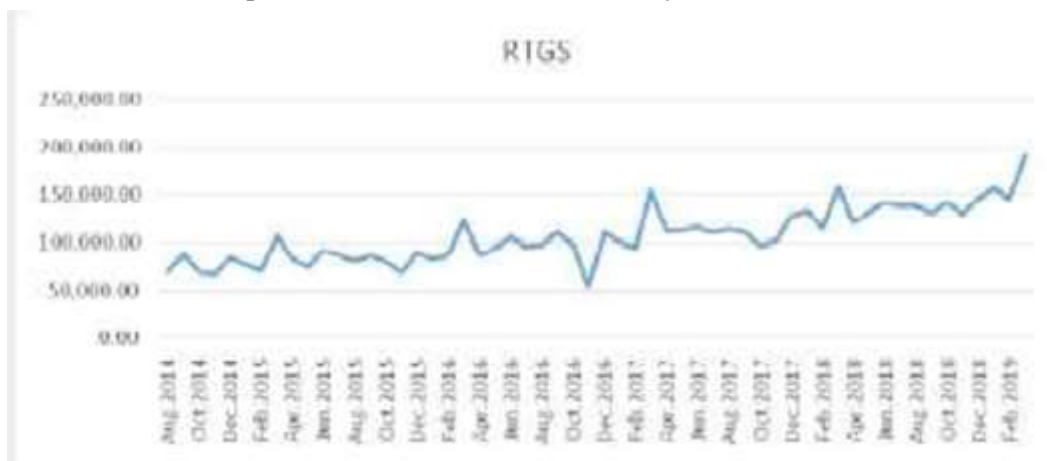
Tigari, Harish. (2018). Digitalization - A Step towards Cashless Economy. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, Issue – 2, Volume – 2, ISSN No: 2456 – 6470.

Vaidyanathan, R. (2017), *Black Money and Tax Heavens*, Westland Publications, Bengaluru

http://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx

http://cashlessindia.gov.in/digital_payment_methods.html

Graph 1: Growth of RTGS transaction by Value (Billion)



Graph 2: Growth of NEFT transaction by Value (Billion)



Graph 3: Growth of RTGS transaction by Value (Billion)

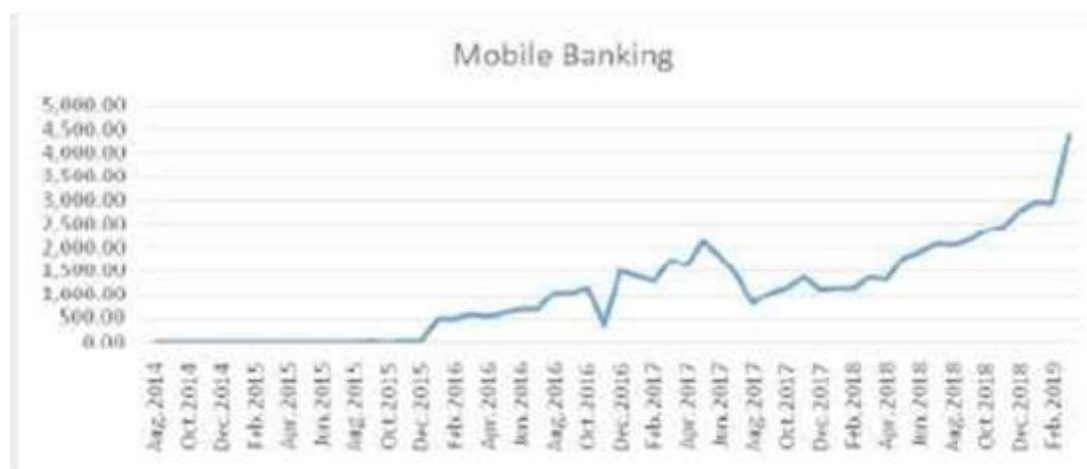


Table 1: Growth Statistics of Various Digital Payment Indicators

Digital transaction details	By Volume (millions)			By Value (Billions)		
	Avg. before Nov. 2016	Avg. After Nov. 2016	% change	Avg. before Nov. 2016	Avg. After Nov. 2016	% change
RTGS	8.19	10.60	29%	87388.05	128733.76	47%
NEFT	100.99	169.40	68%	6885.41	15739.53	129%
IMPS	19.00	95.33	402%	144.98	928.62	541%
Credit Cards	65.18	124.07	89%	203.15	417.46	105%
Usage at ATMs	0.49	0.67	36%	2.48	3.17	28%
Usage at POS	64.99	123.40	90%	200.67	414.30	106%
Debit Cards	766.36	1041.70	36%	2216.47	2875.13	30%
Usage at ATMs	668.62	737.54	10%	2082.47	2457.82	18%
Usage at POS	97.74	304.16	211%	134.00	417.31	211%
(PPIs)	59.36	313.15	428%	38.08	135.73	256%
Mobile Banking	36.07	216.24	499%	273.19	1837.45	573%
No of ATMs (in actual)	193227.26	222843.23	15%	--	--	--
No of POS (in actual)	1249530.26	2950286.41	136%	--	--	--

Table 2: Descriptive Statistics of Various Digital Payment Indicators

Pairs	Name of Pairs	Mean	N	Std. Deviation
Pair 1	PO-RTGS	128733.7615	27	22203.98383
	RTGS	87388.0493	27	13893.11560
Pair 2	PO-NEFT	15739.5296	27	4179.03569
	NEFT	6885.4052	27	1630.09338
Pair 3	PO-IMPS	928.6159	27	420.58580
	IMPS	144.9826	27	82.65083
Pair 4	PO-CREDITPOS	414.2981	27	95.07721
	CREDITPOS	200.6715	27	17.57751
Pair 5	PO-DEBITPOS	417.3070	27	94.21809
	DEBITPOS	134.0019	27	28.31301
Pair 6	PO-PPIS	135.7333	27	46.41335
	PPIS	38.0811	27	14.20276
Pair 7	PO-MOBILEBANK	1837.4533	27	787.64675

