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A COMPARATIVE STUDY OF ONLINE SHARE TRADING AND OFFLINE SHARE TRADING

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ABSTRACT

Technology has made a massive impact on money market in India .Internet plays a vital role in building up the economic activity. In past two decades internet has made trading easier and quicker by breaking the geographical boundaries. Before the internet era, the investors were only dependent on their agents i.e. brokers to buy and sell shares. The buying and selling of shares through internet is called E-trading or online trading. An investor who is interested in offline trading can place his order by a call or by visiting broker's office. Recent revolutionary developments are turning offline trading to an online equivalent. Walking towards the technology based economy can help to reduce poor money market practices .The main objective of this research paper is to compare the study between online share trading with offline practices and acquire knowledge about how E-trading has made an impact on money market sector in India and people's perspective about the same.

Keywords: Online share trading, offline share trading, internet, money market, brokers, clients

INTRODUCTION

This research preliminary focuses on how internet has made an impact on money market sector in India. Before the advent of the internet, clients had to find and approach a quality broker to get involved in stock trade. These brokers i.e. agents bought and sold the shares on behalf of the clients. Clients had to search for such brokers to help them in selecting the best deals prevailing in markets. Those who failed to find or work with such professionals had no option and hence they adopted online share trading .when internet stepped as a daily routine of our lives, it became flexible for the clients to trade and invested by them. Traders who have internet connectivity are recommended online trading to save brokerage. This can help them to make quick decision and implement it in day trading if traded online. Today, both online and offline share trading is preferable. There are various factors that determined vital role in emergence of online trading in money market. Offline and online trading has its own pros and cons respectively. This research will provide a clear difference between online and offline trading which needs to study the same to get maximum benefits in money market sector.

AIMS AND OBJECTIVES

- To study the impact of e-trading on money market sector .
- To compare the study of online share trading and offline share trading.
- To analyze the advantages and disadvantages of online and offline share trading.
- To study the behaviour of people regarding investment in e-trading money market.
- To analyze the preference and perspective of people towards online and offline share trading.
- To conclude and provide suggestions based on the study.

RESEARCH METHODOLOGY

In order to acquire wide knowledge and have sources for the research topic involves the use of data that was collected by somebody else in the past this helps completion of study in short span. As it is summarized and collated it increases the efficiencies of the research. Secondary research includes research resources published in reports and similar information available through internet, sites and documents. This methodology is cost effective and helps to gain wider knowledge and understanding of the subject matter.

LITERATURE REVIEW

KAHEEL AHMED (2012) observed the impact of online share trading in money market sector. The study provided online share trading has given customers (clients) various advantages like real time access to information i.e. live rates, stock quotes, Elaborated money market research and interactive trading.

BALAJI (2014) examined traders' perspective towards online share trading. His study found that Indian investors are more conservative, middle age, literate and has sufficient income base to invest in such markets.

NIDHESH KB reviewed upon role of BSE and NSE in online trading and regulation by such stock exchanges although the regulate the trading account of the clients and various brokers.

ARWIND SINGH ET. AL studied that online share trading is cost effective and provides time value. However few modifications are required to make it more fruitful.

RAJAGOPALNA, V, faced a problem in online share trading. His ID number was exchanged with another investor, and his account was debited to pay derivatives, while he didn't place any order. Worse case was his scripts were sold to cover losses which were luckily incurred; the broker admitted his mistake and compensated him. But left Rajagopalan questioning to reinvest in such online trading.

FINDINGS

Difference between online and offline share trading

Trading

With the help of the internet the user can place order through online share trading account. On the contrary, the user who avail the services of an offline broker to place an order is offline share trading, which generates broker like an agency. This dependence does not exist when user uses online medium.

Security

Online share trading helps users to have complete control over the trading the risk of any fraud is eliminated. In certain situations, the broker can decide and implement his own traits on behalf of the clients without asking them, which can be a disadvantage to the user who chooses offline trading.

Flexibility

People who have internet connectivity can go for online share trading and can monitor their transaction and orders from their convenience. Where as in offline share trading, to place an order user needs to approach a qualitative broker through a phone call or by visiting his office.

Knowledge and information

When client chooses online share as a medium for trading they might get carried away. Without having any proper knowledge and understanding of the markets, they may buy and sell shares which may result into future losses. But whereas in offline share trading brokers have many years of experience which can be beneficial for the user as they get correct guidelines through them. However with technological advancement most of the brokers provide research report and real time information i.e live rates. This helps user to analyze and assist them to acquire broader knowledge to make accurate decision for investing.

Links with bank

Clients had to write a cheques or a demand draft in favour of brokers which used to take lot of time to clear in offline share trading. While trading provides option to directly link the Demat and the bank account. Clients can easily and quickly make transaction by taking up any trade or even less amount. In case of equity shares which are convertible share into cash. These shares gain benefit if trading is done through online medium.

Platform

Through internet connectivity, except from buying and selling clients can transfer, withdraw money, view portfolio and can interact with expertise through chat windows. Online share trading provides indicator such as MACD, RSI, moving averages, derivatives, etc. This helps traders to make best deals out if it. However such beneficial facilities are not available through offline share trading.

Real time information

In offline share trading, it is difficult to have every single minute records of the price of the shares or how is users' portfolio performing in a day. The information is given to the client through a constructive note or phone calls, during the market hours. The lack of time duration and improper information can cause a huge loss. A user needs a real time information which is available through online shares. It is comparatively cost effective to the brokers for every share order taken.

Lack of internet connectivity

In today's technological economy, most of the clients have various multimedia devices at their convenience. In few cases clients may invest with low scale trading just to get a rough idea of what online trading is and later becomes inactive. In most of the urban areas there are network issues and internet connectivity problems. This leads user to opt for offline broker for trading.

Managing of portfolio

The user cannot participate in day to day trading but would like to build their portfolio and get most of the returns. Hence broker assures client to save their investment as well get favorable returns. Hence clients'

requirement and set up are taken into consideration largely for opting online and offline share trading. While one who has less time and looks for saving fee, greater control goes for offline brokers.

• **Online share trading**

Advantages	Disadvantages
1. Reduction in transaction cost.	1. No personal relation with brokers hence autonomy can be unsettling.
2. Speed of using online trading medium provides benefit to the user to transact quickly.	2. Online share trading can be like gambling for some people and bets on speculation which leads into addictive behaviour.
3. It has ability to avoid brokerage bias.	3. Internet connectivity is a must if trading is to be done by online means.
4. Helps user to monitor and analyze the real time information.	4. Traders can face error due to computer missteps like investing twice as much as they intended.

• **Offline share trading**

Advantages	Disadvantages
1. Investor appreciates that they are not alone when making any decision while investing.	1. Does not provide facility of real time information.
2. Brokers are professionals and experienced to handle investment.	2. Broker charges high amount of fees.
3. Investor does not face any problem while making any important decision if they do not have experience.	3. Sometimes broker can take decision without asking the permission of client which may lead to future losses.
4. Less likely to make mistake while trading since a wise broker assist user to make accurate deals.	

CONCLUSION

After going through this research paper which almost has few batters of offline trading as compared to online trading. With the emergence of the internet, the economy has changed and all the transactions are made online. With just one click of the mouse button, one can set up a single platform .however, with traditional means India is a country which still has many brokerage offices running .Since internet was not often used and there is a less concern while associating with a wise broker who can give the best and accurate guideline while investing. It depends upon the individual’s perspective for them to either opt for online or offline trading. Whether one is trading through online or not, it doesn’t matter .The important factor that must include before investing is a proper research. The client must always be updated with the financial status – How much he can invest and how much risk he can take. Finding a wise broker will be profitable but quite challenging. Today both online and offline share is preferable but offline has taken backstage for many good reasons. There are various factors that played a vital role in emergence of online share trading

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DIGITAL PAYMENTS IN INDIA: AN OVERVIEW

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"The evolving social and digital media platforms and highly innovative and relevant payment capabilities are causing seismic changes in consumer behavior and creating equally disruptive opportunities for business."

ABSTRACT

Yogesh is having dinner with his friends at a restaurant in Bangalore. After the dinner, when the bill arrives, he makes the payment using his Quick Response Code (QR) enabled United Payments Interface (UPI) app on his smartphone. After clicking the photo of the bill, he sends it to his friends on WhatsApp. All of them, transfer their contribution directly to Yogesh's bank account from their respective Paytm accounts. To reach their homes they book Ola Cabs and make payment for the same using Ola Money. On the way to home, Yogesh pays his electricity bill using Freecharge app on his smart phone. Next day, he orders groceries from Amazon using his Amazon Pay balance. Yogesh and his friends were able to carry out all the above financial transactions with great ease and convenience without any exchange of cash. This is the power of digital payments. This is new India fuelled by the power of digital payments for our day-to-day financial transactions.

In the recent years there has been a great momentum in the digitization of payments in India due to continuous and sustained efforts by Government of India to move towards Digital India. This research article is an attempt to understand the concept and significance of Digital Payments in India. This paper provides a comprehensive view of the Digital Payments in India.