Table 3: Results of Paired Sample t-test of Various Digital Payment Indicators

Pairs	Post value- Prevalue	Paired Differences of Mean	Std. Deviation	t-Value	DF	Sig. (0.05)
Pair 1	PORTGS – RTGS	41345.71222	21830.38436	9.841	26	0.000
Pair 2	PONEFT – NEFT	8854.12444	3194.19873	14.403	26	0.000
Pair 3	POIMPS – IMPS	783.63333	346.01357	11.768	26	0.000
Pair 4	POCREDITPOS – CREDITPOS	213.62667	65.06247	17.061	26	0.000
Pair 5	POSTOEBITPOS – DEBITPOS	283.30519	79.19689	18.588	26	0.000
Pair 6	POPPIS – PPIS	97.65222	35.71360	14.208	26	0.000
Pair 7	POMOBILEBANK – MOBILBANK	1564.26222	480.80545	16.905	26	0.000

“METAMORPHOSING OF ECONOMY INTO CASH LESS ECONOMY: IS INDIAN SOCIETY READY TO BE TRANSFORMED”

SUSHREE SHEETAL BEURA

ABSTRACT:

Digital advancement has made money transactions easy and convenient to the extreme level. Gone are those days when people used to invest time and labour for financial transactions by running to the banks or to people. Rather ATM machines and internet (online transactions) have saved time and labour. But it's a fact that transformation never happens on a single day. It needs time and process like metamorphosis. If we research, we find that a small country like Kenya is 100 per cent cash less economy, meanwhile Australia is also on the way. So why can't India be, being one of the great economy of the world!

Govt. is promoting cashless transactions through BHIM app, AEPS, Digishala etc. Because it is cost effective, growth friendly, business friendly, pro-financial inclusion etc. It has various challenges like escaping attitudes of people, poor transaction security mechanism, insufficient infrastructure etc. But still it's a boon and we need to have a change in mindset to have a real economy by transforming into cash less.

Keywords: cashless economy, corruption, India, Digital Payments

INTRODUCTION

India has been dealing with cash since years so far its economy is concerned. But very recently the Govt. has announced the biggest, and the most ambitious move to crack down black money and implement digitalization as well as cashless economy.

Background

The payments landscape in India is undergoing a transformation: traditionally a cash-based economy, it has seen an increase in card-based and mobile transactions. In spite of advances made in the recent years by the Government and regulators to popularize cashless transactions, India continued to be a high-cash-usage economy. There was a mad dash to withdraw smaller bills, or deposit bigger ones, at ATMs around the nation before INR 500 and 1000 shut down temporarily. After the announcement of demonetization. This demonetization decision has been the biggest, and most ambitious step ever to initiate the process of black money and fake currency transaction and to make India move towards a 'cashless' economy.

LITERATURE REVIEW

1. Mr. Pradeep H. Tawade (2017), "Future and scope of cashless economy in India." This paper helps in assessing the future trends and the impact of going cashless in the Indian economic scenario. After the study was conducted it was seen that the Government of India should consider many more steps in digitalizing India. And payment methods should be made more secure and risk-free.
2. Dhanda and Arora (2017), Genesis of cashless society: A study on growing acceptability towards plastic money. This paper is aimed towards studying the factors responsible for the rapid increase in acceptability of plastic card in the recent years. After the study was conducted it was seen that use of plastic cards is a matter of great pride among teenagers and is considered safe and free from any frauds.
3. According to Woodford (2003), Cashless economy is defined as one in which there are assumed to be no transactions frictions that can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return. In a cashless economy, how much cash in your wallet is practically irrelevant.

OBJECTIVES OF THE STUDY:

1. To study the benefits & challenges of cashless economy
2. To examine the preparedness of Government for the implementation of the cashless economy in India.
3. To focus on digital payment methods.

DATA AND METHODOLOGY

The secondary data are used in analyzing the present study. The collective data are analyzed with help of suitable statistical techniques like percentage and ratios.

POSITIVE IMPACTS ON CASH LESS ECONOMY

1. **Cost Reduction:** Reduces the cost of printing, storing and transporting etc.
2. **Environment Friendly;** It reduces the use of paper .so as deforestation.
3. **Risk Reduction:** The risk of money getting stolen or lost is minimal. Even if the card is stolen or lost it is easy to block a credit/debit card or a mobile wallet remotely. It is also a safer and easier spending option while travelling.
4. **Convenient:** When it comes to Digital Transaction, both time and labour are saved as one does not need to run to banks or ATMS. A fingertip and 24x7 services are available where e- KYC works.
5. **Keeping Records:** Transactions are done through mobile computers which enables users to keep a track of all their spending, balance and manage their budget effectively.
6. **Contribute to proper tax base:** There is very less chance of avoiding tax payments as all the transactions of everyone is monitored and recorded digitally by advanced techniques and expert institutions.
7. **Easy to Monitor and making Economy Corruption Free:** In case of digital transactions it is easy to track and monitor suspicious transactions as all the records are available with the banks. As a result black money flow can be stopped.
8. **Financial Inclusion:** Forcing people to shift to cashless payment transactions instantly formalizes this world of informality and include everyone in formal economy adding them to a class where all can avail all the official and formal facilities irrespective of their class.
9. **Discounts:** A lot of ecommerce websites offer huge incentives in terms of discounts, cash back, loyalty points to the customers for making digital transactions for shopping online.

CHALLENGES FOR CASHLESS ECONOMY

1. More than 60% of Indian population belongs to rural region. Almost a quarter of the rural populace doesn't have mobile phones and a large percentage of them are computer illiterate. They are not comfortable using computers or mobile phones for transactions and rely on other people for help. This sometimes leads to misuse of the accounts and siphoning of funds, so majority of rural mass prefer cash over digital modes.
2. About 90% of the Indian labor market is informal. Majority being employed in agriculture and manufacturing sector where daily wage is prevalent. Under such circumstances the informal labor market is heavily cash dependant.
3. India is a country where 90% of transactions are paid for in cash because cash facilitates making transactions anonymous, helping conceal activities from the government in a way that might help agents avoid laws, regulations and taxes.
4. Security is another big concern regarding cashless transactions. The Indian Computer Emergency Response Team (CERT-In) has reported a surge in the number of incidents till October 2016 with close to 39,730 security incidents. Indians are wary of digital modes due to cyber security incidents such as phishing, scanning, website intrusions, defacements and virus code.
5. Though several companies have come up with inexpensive smart phones still they are not affordable for most of the people in the country. Unless Indian government provides necessary subsidy or affordable solutions cashless economy would be a farfetched dream.
6. Digital India suffers from the threat of thefts and hacking of digital money instruments. The ATM cards, Debit/Credit cards, Net Banking solutions and even the transaction websites of the financial institutions and banks are hacked by the mischievous people who withdraw money by making clones and changing the passwords. This has to be taken care of before proceeding on digital India mission.

PRESENT SCENARIO OF SKILL CAPACITY OF INDIA

1. According to TRAI, as on 30 September 2016, 82 out of 100 citizens in India owned a mobile phone. The evolution of the telecom ecosystem, with significant reduction in call and data rates, along with the prices of smart phones, is propelling the shift to a cashless economy.
2. The government of India is working dedicatedly to push India towards a cashless economy. With major initiatives such as demonetization, Direct Benefit Transfers, BHIM and many more. The intent is to streamline the economy and curb corruption.
3. The government approved for a proposal, under which there would be no charge for BHIM, UPI, and debit card transactions up to ₹ 2000.
4. Government also ran a DigiDhan campaign where 16 lakh lucky winners (users and merchants) were rewarded with prizes ranging from Rs 1000 to 1 crore.
5. Further to incentivize behavior change and bring down the cost of digital payments, referral and cash back schemes have also been launched for BHIM where users and merchants receive cash back. Also, initiatives like USSD and the *99# service have ensured that non-Smartphone users are also on board the cashless wave.
6. 1 million: Number of newly saved credit and debit cards within two days of demonetization announcement.
7. 100%: Day-on-day growth in customer enrolment with leading mobile wallets after demonetization.

METHODS OF DIGITAL PAYMENTS IN INDIA

Banking Cards: These includes all types of plastic cards such as credit card, debit card, cash card, travel card etc. they provide 2 factor authentications for a secure transaction.

USSD: Unstructured Supplementary Service Data is an innovative of making payments without the use of internet and smartphone. The payments can be made by a feature phone by dialing *99#.

AEPS: Aadhar Enabled Payment System is a means by which a person can make payments at the point of sale by Aadhar authentication.

UPI: Unified Payment Interface powers multiple bank accounts into a single mobile application, merging all or some of the banking services.

Mobile Wallets: It is a means of carrying cash in digital format. Credit card or debit card can be linked to the mobile wallet for making payments or some money can be loaded into the mobile wallet.

Internet Banking: It is a medium through which various banking services like NEFT, RTGS, ECS, and IMPS etc. can be availed over the institution's website.

Mobile Banking: It is a service provided by banks providing its customers a platform to conduct various banking services by use of their mobile phone.

KEY SUGGESTIONS

1. Government of India should try to educate people about the benefits of going cashless before taking any crucial steps.
2. They should also be able to implement their plans properly and without troubling the public.
3. They should also tell about the opportunities which the public will get if they become digital.
4. People should try and use any digital payment method at least once.
5. Government should develop infrastructure to cope up with any policy change or a plan implementation beforehand.
6. People and government should work together to develop infrastructure and technology to digitalize India.

CONCLUSION

From the above analysis it also appears that many people actually agree with the government on the usefulness of cashless economy as it helps to fight against terrorism, corruption, money laundering but one biggest problem in the working of cashless economy in India is cybercrime and illegal access to primary data. India, the following measures are recommended Government have to bring transparency and efficiency in e-payment system, strategies used by government and RBI to encourage cashless transactions by licensing payment banks, promoting mobile wallets and withdrawing service charge on cards and digital payments. A financial literacy campaign should be conducted by government time to time to make population aware of benefits of electronic payments.

REFERENCES:

1. Garg, P., & Panchal, M. (2017). Study on Introduction of Cashless Economy in India 2016: Benefits and Challenge's. IORS Journal of Business and Management.
2. Gupta, A. (2017). Cashless Haryana: Achievements and Challenges in the way. International Journal in Management and Social Science.
3. Hunt, C. (2014). Transforming talent management- the impact of social and digital technology. Denovati.
4. Kumari, D. (2016). Cashless Transaction: Methods, Applications and Challenges. International Journal of Enhanced Research in Educational Development.
5. Kumari, D. N. (n.d.). Impact of Cashless Economy on Common Man in India.
6. Kumari, D. N., & Khanna, J. (2017). Cashless Payment: A Behavioral Change to Economic Growth. IJSRE.
7. "Cashless-Society.org". Retrieved 2017-01-27.