Keywords: Digital Payments, United Payments Interface (UPI), Mobile Wallets, Internet Banking, Mobile Banking, NEFT, RTGS

INTRODUCTION

With technological advancements, a new and innovative concept of making payments has emerged across the globe. This concept is known as Digital Payments. In India there has been great focus by the government on digital India and moving towards cashless economy. Recent bold move of demonetization by the government in November 2016 provided a strong push for consumers to move to digital payment methods. Since then, the volume and number of digital payment transactions have been increasing by leaps and bounds in India. As per government data, till 31st December 2018, more than two thousand crore transactions have been done digitally.

According to a report by Google and Boston Consulting Group (BCG), the Indian digital payments industry is estimated to touch \$500 billion by 2020, contributing 15 per cent to the country's GDP. This exponential growth of the digital payment sector is driven by multiple factors such as convenience to pay, growing internet penetration, increased usage of smart phones, rise of non-banking payment institutions (digital wallets, payments bank etc.), progressive regulatory policies and increasing consumer readiness to the digital payment platform.

SCOPE AND OBJECTIVES OF THE STUDY

- To understand the concept and significance of Digital Payments in India
- To study the emergence of Digital Payments in India.

RESEARCH METHODOLOGY

The research is based on Secondary Data. The data has been collected from Textbooks, library journals, articles from newspapers and relevant web sites from internet.

MODES OF DIGITAL PAYMENT

The Government of India, with a vision to transform India into a digitally empowered society has launched Digital India programme. "Faceless, Paperless, Cashless" is the main motto of Digital India programme. To promote cashless transactions and converting India into less-cash society, various modes of digital payments have emerged. The major digital payment modes are as follows:

1. Banking Cards (Debit/Credit Cards)

Almost, all banks provide Debit and Credit Cards to their customers. Visa, MasterCard and RuPay are some of the example of card payment systems. Banking Cards can be used offline (to purchase items in store) or

online (on ecommerce platforms and bill payments). Banking cards are convenient to use and enable secure transactions with the help of two-factor authentication (PIN and OTP).

According to Reserve Bank of India (RBI), India had 36.2 million credit cards and 846.7 million debit cards as on January 2018. Value of Debit card based transaction grew by 20.6% YoY, reaching Rs. 3674.5 billion in December 2018. Also, RBI has issued directive to replace all magnetic stripe cards with more secure EMV Chip cards by December 2018.

2. Internet Banking

Internet banking is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. Internet banking allows users to make payment and transfer funds using following methods:

a. National Electronic Fund Transfer (NEFT)

NEFT is a prominent electronic fund transfer system that allows individuals, companies and firms to transfer money from any account in one bank to any other bank account across the country, without actually going in person. Fund transfer under NEFT is settled in hourly batches. There are twelve settlements from 8 am to 7 pm on week days (Monday through Friday) and six settlements from 8 am to 1 pm on Saturdays. There is no minimum amount condition to transfer funds using NEFT.

b. Real Time Gross Settlement (RTGS)

RTGS is a electronic fund transfer system that allows transfer of funds in real time. Transactions are processed as and when they are received. There is no waiting time. RTGS is used for high value transactions, the minimum amount being Rs. 2 Lakh. RTGS transactions can be made from 9.00 am to 4.30 pm on weekdays and from 9:00 am to 2:00 pm on Saturdays for settlement at the RBI-end

c. Immediate Payment Service (IMPS)

IMPS offers an instant, 24X7, interbank electronic fund transfer service. Unlike NEFT and RTGS, the service is available 24/7 throughout the year including bank holidays.

d. Electronic Clearing System (ECS)

ECS is an electronic mode of payment / receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment of amounts towards distribution of dividend, interest, salary, pension, etc., or for bulk collection of amounts towards telephone / electricity / water dues, cess / tax collections, loan instalment repayments, periodic investments in mutual funds, insurance premium etc.

3. Mobile Banking

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s). According to the Reserve Bank of India's (RBI) annual report for 2017-18, mobile banking services witnessed a growth of 92 per cent and 13 per cent in volume and value terms, respectively.

4. Mobile Wallet

A mobile wallet allows you to carry cash in digital format. You can link your debit/credit card to mobile wallet application or you can transfer money online to mobile wallet. Instead of using your physical plastic card to make purchases, you can pay with your smartphone. Most banks have their e-wallets. Some private companies have also started their mobile wallets. Some of the popular mobile wallets are Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets etc. As per medianama.com, around 325 million mobile wallet transactions worth Rs. 15202 crore were recorded in July 2018 as against 235 million transactions amounting to 6934 crore in July 2017. There has been a rise of 38% in mobile wallet transaction volume and 119% rise in transaction amount between July 2017 and July 2018.

5. Unified Payments Interface (UPI)

Unified Payments Interface (UPI) is a payment system that allows users to link more than one bank account in a single smartphone app and make fund transfers without having to provide account number or IFSC code. This is a real-time payment system where funds are credited instantly on a real-time basis. Users can make bill payments and send/receive funds to/from bank accounts mapped using Virtual Payment Address (VPA).

UPI has been developed by the National Payments Corporation of India (NPCI) and is regulated by the Reserve Bank of India (RBI). UPI is slowly becoming the most preferred form of digital payment. The UPI interface is compatible with most banks and many digital wallets, and payment applications are embracing UPI. Some of the UPI enabled apps are PhonePe, MobiKwik, Freecharge, Google Tez, Airtel Payments Bank, Paytm Payments Bank etc.

As per NPCI data, the volume of UPI transactions grew to 674 million in February 2019 as against 171 million in February 2018, a 294% rise in transaction volume. The amount of UPI transactions rose to Rs. 1,06,737 crore in February 2019 as against Rs. 19,126 crore in February 2018, a 458 % rise transaction amount.

6. Aadhaar Enabled Payment System (AEPS)

AEPS is a modern transaction system which brings banks to the remote areas where people don't have a smartphone and not comfortable with the digital transactions. This system uses Aadhaar data for the transaction and authentication. AEPS enables users to do banking without any phone or internet.

7. Unstructured Supplementary Service Data (USSD)

USSD service allows mobile banking transactions using basic feature mobile phone without any internet facility. Banking customers can avail USSD service by dialling *99#, a "Common number across all Telecom Service Providers (TSPs)" on their mobile phone and transact through an interactive menu displayed on the mobile screen.

CONCLUSION

Digital Payments is a great step towards making India a Digital Economy. Over the years, we have witnessed a tremendous growth in digital payments space supported by continuous innovations and regulatory support from Government. In the words of Aruna Sundararajan, Secretary, Ministry of Electronics & Information Technology (MeitY) - "The government has been placing a lot of emphasis on digital payments. But digital payments will not be possible unless people are assured it is secured. So the government is working on all levels to enhance the security architecture".

To create community awareness on safe and secure digital practices, Google and the Ministry of Electronics and Information Technology (MeitY) announced a 'Digital Payment Security Alliance' initiative in April 2017. Under this initiative, banks, FinTech companies and government will work together to create awareness as users adopt digital and mobile payments. The Indian Computer Emergency Response Team (CERT-In), an office within the Ministry of Electronics and Information Technology has also issued advisory on Secure Mobile Banking and Safeguarding smartphones against cyber-attacks.

With continuous and sustained growth in Digital Payments space, India has become the most evolved country when it comes to the digital payment ecosystem. The focus should be to keep the momentum going with more support from the government and innovations, safety and convenience from the players.

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EXAMINATION OF PRINT MEDIA ADVERTISING ON CONSUMER BEHAVIOR TOWARDS COSMETICS IN J & K. A SURVEY ON DERMATOLOGISTS

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ABSTRACT

It is a common saying in India that people in west wake up reading a newspaper first then take tea. Albeit the development in cyber world is worth praising, the news papers have their own go in any market of the world. India is a developing country. Looking at the development of economic sensitivity, the newspaper industries are playing a vital role in promoting the business. There are various challenges for newspaper industries in the market but the fact is that a news paper has its own role and the effectiveness of that role is worthy to mention. The present paper shall try to highlight the effectiveness of print media advertising on consumer behaviour in digital India. For marketers, the print media is an essential tool to initiate consumer awareness. Before the invention and widespread use of technologies like; T.V, social media and internet, print media was primary source of promoting products or business. When we say print media, we mean anything that is offline. Print media provides physical or tangible information about the business.

Keywords: Print Media, Economic Sensitivity, Digital India, Consumer Behavior, Cyber world.

INTRODUCTION

Print media is one of the oldest channels of advertisements about skin and health care products and is still doing fine despite the presence of number of other modern and faster electronic channels of advertisements. The print media is an independent reservoir, showing a preferment by readers that much in a space where people now and then remain glued to internet for any source of information. Print media provides tangible information about health and skin care products that a dermatologist can walk away with and it helps to add credibility to them and their prescription. Print media advertisements provides detailed information that can be processed at readers own pace and so print media advertisement are often referred to as high engagement media.

Internet is always taken a possible threat to traditional means of cosmetic advertisements, but by showing persistent and simultaneous growth in both readership and distribution of newspapers, magazines and other medicinal and clinical journals all across the world, the discussion stands itself invalidated. Print media industry is believed to be one of the largest industries in the world publishing its stuff in hybrid form, viz. both print and online form. Internet addiction by social media sites has given good competition to print media industry, whereby consumers feel very much entitled and more associated with both in and outside world. Social media networking is growing and have somewhat invaded into the horizon of print media industry to the extent that most of the cosmetic advertisements gets delivered to netizens through social media.