ROLE OF MOBILE WALLET IN CASHLESS ECONOMY IN ODISHA

VENKATA RAMANA KOTHAKOTA

ABSTRACT

The advancement of technology and initiative of government can contribute towards the development of mobile payment. Due to advanced technology, mobile users can use their smart phones to make money payment by installing the application on their phones. The major actors involved in the mobile payment system include Telecom operators, banks, merchants and consumers. In Mobile payment system the goods and services are transacted without using the physical cash. After demonetization process this system (e- wallet) especially mobile wallet become popular for transaction purpose. Mobile wallet can be used for shopping, recharge, transfer, bill payment purpose. The growth of mobile wallet can be positively contributing to the economic growth and cashless transaction. It helps the country to becoming a cashless economy.

KEY WORDS: *Technology, Mobile Wallet, money*

INTRODUCTION

In today's world Smart phone has become an important part of life. Number of smart phone users has increased now adays, because it has become more affordable. As of 30 September 2019, there are 1173.75 million wireless subscribers in India according to Telecom Regulatory Authority of India (TRAI). Besides providing basic function of communication there are many others services a smart phone provides. These services include entertainment (music, movies, games etc.), socialization (social networking application like Facebook, WhatsApp, Twitter, messenger), internet services and even payment services. For instant payment services on smart phone and application is required to be installed in it. This application is called the digital wallet or electronic wallet or popularly known as mobile wallet. It's functions of keeping and paying the currency as same as leather wallet with the only difference of performing the same digitally and a greater number of parties directly or indirectly involved in performing the same on digital platform. For using mobile wallet service customers have to register themselves with that mobile wallet and preload a certain amount of money in it which can be used for shopping, recharge, utility bill payment etc. It depends only on the smart phone and mobile wallet installed in it. The entire process of sending and receiving money requires a complex network

of intermediaries including banks, payment gateways and mobile network operators. Demonitization in India has great impact on cashless transaction. It encourages usages of credit card, debit card, online payment and mobile wallet for transactions among public. Credit and debit card are also available in the mobile wallet to make the transaction secure and simple. The demonitization has influenced the digital payment platforms in India. The usages of mobile wallets are very popular among the youth ranging the age group of 18-25 years. The mobile wallet provides services through companies and individuals can pay and receive payment via mobile applications. Payment gateways and banks approaching towards cashless transaction. While, mobile apps play a big part of the government initiative of “cashless India”. This will have an enormous impact on making India a digitalized cashless economy.

REVIEW OF LITERATURE

1. **Sarika P and Vasantha S (2019)** in their paper “Impact of Mobile Wallets on Cashless Transaction” studied the effect of mobile wallet on cashless transaction and usage of various kinds of mobile wallets at present. They conclude that Demonitization has triggered more usage of e-payment among public which increases the usage of cashless transaction. The usage of plastic money i.e. credit/debit cards, mobile wallets, net banking and more, indicates a movement towards a cashless economy.
2. **Roy P (2018)** in this paper “The Digitization Wave in India: A SWOC Analysis with Special Reference to the Demonitization and a Leap towards Cashless Economy” studied how digital illiteracy, digital divide, lack of infrastructure, cyber security and so forth affects the transition of a cashless society in a developing country like India. He concludes that how digital illiteracy, digital divide, lack of infrastructure, cyber security and so forth affects the transition of a cashless society in a developing country like India.
3. **Arora B and Kaushik N (2018)** in their paper “Cashless Economy: A Key to Digital Proliferation in Indian Banks” studied the impact of cashless society on banks performance by focusing on issues and challenges of cashless economy through SWOT analysis as various issues exist in Indian economy like Digital Divide, technological disruptions etc. which affect bank performance. They conclude that India’s unbanked population was 233 million approximately. So, the need of the hour is to end the digital divide and make rural people aware of the benefits of going cashless and make them tech-friendly.
4. **Kaur R (2017)** in this paper “India’s Progressive Transition Towards Cashless Economy” studied the basic concepts, modes of digital economy and the initiatives taken by government to create cashless environment and examine the perspective of people regarding cashless economy. He concludes that Cashless environment should be accepted enthusiastically after considering risks associated with digital payments. It will take more than one generation to completely adopt cashless economy.
5. **Rana S S (2017)** in this paper “A Study of Preference Towards the Mobile Wallets Among the University Students in Lucknow City” studied the preference towards the usage of mobile wallets among the university students in Lucknow city, the impact of various demographic variables on the opinion regarding the future of mobile wallets. He examines the factors influencing adoption of mobile wallets and refraining the usage of mobile wallets. He concludes that Majority of the respondents prefer to use mobile wallet for doing recharge followed by paying bills and transferring money. Queue avoidance, time and place independent purchase and instant payments are the three important factors for the students to opt for mobile wallets.

6. **Manikandan S and Jayakodi J M (2017)** in their paper “An Empirical Study on Consumers Adoption of Mobile Wallet with Special Reference to Chennai City” studied that the consumers perception towards mobile wallet, factors that influence consumers in adoption of mobile wallet and problems faced by consumers in use of mobile wallet. They conclude that the security issues are tighten and risk factors are reduced will automatically tremendous growth in adoption of mobile wallet in the forthcoming years.

OBJECTIVES

- To study the people perception towards mobile wallet.
- To study the factors that influence consumers in adoption of mobile wallet.

RESEARCH METHODOLOGY

Data collection:

This study will be descriptive-analytical and is based primary as well as on secondary data. A structure questionnaire will be designed to collect primary data from individuals. The secondary data will be collected from official websites, Newspapers, articles etc.

Research design:

descriptive-analytical

Sample size:

93 respondents will be taken sample for study.

Sample location:

Odisha

A STUDY ON MOBILE WALLET

Gone those days when people use to carry cash with them to exchange good and services. At present, instead of physical wallet people used to pay through mobile wallets. Mobile Wallets are known as virtual wallets which act as a container that stores your credit card or debit card information on your mobile device. Instead of using cash or debit card for any payment, you can just pay through your Smartphone, smartwatch or tablet. Using m-wallets, you can do the online and offline transaction to merchant registered with the mobile wallet service provider. Millions of users in India are doing their daily transaction from small to big amount through virtual wallets – as they are getting discounts on purchase provided by the mobile wallet service provider.

We can store cash in our mobile to make online payments. Various service providers offer these wallets via mobile apps, which is to be downloaded on the phone. we can transfer the money into these wallets online using credit/debit card or Net banking. This means that every time you pay a bill or make a purchase online via the wallet, we won't have to furnish our card details. we can simply use these to pay bills and make online purchases.

The Digital Wallets are one of the best innovations in the field of technology. Millions of people making payment from these virtual wallets. These e-wallets are easy to use, and who are not familiar with this wallet can follow these quick steps:

- Download the respective mobile wallet app from the app store on the mobile device.
- Register for free using an email id & password.

- After logging to your account, choose the payment method from various options like – credit/debit card, net banking transfer, ATM transfer, etc.
- Now add money simply to your e-wallet for making online mobile recharge, DTH recharge, send/receive money, etc.

There are three kinds of mobile wallets –

(i) closed wallets: Closed mobile wallet doesn't provide services like redemption or cash withdrawal – only can be used for goods and services for that specific company. Online merchants like MakeMyTrip, Jabong, etc. are some examples of closed wallets. In case of any cancellation or to return product your registered MakeMyTrip or Jabong accounts credited with the refund amount. This can only use with that merchant itself.

(ii) semi-closed: Semi-closed wallets are also similar like closed wallets. It also doesn't permit to redeem or withdraw cash. But allows users to purchase goods and services with listed merchants who have a contract with Wallet Company to receive payment. Amazon pay, phone pay, google pay, PayUMoney, MobiKwik, Oxigen, etc. are examples of semi-closed e-wallets. Moreover, they are the most downloaded and trending mobile wallets in India.

(iii) open wallets: The wallets that allow users to redeem plus withdraw cash name as Open Wallets. Paytm wallets is the perfect example.

Now there are various mobile wallets are available which are very helpful to the people in digital transactions. among them some of the most trending Mobile Wallets Companies of India are discussed below:

PAYTM: Paytm is one of the most popular mobile wallet in India which offers their users an online payment platform for secure transaction. In 2010, Mr. Vijay Shekhar Sharma founded Paytm in India – start with a dream and now known as the most prominent mobile wallet company in India.

Paytm is user-friendly application and easy to use. Just download the form from your respective app store and signup and load money in your Paytm wallet. Use that digital money and make payment for any online or offline shopping. You can do e-commerce transactions using Paytm for mobile recharge, bill payments, transferring money and much more.

Apart from a mobile wallet, Paytm is an online shopping store. More than 3 million of products to shop and pay online from Paytm Mall. Paytm added a chat box feature, that enables user to bargain with the real person regarding product virtually. Transfer money directly to your bank account or others bank account easily and receive instant notification of successful transaction. Benefits for KYC customers – verify with your Aadhar card and become the KYC customer of Paytm. Get exclusive offers and cashbacks, no spending limit & access to Paytm Payment Bank. Cabs like Uber support Paytm payment method – now ride with uber & pay using Paytm Wallet and get some cashback on every ride. Paytm tie up with various branded merchants like – Lenovo, Sony, Oppo, HP, LG, Hair, Nike, Onida, Panasonic & more.

PHONE PAY: It is an Indian e-commerce payment system and digital wallet company headquartered in Bangalore, India. It was founded in December 2015 by Sameer Nigam and Rahul Chari. PhonePe app went live in August 2016 and was the first payment app built on Unified Payments Interface (UPI).

The PhonePe app is available in over 11 Indian languages. Using PhonePe, users can send and receive money, DTH, recharge mobile, data cards, make utility payments, buy gold and shop online and offline. In addition, PhonePe also allows users to book Ola rides, pay for Redbus tickets, order food on swiggy, eaf, fit and avail Goibibo Flight and Hotel services through microapps on its platform. PhonePe is accepted as a payment option across 5 million offline and online merchant outlets covering food, travel, groceries, movie tickets etc. The app crossed 100 million user mark in June 2018 and also crossed 5 billion transactions in December 2019.

GOOGLE PAY:It is a digital wallet platform and online payment system developed by Google to power in-app and tap-to-pay purchases on mobile devices, enabling users to make payments with Android phones, tablets or watches. In January 8, 2018, the old Android Pay and Google Wallet have unified into a single pay system called Google Pay. Android Pay was rebranded and renamed as Google Pay. It also took over the branding of Google Chrome's autofill feature. Google Pay adopts the features of both Android Pay and Google Wallet through its in-store, peer-to-peer, and online payments services. Using Google Pe, users can send and receive money, DTH, recharge mobile, data cards, make utility payments and shop online and offline.

FREECHARGE: It endowed in 2010 by Kunal Shah and Sandeep Tandon, headquartered in Mumbai. The current CEO of the MobiKwik is Jason Kothari. This e-wallet becomes the most popular app among youth, which allows you to make prepaid, post-paid, DTH, bill payment and more in few clicks. Freecharge added one unique feature in the app from where you can donate money to the registered NGO's. Rest features are similar to other m-wallets apps like add money using net banking, credit card, debit card, etc. and make payment instantly sitting at home. Freecharge provides discounts to their users on transactions to make their customer interest. Simple user interface lets you make your mobile payment immediately.