The present study is targeted to analyze the scenario of print media advertising in the state of Jammu & Kashmir India, when online sources of information have mostly been established. Reach to internet, like rest of the populace is no more a restriction to the people of Jammu & Kashmir. The present study includes, newspapers/newsmagazines, medicinal journal, clinical papers, social media, internet, and other print medium published from Jammu & Kashmir. The present study is targeted to examine the effectiveness of print media advertising on dermatologist's awareness towards skin, oral, hair care products across the state. Sterling (14) revealed that the fundamental model of print media could be still maintained because of publishing rich scholarly stuff in the medium of research papers, articles and other such business related literature.

Print marketing and its applications are widened in escalating business practices almost in all cosmetics companies in print media to reach consumers. Print media campaigns should not just be maintained as separate entities. It's institution in marketing can be largely regulated with various marketing methods. The print media is an important promotional platform where dermatologists get aware about branded skin care products. It helps them to offer better services to patients in a possible manner.

LITERATURE REVIEW

Since times immemorial print media has invited a lot of research across the globe. Some individual studies have been undertaken with specific aim suiting the research paper. Rik Pieters et.al (1) proposed a statistical sub models to ascertain the attention duration, visual attention to elements of the advertisement and inter-and-intra-element saccades. Harald J, et al (2) maintains how the reactions of retailer, customer and investor get affected by the coverage of media of a price war. Shabbir Khan, et al(3) examined that the persons who are emotionally attached with the brands prefer to purchase them and presented the results in the field of buying behavior of

consumers’ response. Ghachem (4) observes the online trending and branding in print media such as Newspapers. Samar Fatima, Samreen Lodhi(5) analyzed two variables such as awareness of the consumer and perceptions of the consumer will energies the person to buy that vary product, as both variables have positive relationship. Mansor, et al, (6) in their study, they mentioned that now a day’s cosmetics is one of the quintessential factor for attractiveness to consumers. Jonathan Hasford, et al (7) it develops an information model as affect to explore how targeted emotions are used to encourage and impact on brands and unrelated products that are available nearby. Gul & Islam (8) studied the online newspapers of Kashmir presented through social media to provide information or the news reading a communication in both ways and revealed through social media the channels of print media are available to readers all across the world. Krishnan, et al (9) revealed the level of purchasing cosmetics among consumers in Kerala explained that usually male consumers take to buying and take decision of brands on their own. The factor which affects the choice is quality of the product .The other factor found in this respect was the purchasing of cosmetics from single shop driven by convenience. Dalip, Khujuria (10) examines the effectiveness of advertising in India in the current time map. The study provides the intent behind purchase of a any product, major part of the advertisement, and to what scope the advertisements transmit a relevant and believable content. Kim, et al (11) studied customer attitude in the men’s cosmetics market, comprehends the impact of theories of self-concept on the consumer buying of male cosmetics and maintained that there exist a strong relationship between self-concept and purchasing pattern. According to Lefa and Laroche (12), asses that culturally incongruent appeals and neutral arguments in advertisement receives numerous favorable responses. Dheeraj Ram (13) reveals that in context to the pharmaceutical industry in India advertisements make an impact on the prescription behavior of the customer (doctor), along with the direct consumer. The study also helps me in constructing the questionnaire and other material related to my study.

Objectives of the study:- In addition to examine the role of print media ads in creating product awareness and awareness towards cosmetic products. The aim of the research is to examine the consumer preference towards print advertisement media.

Hypothesis: Ho: There is no significant difference of cosmetic print advertisement on dermatologist’s prescription behaviour with respect to qualification.

Methodology: Descriptive research design is being used by the researcher to know the effectiveness of print advertisement with respect to awareness of customers and their attitudes. It is being used because it is typically concerned with determining frequency with which something occurs. A structured undisguised questionnaire is used to collect information from (125) doctors who are either dermatologists or physicians from five districts of Kashmir division in J&K with related to the above objectives. But at the final stage I considered only 100 respondents as the entries in other 25 were not appropriate. The study was done in five districts and in each district 25 respondents were selected with different qualifications.

Methods of data collection: The data collected for the study includes both primary and secondary data in order to attain the objectives of the study. The primary data is collected by using questionnaire. Apart from this information secondary sources are collected from websites, clipping from newspapers, magazines, journals and books. I am highly thankful to my friends who are working as medical representatives as they helped me a lot in collecting the data. It was not possible without their support.

Reliability Statistics: Reliability was checked in SPSS and it indicates the good sign as the reliability almost touches 1.

Cronbach's Alpha	N of Items
.762	12

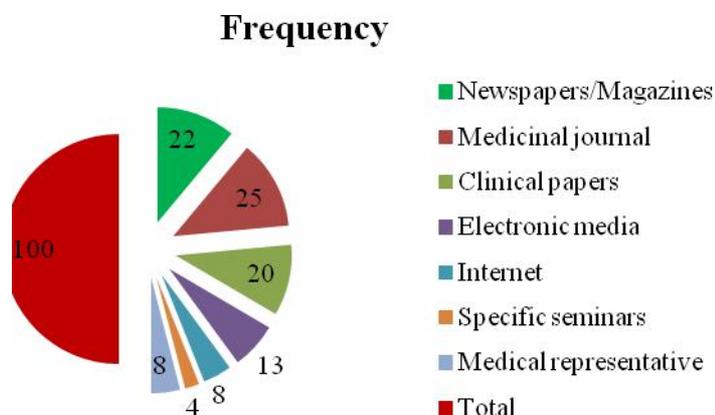
DATA ANALYSIS AND DISCUSSION

In order to configure and demonstrate the above set objective, I have collected and assessed the data through a pre-defined questionnaire made easy and convenient for subjects. Eventually the different medium of information, which I chose are as: Newspapers/Magazines, Medicinal journals, clinical papers, Electronic media, Internet, specific seminars by companies, medical representative.

The first query that finds mention in the questionnaire is about various media options being accessible to the dermatologists inviting attention towards cosmetic products.

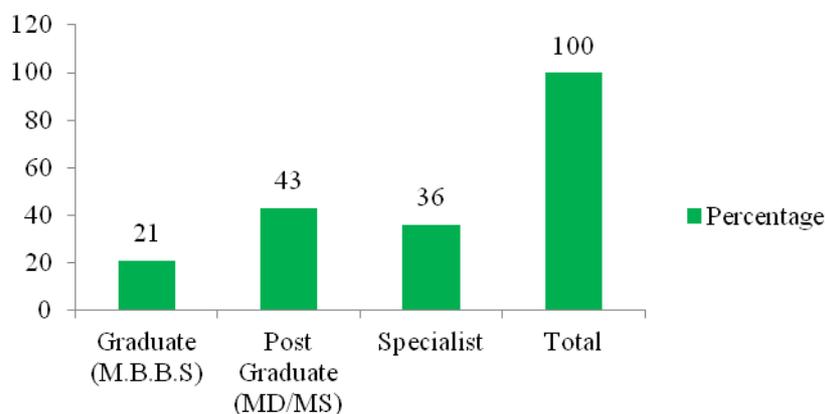
The given pie chart presents the assessed data taken from the dermatologists related the medium providing important and reliable information about skin, hair, oral care products

Medias providing important and reliable information about skin care products.



In this connection the above pie chart clearly indicates that out of 100 dermatologists 22 doctors were found to be used the newspapers and magazines of various specific or beauty products to get the most reliable and useful information about cosmetic products. Medicinal journals, the other important and reliable source of information were used by 25 respondents. Similarly 20 doctors used clinical papers, a creative specialized tool that enables the clinical decisions. Thirteen dermatologists used electronic media such as TV, Radio and Social media in order to attain the supportive information about skin, hair and oral care products. Internet is used by 8 respondents, 4 respondents said they are attending the specific seminars arranged by the companies to become aware about the cosmetic products. Even though 8 specialized doctors gives their opinion as medical representatives are providing the suitable information about the mention.

Percentage of doctors as per their qualification is presented in the column chart below.



The data in the figure presents that 21% are graduates, 43% of subjects are post graduates and 36% of dermatologists were specialists in dermatology. The data was collected from 100 respondents.

Dermatologist’s access to the print media to have information about skin, hair and oral care products has soared in current years. This study was carried out on the data collected through questionnaire from dermatologists in which they were asked to mark their preferable choice. The questionnaire contains 8 attributes related to their prescription or attitude behavior towards print advertisements published in various forms of print such as magazines, medicinal journals, clinical papers and newspapers. This five point likert scale was drafted to denote awareness of the respondents and thus mentioned as extremely aware at point (1) and not at all aware at point (5). Influence of cosmetic print advertisement on dermatologist’s prescription behaviour depends various variables and qualification of dermatologist is one of the factor in which print advertisement will have impact with different dimensions. The statistical ANOVA test is being used on the data through SPSS to ascertain whether the difference exists on prescription behavior by reading cosmetic print advertisement in various categories of doctors among all the dimensions of education. The statistical data is presented in the table.