MOBIKWIK: It is Powered by MobiKwik Systems Private Limited, another leading mobile wallet in India – founded in 2009. The founder & CEO of MobiKwik Bipin Preet Singh who contributes to bringing Digital transaction in India. This m-wallet has the user base of 40 million along 2 Lakhs retailers. This mobile wallet allows users to load money using credit, debit card, net banking & door to door cash collection services.

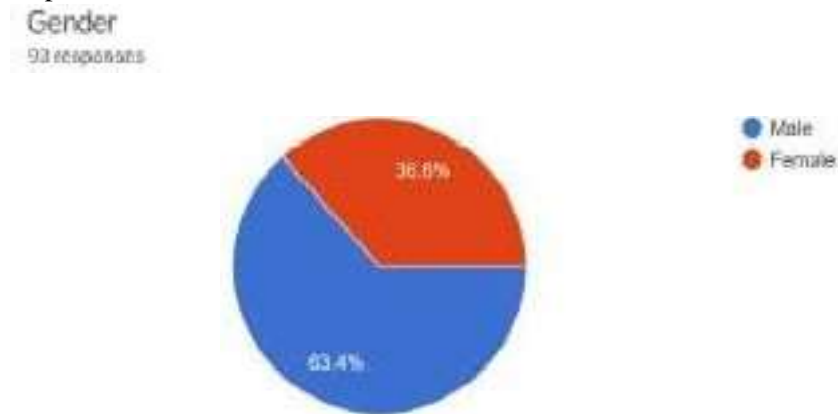
Make payment for the electricity bill, recharge your mobile, shop online and get the discount on various deals. Easy to use and 24*7 customer support for its users, the company has it headquarter in Gurgaon. No interruption of any third party while doing the transaction- the payment mode is 100% secure and safe.

JIO MONEY:Jio introduces the JioMoney – the digital wallet that earned popularity among mobile wallet users. This wallet offers fast, secure, and easy mobile transactions service. Using JioMoney one can make online recharge, transfer/receive money, online book tickets, or pay for their cabs. It offers massive discounts and deals on making the first transaction- and provides time to time promotion coupons.

AMAZON PAY:Amazon Pay is a service that lets you use the payment methods already associated with your Amazon account to make payments for goods, services, and donations on third-party websites, in apps, and using Alexa. To make a payment, you can use any of the payment methods on file in your Amazon account.

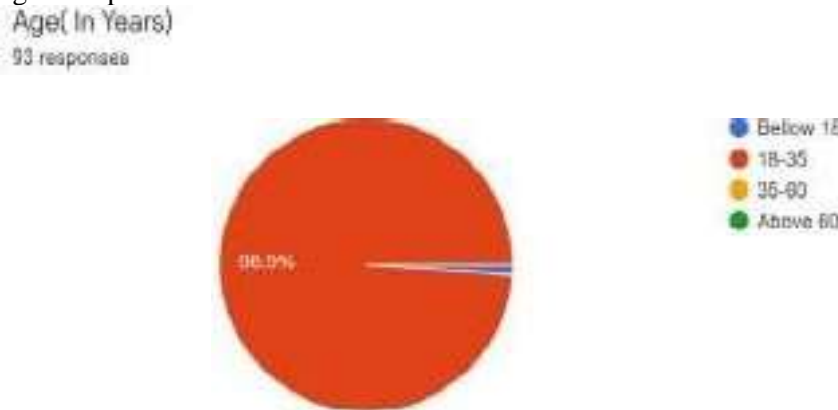
ANALYSIS AND INTERPRETATION

Figure no.1: Comparison of Male and Female user



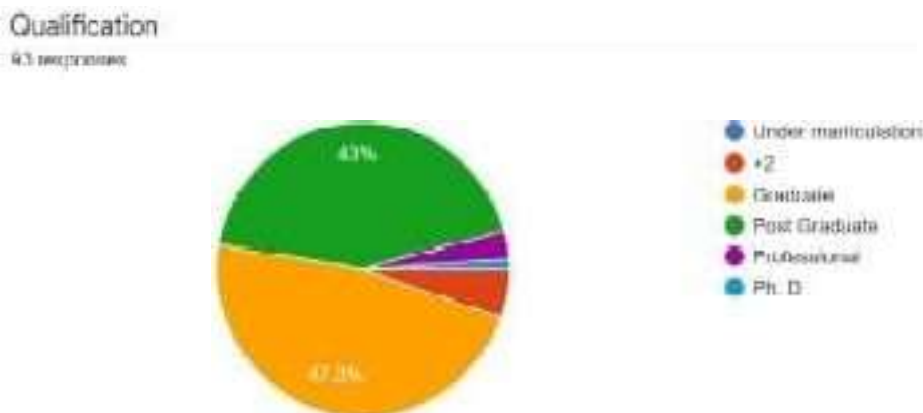
In the above pie chart shows that there is more male user are used mobile wallet in doing transaction.