INFLUENCE OF COSMETIC PRINT ADVERTISEMENT ON DERMATOLOGIST’S PRESCRIPTION BEHAVIOUR BY ANOVA WITH DOCTOR QUALIFICATION.

Print advertisement attributes		Sum of Squares	df	Mean Square	F	Sig.
Ethical issues in promotional activity adopted by companies through print media are important.	Between Groups	3.010	2	1.505	1.878	.158
	Within Groups	77.750	97	.802		
	Total	80.760	99			
Direct to print advertisement is important in promotion of skin care products.	Between Groups	20.600	2	10.300	5.719	.004
	Within Groups	174.710	97	1.801		
	Total	195.310	99			
Cosmetic print advertisements influence me to change my prescription decision from generic medicine to branded medicine.	Between Groups	25.773	2	12.887	6.499	.002
	Within Groups	192.337	97	1.983		
	Total	218.110	99			
Cosmetic print advertisements have an important role in promotion of branded skin care products.	Between Groups	17.490	2	8.745	4.265	.017
	Within Groups	198.870	97	2.050		
	Total	216.360	99			
Specialized magazines of cosmetic products and programmes are important in the promotion of skin care and hair care.	Between Groups	25.637	2	12.818	5.459	.006
	Within Groups	227.753	97	2.348		
	Total	253.390	99			
Print media channel used by companies conveying information to consumers about skin care products.	Between Groups	9.157	2	4.578	2.271	.109
	Within Groups	195.593	97	2.016		
	Total	204.750	99			
Frequency of skin care print ads is important factor to influence my prescription decision than other media.	Between Groups	21.462	2	10.731	6.675	.002
	Within Groups	155.928	97	1.608		
	Total	177.390	99			
Print media is important for consumer awareness about skin care products compared to other medias.	Between Groups	6.586	2	3.293	2.346	.101
	Within Groups	136.164	97	1.404		
	Total	142.750	99			

The results in the table clearly indicate that the p value in five attributes is less than the 0.05. the five attributes are as (1) Direct to print advertisement is important in promotion of skin care products, (2) Cosmetic print advertisements influence me to change my prescription decision from generic medicine to branded medicine,(3) Cosmetic print advertisements have an important role in promotion of branded skin care products,(4) Specialized magazines of cosmetic products and programmes are important in the promotion of skin care and hair care, (5) Frequency of skin care print ads is important factor to influence my prescription decision than other media and their p values are (.004, .002, .017, .006, .002) respectively configure and demonstrate the above set objective and hypothesis. The p value here clearly represents that the set hypothesis is rejected and indicates there is significant difference of cosmetic print advertisement on dermatologist’s prescription behaviour with respect to qualification. However there are some attributes which shows there is no significant difference of cosmetic print advertisement on dermatologist’s prescription behaviour with respect to qualification as their p values exceeds the level of significance.

CONCLUSION

Though in slumber the Print media is not dead, the research findings will facilitate the news paper industries and marketers in understanding the effectiveness of print media. The study will help the newspaper industries in knowing various factors that affect consumer behavior towards print media. Cosmetic print advertisement acts as an influencer in selecting cosmetics for common diseases of skin, hair and oral. The print advertisement influences dermatologists to prescribe the cosmetic products. Frequency of skin care print ads is important factor to influence the prescription than other Medias. As such it creates more attention which prompts them to select the desired advertised products. From the results it is found that doctor's prescription for beauty products is responsive to various types of print advertising. However other Medias also makes their impression on prescription behavior but the print medium is mostly accepted and considered by doctors. In addition to that the dermatologists rely more on print advertisements of cosmetic products such as: magazines, clinical papers, medicinal journals, newspapers, hoardings, newsletters and catalogues because it becomes more easy for them to recall after recognition of cosmetic products.

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**A STUDY ON BORROWERS' APPROACH TOWARDS HOME LOAN WITH REFERENCE TO
DOMBIVLI CITY****Balu Trymbak Shirsath¹ and Tejashree Gawde**Vice Principal¹ and Head, Department of Commerce, DSPM's K. V. Pendharkar College, Dombivali

ABSTRACT

Housing is considered to be one of the most important basic necessities of life. The need of housing is fulfilled through home loan. Through this research paper, the perception of borrowers towards home loan is studied. Basic demographic information is obtained such as gender, monthly family income level, educational qualification and occupation. Various factors were considered in questionnaire such as source of home loan, category of home loan, home loan availed in % of cost of property, tenure of home loan, % of gross monthly family income use to pay EMI, mode of part payment and awareness about home loan protection insurance plan. Data has been collected from 50 respondents from Dombivli City. The data is presented in tabular as well as in graphical form using pie charts. Detailed analysis and interpretation of core factors relating to the behaviour pattern of home loan borrowers is given in the research paper.

Keywords: Borrowers, Source of home loan, part payment option and home loan protection insurance plan.

INTRODUCTION

Food, Clothing & Shelter are considered as basic need of a human being. Among this Shelter is also termed as Housing. Housing plays an important role in today's world. It is one of the utmost necessity of an individual for the purpose of safety, security and a place of protection from outside world. Houses can be in the form of Apartment, Bungalow, Cottage, Duplex, Farmhouse, Hut, etc. Due to increasing population and increasing inflation possessing own house is somewhat difficult.

Owning a house is not affordable to everyone in today's scenario. Most of the people from the middle class & lower middle class section of the society has to resort on home loan for purchasing Home. The types of financial institutions offering home loan can be categorised into four namely, Nationalised banks, Private Banks, Public sector banks and Non- banking financial companies. Borrowers take home loan for tenure from minimum 05 years to 30 years maximum. Depending upon availability of cash, salary and the cost of home, borrowers decides the amount of home loan. Rate of interest, Processing fee, customer service are some of the factors which borrowers take into consideration, while selecting the financial institution for home loan. Part payment option is available for borrowers, where borrower can pay certain amount (minimum amount equal to two EMI) to reduce the burden of loan. Post part payment borrowers have different option such as reduction in tenure of loan, reduction of EMI and reduction of EMI as well as tenure proportionately. Financial institutions with help of insurance companies provide home loan protection insurance plan to borrowers, which gives peace of mind to them while repaying home loan. Borrowers belonging to different strata of the society have got different approach towards selection of financial institution, tenure of home loan, selection of option post part payment and home loan protection insurance. This research paper is an attempt to understand the borrowers approach towards home loan.

REVIEW OF LITERATURE

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- 2) Dr.Amilt S. Nanwani, Dada RamchandBakhrusindhuMahavidyalay, Nagpur through their research paper on "A comparative study of home loans offered by public and private sector banks in Nagpur District" analysed that the satisfaction level in relation to the services provided by private sector banks are very high as compared to public sector banks.
- 3) Ms.AnujaOtwani, Assistant Professor, Rajeev Gandhi College, Madhya Pradesh through her research paper on "Comparative Study of Housing Loan of HDFC & Allahabad Bank" dated May 2017 with an ISSN: 2278-487X showed that people prefer HDFC Bank as compared to Allahabad Bank as services and facilities offered by private banks are considered to be up to the satisfaction level.

OBJECTIVES

- 1) To study the behaviour of Borrowers from different strata in respect of home loan.
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- 2) To analyse the behavioural differences between salaried and non-salaried borrowers in respect of home loan (Income Level).
- 3) To understand the penetration of home loan protection insurance among borrowers of home loan.

HYPOTHESIS

1] H0: There is no significant behaviour difference between salaried and non-salaried borrowers in respect of choice of financial institution.

H1: There is a significant behaviour difference between salaried and non-salaried borrowers in respect of choice of financial institution.

2] H0: Selection of option post part payment of home loan does not depend upon ratio of gross income and EMI.

H1: Selection of option post part payment of home loan depends upon ratio of gross income and EMI.

3] H0: Penetration of home loan protection insurance does not depend on the education level of borrower.

H1: Penetration of home loan protection insurance depends on the education level of borrower.

RESEARCH METHODOLOGY

- ❖ The study was conducted to analyze the borrower’s approach towards home loan in Dombivli City.
- ❖ The data has been collected through a SURVEY.
- ❖ Structured Questionnaire containing close ended questions was used as an instrument for the survey.
- ❖ Samples of 50 respondents who have availed home loan were selected on convenient sampling basis.
- ❖ The study included a sample of respondents between the age group of 21 to 60 years.
- ❖ The respondents included Salaried, Self-Employed, Professional and others.

FACTORS CONSIDERED UNDER QUESTIONNAIRE

- Qualification
- Occupation
- Age-group
- Monthly Family Income
- Source of Home Loan
- Category of Home Loan
- Home Loan availed in % of cost of property
- Tenure of Home Loan
- % of gross monthly family income used to pay monthly EMI
- Option used Post Part Payment
- Awareness about home loan protection insurance plan

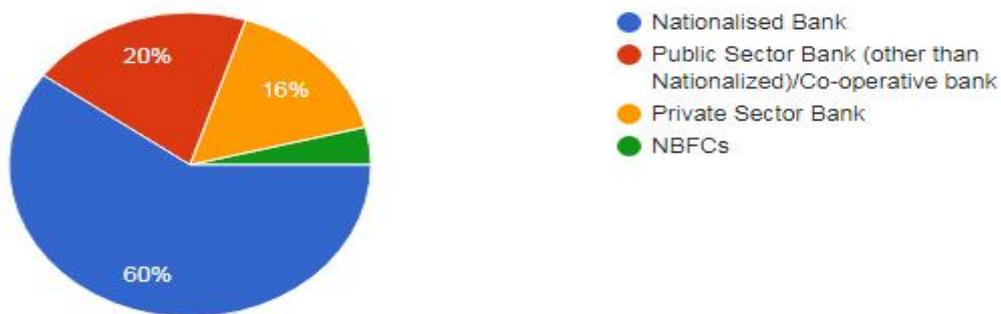
DEMOGRAPHIC PROFILE OF THE RESPONDENTS

BASIS	FREQUENCY
AGE :	
21-30 yrs	18
31-40 yrs	21
41-50 yrs	6
51-60 yrs	5
GENDER :	
Male	27
Female	23
EDUCATIONAL QUALIFICATION :	
Upto H.S.C.	00
Graduate	06

Post-Graduate	41
Professional	05
OCCUPATION:	
Salaried	42
Professional	00
Self-Employed	03
Others	05
MONTHLY FAMILY INCOME :	
Upto 50,000	14
50,001 to 1,00,000	17
1,00,001 to 1,50,000	7
Above 1,50,000	12

DATA ANALYSIS& INTERPRETATION

1] SOURCE OF HOME LOAN:



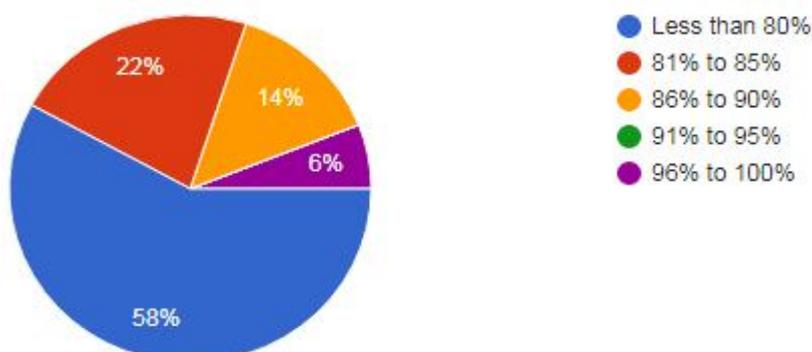
From the above pie diagram it can be seen that majority of the respondents are borrowers of Nationalised Banks. Percentage of borrowers from public sector and private sector banks are low in comparison to borrowers from nationalised banks. This might be because of trust or reasonable interest rates. A very minute share i.e. 4% borrowers belongs to Non-Banking Financial Companies.

2] CATEGORY OF HOME LOAN:



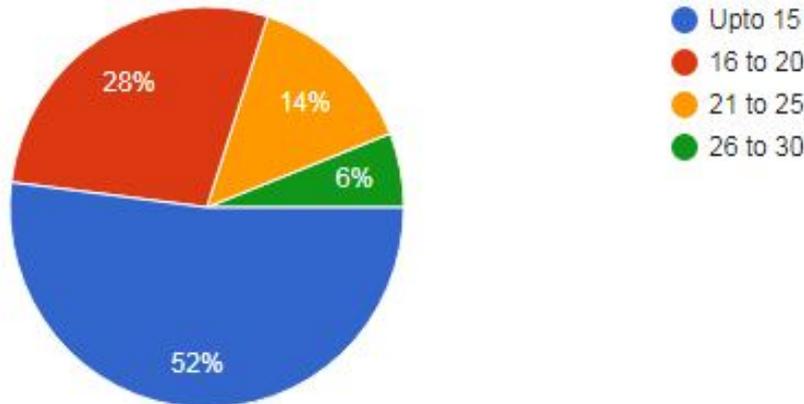
The above diagram brings out that 64% borrowers opted for individual home loan whereas rest of them have opted for joint home loan. The reason behind this may be working/non-working spouse or low family income.

3] HOME LOAN AVAILED IN % OF COST OF PROPERTY



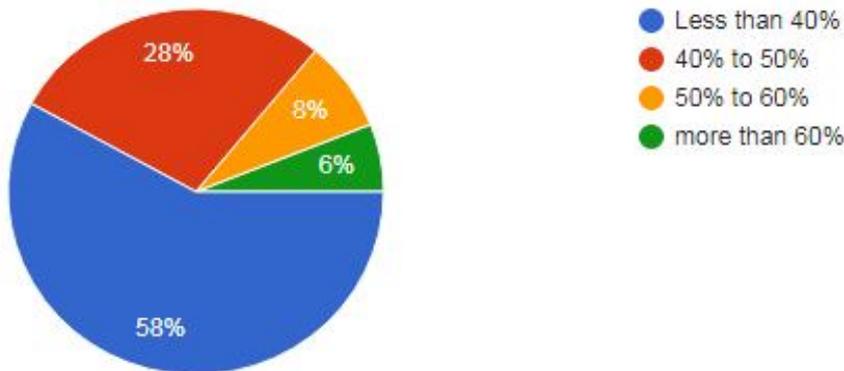
From the above figure it can be understood that about 58% of the respondents have availed home loan for less than 80% of the cost of their house property, 22% of them are under the range of 81% to 85% of cost followed by 14% are in the range 80% to 90% of the cost. This can be because of the factors like better Income level, avoid the burden of repayment, sufficient funds to make part cash payment while purchasing home.

4] TENURE OF HOME LOAN



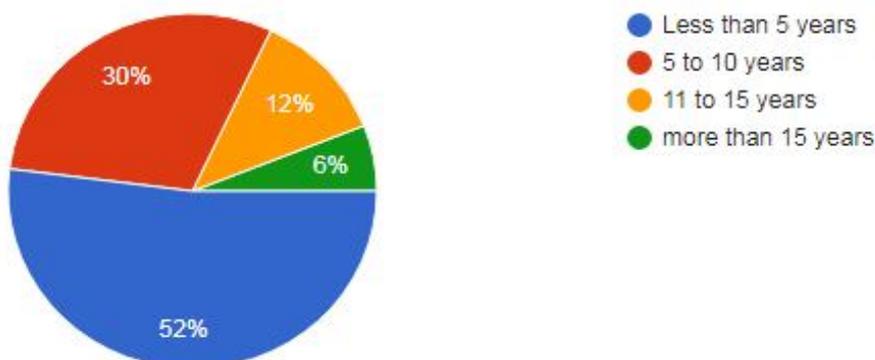
It can be observed from the above diagram that round 52% of the respondents opted for a tenure of up to 15 years. Followed by 28% respondents opted for 16 to 20 years. Very low % of respondents took tenure of 20 to 30 years. Again this can be because of better family income level, ability to repay, comparatively greater EMI amount or to avoid the burden of future repayment.

5] % OF GROSS MONTHLY FAMILY INCOME USE TO PAY EMI ON HOME LOAN



The Above analytical figure shows that majority of the respondents opt to use less than 40% of their gross monthly family income to pay EMI on home loan. This is further followed by 40% to 50%, 50% to 60% & more than 60% respectively. The reason behind this might be high family income level, less EMI or comparatively more monthly household expenditure.

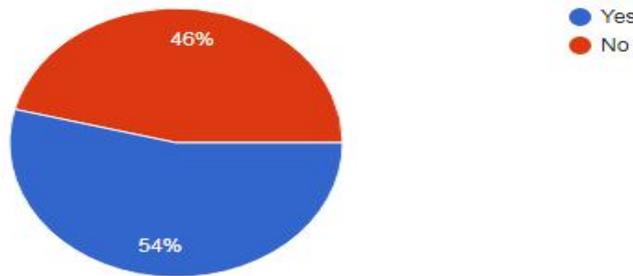
6] SINCE WHEN YOU HAVE BEEN REPAYING YOUR HOME LOAN



It could be analysed from the above figure that about 52% of the respondents are repaying their home loan from less than 5 years, 30% of them are repaying from 5 to 10 years. 18% of the respondents are repaying since more

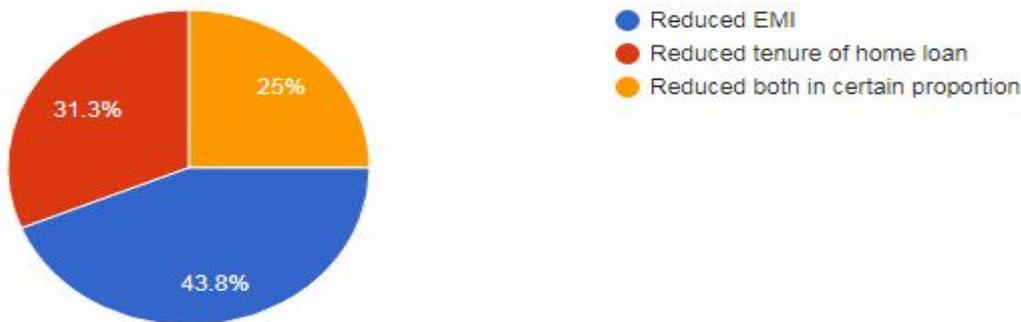
than 10 years. These number indicates that majority of the respondents are at the initial stage of repayment of home loan.