Figure No 2: Age Group



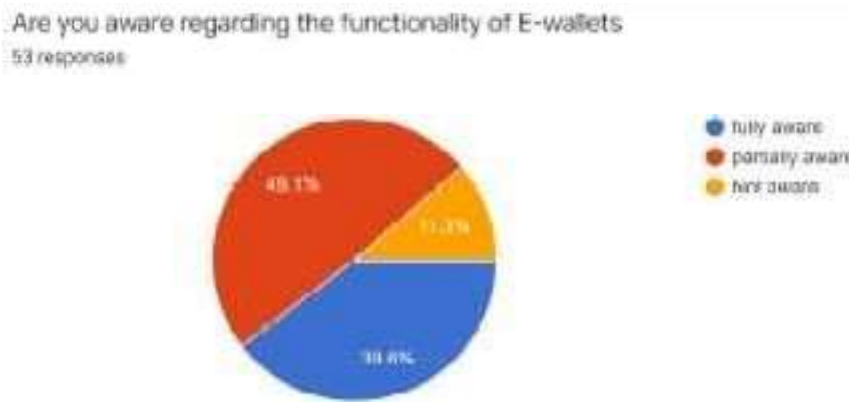
In this above figure it is shown that there are most numbers of users in the age group between 18 to 35 years.

Figure No 3: Qualifications of different users



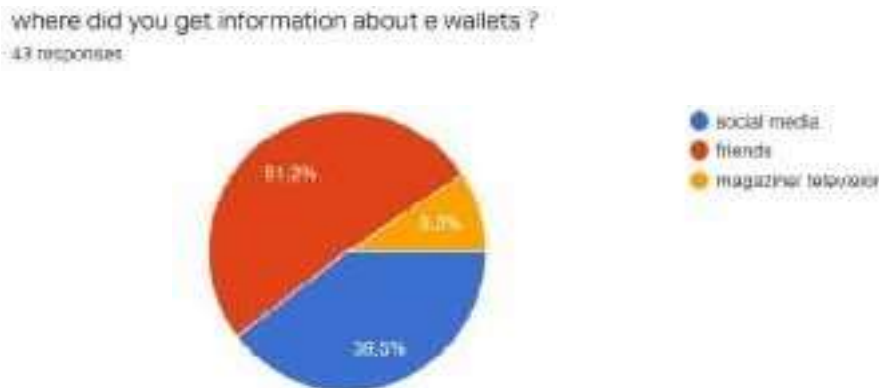
In the above pie chart, it is shown that most number users are graduate and post graduate.

Figure No.4



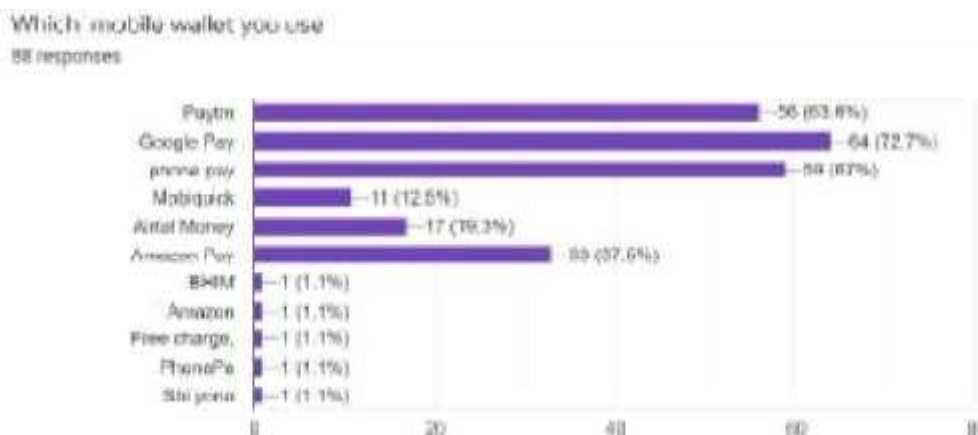
In the above pie chart shown that there are most numbers of users partially aware followed by fully aware people about mobile wallet.

Figure No.5



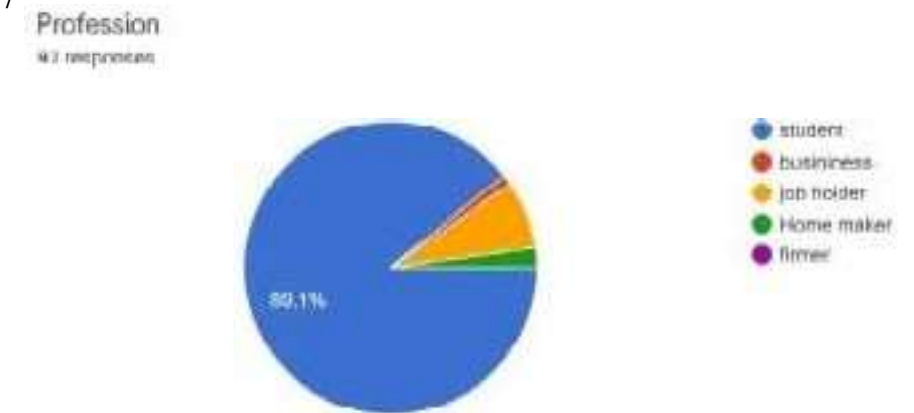
In the above figure there is shown that they get information about money wallet from social media.