7] PART PAYMENT OPTION FOR REPAYMENT OF HOME LOAN



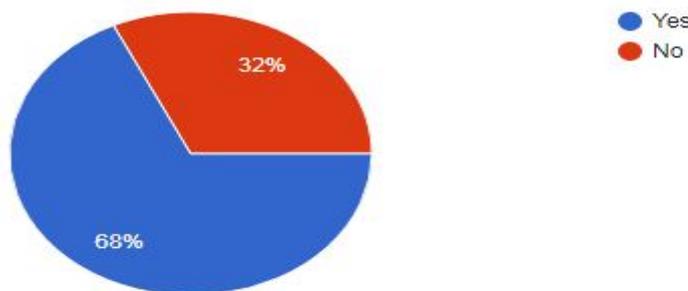
Above figure brings out that 54% of the respondents have used part payment option this may be due to increase in income level, avoid the burden of future repayment or some other future financial planning.

8] OPTION USED FOR POST PART PAYMENT



From the above figure it is observed that about 43.8% of respondents opted for reduction in EMI after part payment as they might be finding difficult to manage their monthly household expenditure. 31.3% have reduce the tenure to save the interest payment to lender & rest of them opted for both..

9] HOME LOAN PROTECTION INSURANCE PLAN



Above figure indicates that about 68% of respondents are aware about home loan protection insurance plan & has availed the same. But still 32% of them havenot availed for home loan protection insurance plan might be because they are not aware about insurance plan or increased cost of EMI.

HYPOTHESIS TESTING

First Hypothesis:

Category of Borrowers	Nationalised Banks	Private Sector Banks	Public Sector Banks	NBFCs
Salaried	66.67%	14.28%	16.67%	2.38%
Non-Salaried	25%	25%	37.50%	12.50%

From the above table it can be seen that in case of salaried people, majority of the respondents have borrowed home loan from nationalised bank, followed by public sector bank and private sector bank and this shows their preference towards nationalised bank as compared to other banks. Whereas in case of non-salaried people about 25% of the respondents have borrowed home loan from private sector banks 25% & 37.50% non-salaried have borrowed from nationalised and public sector banks respectively. A very low percentage of Non- salary

respondents prefer NBFCs for borrowing home loan. This analysis supports the H1: There is a significant behaviour difference between salaried and non-salaried borrowers in respect of choice of financial institution.

Second Hypothesis

% of Gross Monthly Family Income to pay EMI & Selection of Option for post part payment

Option post part payment	Category of borrowers on the basis ratio of Monthly Income & EMI	
	Borrowers- Category 1 (Less than 50% of income for EMI)	Borrowers- Category 2 (More than 50% of income for EMI)
Reduction of both	18.60%	57.14%
Reduction of EMI	44.19%	28.57%
Reduction of Tenure	34.88%	Nil
Not Opted	2.33%	14.29%

The above table clearly indicates that 18.60% borrowers of Category 1 (Using less than 50% of their income to pay EMI of home loan) have reduced both EMI as well as tenure post part payment in compare to this 57.14% borrowers of category 2. 34.88% borrowers of Category 1 have reduced their tenure of home loan post part payment in compare to this none of the borrowers of Category 2 have opted this option. This analysis supports acceptance of H1: Selection of option post part payment of home loan depends upon ratio of gross income and EMI.

Third Hypothesis

Borrowers having Home loan Protection Insurance	Educational Qualification of Borrowers		
	Graduate	Post-Graduate	Professional
Availed	83.33%	69.23%	40%
Not- availed	16.67%	30.77%	60%

The Above table brings out that 83.33% of Graduates & 69.23% of Post Graduates borrowers have availed the home loan protection insurance to provide the financial security to the family in comparison to 40% borrowers who are professional. This analysis shows that the penetration of home loan protection insurance is high in case of Graduates; Post graduates borrowers & low in case of borrowers who are Professionals. This supports H1: Penetration of home loan protection insurance depends on the education level of borrower.

FINDINGS

- 1) Nationalised Banks are more preferred source of home loan for borrowers of Dombivli City.
- 2) Majority of home loan belongs to Individual Home Loan.
- 3) Around 58% of borrowers have availed home loan for less than 80% of the cost of their house property.
- 4) About 52% of the respondents opted for a home loan for tenure of 15 years.
- 5) Most of the borrowers use less than 40% of their gross monthly family income to pay EMI on home loan.
- 6) Around 52% of the respondents are repaying their home loan from less than 5 years.
- 7) About 54% of the borrowers have used part payment option towards their home loan.
- 8) Among the borrowers who opted for part payment, 43.8% of them opted for reduction in EMI after part payment.
- 9) Through first hypothesis testing it can be seen that borrowers who are salaried prefer nationalised banks whereas non-salaried mostly prefer public sector banks.
- 10) 68% of the borrowers have availed the Home Loan Protection Plan. Penetration of home loan protection insurance depends on the education level of borrower.

CONCLUSION

Based on the findings it can be concluded that Age, Occupation & education of the borrowers influences their choices of institution for home loan, tenure of home loan, option which they select post part payment and adoption of home loan protection insurance. In short study brings out the fact that, the borrowers with different demographics have got different approaches towards the home loan.

SCOPE FOR FURTHER RESEARCH

This study was confined to borrowers of dombivili city only, hence findings cannot be generalised. Sample size selected for study was small. Similar kind of research can be conducted in different cities of the country. Research on similar grounds can be conducted to explore the borrowers approach towards Personal loan, Vehicle loan and business loan.

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IMPACT OF INTERNET ON INDIAN BANKING SYSTEM

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ABSTRACT

Banking is an integral part of financial activity today and digital banking in India is highly advanced. Tracing its roots, the word Bank evolved from the Italian word 'Banca' which means 'bench'. The merchants in the early middle ages would sit on benches where they would keep their coins for lending, exchanging, and so on. That is why the first bank, in the modern sense of the word, to powerful merchants who lent money and kept deposits.

The financial sector in India is currently experiencing a golden period, and its key driver is the effort to move towards a less-cash economy. The Government of India recently announced its step to demonetization. This has created the greatest impetus for the transition from cash to digital transactions for the Indian economy. The foundation for a less-cash economy was set in the JAM (Jan Dhan-Aadhar-Mobile) trinity.

Digital Banking is part of the broader context for the move to online banking where banking services are delivered over the internet. The shift from traditional to digital banking has been gradual and remains ongoing, and is constituted by differing degrees of banking service digitization. It provides the ability for users to access financial data through Internet desktop, mobile App and ATM services.

A study conducted in 2015 revealed that 47% of bankers see potential to improve customer relationship through digital banking, 44% see it as a means to generate competitive advantage, 32% as a channel for new customer acquisition. Only 16% emphasized the potential for cost saving, banking efficiency, increased accuracy, etc. A study by Centre Government of India entitled that most effective way to understand and bring the organization from traditional banking to digital banking.

Keyword: Banking- A less -cash economic, Digitalization, Jan Dhan Adhar Yojana

1. INTRODUCTION

Banking is an integral part of financial activity today and digital banking in India is highly advanced. Tracing its roots, the word Bank evolved from the Italian word 'Banca' which means 'bench'. The merchants in the early middle ages would sit on benches where they would keep their coins for lending, exchanging, and so on. That is why the first bank, in the modern sense of the word, was established in Venice, Italy, in 1157 and was called the Bank of Venice. Then there are others who state that the banking system was in existence by about 2000 BC in ancient Assyria and Babylon. Chanakya in his Arthashastra of the second or third century CE alludes to powerful merchants who lent money and kept deposits.

In the Indian context the earliest banks were the Bank of Hindustan and the General Bank of India, both of which failed. Then the Bank of Calcutta was established in 1806, and it eventually came to be known as the State Bank of India.

The financial sector in India is currently experiencing a golden period, and its key driver is the effort to move towards a less-cash economy. The Government of India recently announced its step to demonetization. This has created the greatest impetus for the transition from cash to digital transactions for the Indian economy. The foundation for a less-cash economy was set in the JAM (Jan dhan-Aadhar-Mobile) trinity. The PMJDY scheme initiated in August 2014 as a tool for financial inclusion has managed to get over 22 crore bank accounts created for previously unbanked citizens.

RBI has strengthened this initiative by offering new banking licenses to payment banks and small banks in 2015. The objectives of setting up payments banks was to further financial inclusion by providing (i) small savings accounts and (ii) payments/remittance services to migrant labour workforce, low income households, small businesses, unorganized sector entities and other users. Aadhaar, the world's largest national identification number project, has covered over 99 per cent of Indians aged 18 and above (as of 27th Jan 2017), per UIDAI. With Aadhaar helping in direct biometric Identification for the unbanked and Jan Dhan bank accounts and mobile phones allowing direct transfer of funds into their accounts, the foundational infrastructure for digital banking has been created. The JAM trinity alone wasn't adequate to make digital payments a preferred transaction mode. It took other technologies such as UPI (Unified Payments Interface) and wallets, which have become the alternate payment modes available post-demonetization and are gaining recognition. The latest step by government is the introduction of the BHIM platform.

The third segment of people, those without phones, are often the rural, poor and socially disadvantaged and thereby the neediest for easy access to financial services. Being the most difficult category to reach out, It is important to provide assisted banking through banking correspondents to create an account leveraging AEPS (Aadhar Enabled Payment Systems) and deposit and withdraw money through Micro ATM's (an AEPS tool). These micro-ATMs would be able to conduct an e KYC (Electronic Know Your Customer) using Aadhaar and open a bank account, making them complete one-stop shops for all banking needs. Soon, Aadhaar Pay (Aadhaar enabled Point of Sale devices, complete with fingerprint scanners) will be installed and enabled at retail touch points. These will allow for direct transactions from a customer's Aadhaar-linked bank account to the retailer, requiring

2. OBJECTIVES

The objectives of the present paper are as follows:

1. To bring every Indian in the flow of Digital India.
2. To give benefit of government schemes to all citizen of India.
3. To encourage and motivate all payers and payees to use a digitally enabled cashless Economic system.

3. RESEARCH METHODOLOGY

Primary data by taking survey of people in different groups as well as secondary data by various sources are used with reference to this research paper.

4. DIGITAL BANKING

Definition;-We cannot have a standard definition for digital banking. Different people have given different definitions. Some of them are as follows:

- “Digital Banking—a new concept in the area of electronic banking, which aims to enrich standard online and mobile banking services by integrating digital technologies, for example strategic analytics tools, social media interactions, innovative payment solutions, mobile technology and a focus on user experience.”
- “Embracing a fully digital strategy requires end to-end modernization of a bank's often outdated infrastructure. Equally important, it requires a transition from an account-based view of banking customers to one that knows them as individuals and enhances the customer experience with relevant, convenient and personalized products and services.”
- “Digital Banking is the application of technology to ensure seamless end-to-end (STP in the 'old' jargon) processing of banking transactions/ operations; initiated by the client, ensuring maximum utility to the client in terms of availability, usefulness and cost; to the bank in terms of reduced operating costs, zero errors and enhanced services.”

However, any definition of digital banking is only centered around enhanced customer service and user experience based on their engagement, expectations and experience, which can be captured in a variety of datasets resulting in a huge repository which is akin to a digital super highway Why To Go Digital – Advantages of Becoming A Digital Bank Worldwide, the trends have been very clear and consistent: Customers are becoming increasingly comfortable with transactions on digital channels –whether for product purchases or services Fin- Tech platforms and services have responded to e-Commerce and mobility with disruptions across the board – resulting in loss of opportunities and value for the traditional banks The cost of meeting tough regulations, has eaten into the allocations for investment in business and IT, which then makes banks less competitive, eventually affecting their bottom line even more. Remaining relevant in view of ever changing consumer behavior and changing business model for several industries Exploiting the ability to tap into increasing digital awareness, and huge amounts of digital information about the customer via social networks.

5. DIGITAL BANKING IN INDIA

First of all what is digital banking? Digital Banking is also called Internet Banking or Online Banking. When a bank provides its services online and customers can make transactions, submit requests, and handle other banking activities online, it is called digital banking. The first bank in India to offer internet banking was the ICICI bank in 1996. Since then a number of other banks have followed suit and today most of the banks provide online banking facilities.

Digital Banking is part of the broader context for the move to online banking, where banking services are delivered over the internet. The shift from traditional to digital banking has been gradual and remains ongoing,

and is constituted by differing degrees of banking service digitization. Digital banking involves high levels of process automation and web-based services and may include APIs enabling cross-institutional service composition to deliver banking products and provide transactions. It provides the ability for users to access financial data through desktop, Mobile and ATM and Internet services.

A digital Bank represents a virtual process that includes online banking and beyond. As an end-to-end platform, digital banking must encompass the front end that consumers see, the back end that bankers see through their servers and admin control panels and the middleware that connects these nodes. Ultimately, a digital bank should facilitate all functional levels of banking on all service delivery platforms. In other words, it should have all the same functions as a head office, branch office, online service, bank cards, ATM and point of sale machines.

The reason digital banking is more than just a mobile or online platform is that it includes middleware solutions. Middleware is software that bridges operating systems or databases with other applications. Financial industry departments such as risk management, product development and marketing must also be included in the middle and back end to truly be considered a complete digital bank. Financial institutions must be at the forefront of the latest technology to ensure security and compliance with government regulations.

6. ROLE OF DIGITIZATION IN BANKING IN INDIA

Indian Banks as a whole were very reluctant to adopt the changes brought about by technological advancement. A number of factors brought about the mechanization and digitization in banking industry in India. The putting in place standard cheque encoders was the first step forward in digital transformation in banking. Magnetic Ink Character Recognition (MICR) helps in the sorting and processing of cheques with each bank branch having an MICR code. The next step was more of a necessity than an innovation. Banking is a repetitive job, and therefore a labor intensive one where the worker is prone to making mistakes. In order to minimize errors and speed up the process, banks began using computer technology with standalone personal computers and then set up their own local area networks (LAN).

As the networks grew and banks began to connect together, Core Banking came into being. Centralized Online Real-time Exchange (CORE) banking thus allowed customers to perform financial transactions and access their account from any of the participating bank's branches. These services made it easier for customers to operate their accounts and slowly led to the coining of the phrase: 'Anytime, Anywhere Banking.' Then Automated Teller Machines (ATMs) arrived on the scene, and electronic fund transfers were made possible.

Online banking and Telebanking made their appearance in the 2000's and different modes of online fund transfers were instituted such as Real Time Gross Settlement (RTGS), Immediate Payment System (IMPS), National Electronic Fund Transfer (NEFT), and National Electronic Clearing Service (NECS). Recent years have seen the growth in mobile banking services and other innovative services online. The role of digitization of banking in India that began in the 1980's has certainly come a long way. However there is still a long way to go in the digitization in banking industry and a number of hurdles to cross before we are able to ensure end to end digital banking in India as we will discuss in this article.

A study conducted in 2015 revealed that 47% of bankers see potential to improve customer relationship through digital banking, 44% see it as a means to generate competitive advantage, 32% as a channel for new customer acquisition. Only 16% emphasized the potential for cost saving.

7. MAJOR BENEFITS OF DIGITAL BANKING

- **Business efficiency** - Not only do digital platforms improve interaction with customers and deliver their needs more quickly, they also provide methods for making internal functions more efficient. While banks have been at the forefront of digital technology at the consumer end for decades, they have not completely embraced all the benefits of middleware to accelerate productivity.
- **Cost savings** - One of the keys for banks to cut costs is automated applications that replace redundant manual labor. Traditional bank processing is costly, slow and prone to human error, according to McKinsey & Company. Relying on people and paper also takes up office space, which runs up energy and storage costs. Digital platforms can future reduce costs through the synergies of more qualitative data and faster response to market changes.
- **Increased accuracy** - Traditional banks that rely mainly on paper processing can have an error rate of up to 40%, which requires reworking. Coupled with lack of IT integration between branch and back office personnel, this problem reduces business efficiency. By simplifying the verification process, it's easier to

implement IT solutions with business software, leading to more accurate accounting. Financial accuracy is crucial for banks to comply with government regulations.

- **Improved competitiveness** - Digital solutions help manage marketing lists, allowing banks to reach broader markets and build closer relationships with tech savvy consumers. CRM platforms can track customer history and provide quick access to email and other forms of online communication. It's effective for executing customer rewards programs that can improve loyalty and satisfaction.
- **Greater agility** - The use of automation can speed up both external and internal processes, both of which can improve customer satisfaction. Following the collapse of financial markets in 2008, an increased emphasis was placed on risk management. Instead of banks hiring and training risk management professionals, it's possible for risk management software to detect and respond to market changes more quickly than even seasoned professionals.
- **Enhanced security** - All businesses big or small face a growing number of cyber threats that can damage reputations. In February 2016 the Internal Revenue Service announced it had been hacked the previous year, as did several big tech companies. Banks can benefit from extra layers of security to protect data.
- **Customer Service:** With internet freely available everywhere, all a customer needs to access his account is a device and internet connectivity. It saves him time and expense as he no longer has to travel to a bank to carry out transactions. He does not have to wait in unending queues only to find that he will have to go to a different counter to get his job done. Online services make it possible for him to sit in the comfort of his home or office, or in fact even in a vehicle while travelling, and carry out transactions without having to wait for anything.
- **Availability of 24X7**-The customer is able to check his bank records anytime he wishes and a number of banking services are available to him round the clock. Transferring money is easier, quicker, and safer.
- **Time Constraint:** A number of services required waiting for considerable periods. Banks had boards put up at their branches specifying the time required for different services. Even simply cashing a cheque took time. But with digital banking it is instant, with no time constraints.
- **Online Bill Payments:** This is a feature that saves customers a lot of time and expense. Customers do not have to carry cash and queue up to pay their utility bills or other bills.
- **Lower Overheads:** Digital banking has drastically reduced the operating costs of banks. This has made it possible for banks to charge lower fees for services and also offer higher interest rates for deposits. Lower operating costs have meant more profits for the banks.
- **Banking Benefits:** With the increased convenience of anytime, anywhere banking, the number of customers has increased for banks. Human error in calculations and recordkeeping is reduced, if not eliminated. With records of every transaction being maintained electronically, it is possible to generate reports and analyze data at any point, and for different purposes.