Figure No. 6



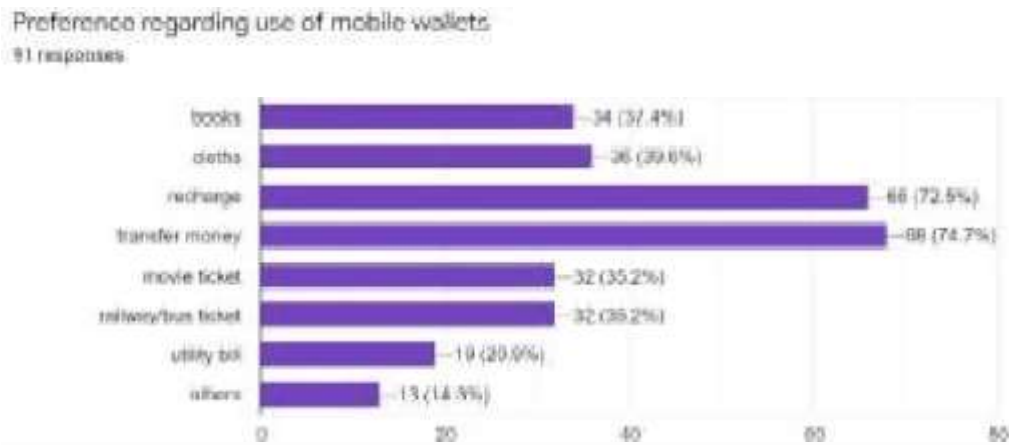
In the above diagram shown that most of the user using Paytm, google pay, phone pay for online cashless transaction.

Figure No.7



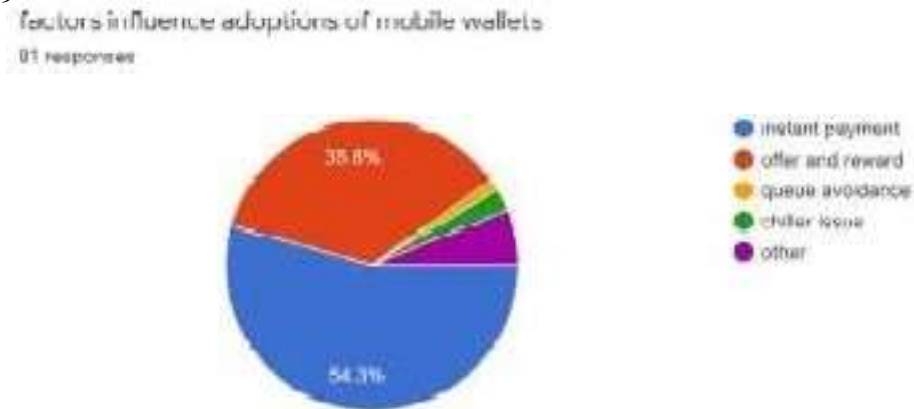
The above pie chart it is shows that there the greatest number of users are students.

Figure No.8



In the above diagram it is shows that the users use mobile wallets to paid different kind of service but they prefer to use this for transfer money and recharge.

Figure No.9

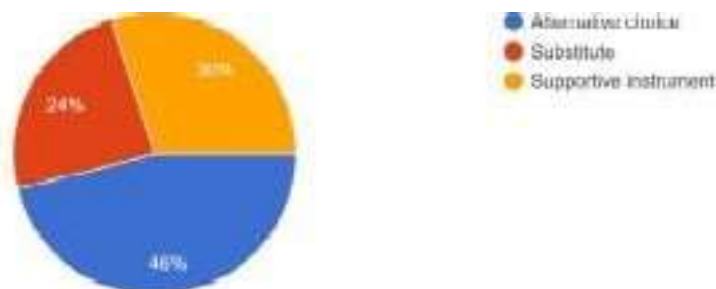


In the above pie chart, it is shown that the people are influence for adoption of mobile wallet for instant payment and offer and reward.

Figure No.4

How do you consider E-wallet against other sort of payment methods?

50 responses



In the above pie chart, it is shown that the peoples are choosing mobile wallet for a alternative choice.

CONCLUSION

The good news is that most of the people have mobile phones capable of supporting a mobile wallet. However, the value proposition must be clearly stated to people to change their behavior from using payments card to using their mobile phones. Mobile wallet made digital payment easy and secure. Electronic wallet or mobile wallet have a bright future. Many of the people, including us barely use cash anymore. When we do have cash on hand, we often spend it right away or put it in the bank so we don't have to carry it around. It can be a burden and always there is a risk of losing it. Having card or using an application is much easier and safer. Now a days mobile payment is improving and developing rapidly. The usage, comfortability is being wider and wider day by day. In this way mobile wallet help the country to become a cashless economy.

REFERENCE :

1. **P. Sarika and S. Vasantha (2019)**, "Impact of Mobile Wallets on Cashless Transaction". International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7, Issue-6S5, April 2019.
2. **Prasenjit Roy (2018)**, "The Digitization Wave in India: A SWOC Analysis with Special Reference to The Demonetization and A Leap Towards Cashless Economy". IRA-International Journal of Management & Social Sciences ISSN 2455-2267; Vol.10, Issue 01 (January 2018) Pg. no. 54-62.
3. **Prof. Bindu Arora and Neha Kaushik (2018)**, "Cashless Economy: A Key to Digital Proliferation in Indian Banks". International Journal of Creative Research Thoughts (IJCRT).ISSN: 2320-2882, April 2018, pp-142-149.
4. **Rajwinder Kaur (2017)**, "India's Progressive Transition Towards Cashless Economy". India's Progressive Transition Towards Cashless Economy. ISSN: 2319 – 7285, Vol.6(6), November-December 2017, pp-30-35.
5. **Shailendra Singh Rana (2017)**, "A Study of Preference Towards the Mobile Wallets Among the University Students in Lucknow City". Scholedge International Journal of Management & Development. ISSN 2394-3378, Vol.04, Issue 06 (2017) Pg. 46-57.
6. **DR.S. Manikandan and J. MaryJayakodi (2017)**, "An Empirical Study on Consumers Adoption of Mobile Wallet with Special Reference to Chennai City". International journal of research-granthaalayah. ISSN- 2350-0530(O), ISSN-2394-3629(P), Vol.5 (Iss.5): May, 2017, pp-107-117.