8. DIGITAL BANKING TRENDS IN INDIA

Digital India in the banking sector has grown sharply in recent times. Some trends we see in digital banking in India are:

- **Increase in Customers:-**The government's encouragement to use electronic wallets has contributed much to people adopting the use of technology in financial transactions. We see a rapid increase in the use of credit/debit cards as well as electronic wallets and the trend will continue.
- **Chat bots:-**A number of banks have already employed chat bots in their customer care operations. We will see a steady increase in the number of chat bots employed as well as improvements in their speed of response, quality of interaction and the quality of services rendered.
- **Merge Physical and Digital Process:-**Many banks today offer a mixed physical and digital process to their customers. The customers could walk into the bank and then use devices there to carry out their transactions. In the Indian context we will certainly see a steady increase in this kind of service especially in the rural areas.
- **Mobile Technology:-**The proliferation of mobile phones and the easy and cheap availability of internet has meant that the banking sector had to provide digital services via mobile phones. A number of banks have developed apps to help customers handle banking transactions on their mobile phones. This trend will only

continue. We can look forward to additional features and services being provided, and the user experience being more streamlined.

- **End to End Digital Marketing:-**A number of customers are already using devices to handle their banking tasks. Banks have come to realize that digitization is the only way forward. Hence a number of banks have already started on the path of end to end digitization, in their effort to provide all kinds of services over the internet, resulting in paperless transactions.

9. SCOPE OF DIGITAL BANKING IN INDIA:-

There are a number of factors that affect the scope of digital banking in India. Some of them are enumerated below:

1. Education:

A lack of knowledge about banking in itself is a hurdle for many. Also many parts of India still struggle with a very low literacy rate. The lack of knowledge about computers and the use of the internet is a challenge.

2. Fear:

There are a number of unfounded fears individuals have about the use of the internet. Cases of fraud are often blown out of proportion, and this adds to the fear factor, resulting in a number of ill-informed customers being nervous to use digital banking.

3. Training:

There is much resistance from within the banking industry itself. Employees are not trained in the use of innovative technology. They are unable to utilize different features of digital banking and hence are wary about its implementation.

This having been said, the challenges are steadily being overcome. Gen Y today, even in rural areas, has become computer literate and wants the conveniences and advantages of digital banking.

10. FUTURE OF DIGITAL BANKING IN INDIA

What can we look forward to on the scene of digital marketing in India? Technologically India is a very progressive country. We do not only adopt new technology but are constantly innovating; we are at the cutting edge of technology. Therefore the future of digital banking in India is very bright and we can look forward to new innovations and services from the banking sector.

We have only discussed some aspects of digital banking in India, or digital India in the banking sector, and the future of digital banking in India. Digital banking should not be looked at just as a technological advancement. Neither is it a customer service initiative. It is a revolution in how the banking industry functions and the services it renders.

CONCLUSION

A. **Digital Life Partners -BHIM and Aadhar Apps:-**The full form of BHIM app is Bharat Interface for Money. The Prime Minister of India Shri. Narendra Modi has launched this app on 31 December 2016. He said that, this app will be world's biggest wonder. It is the most popular app in India. More than 5 million's people download this app. All transactions will be on BHIM and Aadhar apps by using fingerprints only. Cashless transaction will be done on these apps only in 30 seconds. So there will be no need of debit card, credit card, ATM and POS machines up to 2020. India is the only one country in the world where 100 crore people use mobile phones and have their eye -witness and biometric identification. Today, 2-2.5% people are paying taxes in India. If we go 100% towards digital transaction, then Indian economy rises 3 times of current economy

B. **Cyber Security in Digital Banking:-**We always remember following key points while doing cashless transaction.

1. Do not store any information in mobile regarding bank account.
2. Do not save user name and password in mobile.
3. Do not use public Wi-Fi for banking purposes.
4. Download bank app from official store of the bank.
5. Do not click on unknown link of bank. If bank website link begin with **https**, then it is such sites are fake.
6. Original site of bank. If it is only begin with **http**,
7. Change your password regularly and it should be difficult.

8. Do not tell our pin , Password CVC or Card Number to any other person or any bank officer.

9. Use only security connection for online transaction.

The following table shows cyber crime in cashless transaction.

Sr. No.	Media	% of cheating
1	Debit and Credit Cards	46
2	Face book	39
3	Mobile	21
4	E-mail hack	18

From this table we observe that, there are maximum number of cyber crimes in debit and credit cards. This rate increases 6 times in the last three years. Such type of cyber crimes will increase 60-65% in the next year. The government has to take important steps to avoid cyber crimes. The government has to motivate people and school children about awareness of cyber crimes.

If the journey of cashless transaction will be successful in Digital India, then the journey of paperless and faceless governance will begin very soon. So, there are winds of financial revolution flowing in India..Finally the era of “Stand Up India and Start Up India” begins. The benefits of digital banking stress its importance by themselves. However the socio-economic conditions we face add to the importance of digital banking in India. With a high rate of crime and corruption, digital banking is a safe way to handle financial transactions. The lax and cavalier attitude of public servants makes it a real hassle to sometimes even pay for utility bills and so the online bill payment feature of digital banking is really helpful. Many cities are known for pickpockets who eye bulged wallets, and hence the option of paying by credit or debit card, or through online wallets is a much safer option.

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THE WORLD AND DIGITIZATION

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ABSTRACT

- *The World And Digitization*

Not a single person is unaware of the word "DIGITAL".

Through this research we will have the complete idea how digitization evolved. Every single person today is making use of technologies.

The term digital era refers to the world we are now living in where almost everything is based on technology and internet. Digital era is all about conversion of analog signals into digital signals.

- *Analog Signals: They are continuous signals.*
- *Digital Signals: They are discrete signals.*

We are living in an era where each and every company and industry makes use of computerized or digitized devices in order to reduce the workload.

When talking about digital tools it is not only industries or companies who are using this...but also hospitals are utilizing technology to the fullest.

Not lacking behind, utilization of digital technology is done on major basis in education. "Digital technology is meant for education.

Nowadays employees from any of the field are selected on the basis of the knowledge of computing. So in simple terms digitization has become a priority.

Keywords: Digitization, Digital era and education, Employment in digital era, Digital technology and medical sector

INTRODUCTION

The digital revolution also called as industrial revolution, which started for 1950s to late 1970s...which simply means the conversion of mechanical or analogue technology to digital based electronics. Manually performed calculations started to be solved on automated devices. This includes computers, cellphones, internet. The revolution of digitization increased the use of electronic circuits and related devices. Digital era is rapid shift of traditional industry to technological based industries. The increase in utilization of electronic devices or the change of analog technology into digital technology became ubiquitous within short period of time. [1]

REVOLUTION OF DIGITIZATION

The digital era started from late 1950s to late 1970s. Digital era is also called as "Computer Age" or "Third Industrial Revolution".

Below is the brief report of how digitization evolved

- In 1947 first ever transistor and LEO first general computer were invented.
- From 1969 to 1971 Intel developed "INTEL4004"(an early microprocessor).
- "ARPANET" the first ever internet that was introduced to the public in 1969.
- The use of new technology started by 1960s.
- By 1970s home computers were introduced, example : video games.
- By 1980s computers were known almost everywhere in developed nations, computers made their ways in homes and schools.
- "COMMODORE64" sold 17 millions of computer units in 1982-1994 and cited as best selling company.
- According to first survey 8.2% of all US households owned a personal computer in 1984. And homes with children under 18 were twice to own one at 15.3%. Middle and upper middle class owned personal computer at 22.9%.
- By 1989 15% US household owned computer and 30% almost with children under 18 owned one.

- By late 1980s many business were dependent on computer digital technology.
- Motorola created first mobile “Motorola DynaTAC” in 1983.
- First true digital camera was created in 1988 and first marketed in 1989 in Japan and in 1990 in United State.
- Digital ink was also invented in 1980s.
- Disney’s CAPS system was used for scene in 1989s the “little mermaid” and for all their animation films between 1990s.
- Tim Berners Lee introduced WWW(World Wide Web) in 1989.

- **1990s:-**

First public digital HDTV broadcast was 1990 world cup was played in 10 theatres in Spain and Italy.

HDTV didn’t become standard until mid 2000s outside Japan.

WWW become publically available available in 1991 only to government and universities.

First Web Browser was created in 1993 by Andreessen and Erica Binna.

Stanford Federal Credit Union was first financial institution to offer online internet banking services to all its members in October 1994.

In 1996 OP Financial Group also a cooperative bank, become second online bank in world and first in Europe.

By 1996 internet was part of mass culture and many businesses.

By 1999 almost everyone had a connection of internet. Half of Americans and other countries used internet regularly.

Till 2000 65% of population owned computers in US.

- **2000**

Cell phones become ubiquitous as computers by 2000s with movie theatres showing ads to silence phones .

Playing of simple games on cell phones started by 2000s .

Text messages existed in 1990s but not used widely to early 2000s.

In late 2005, population of internet reached 1billion, and 3 billion people worldwide used HDTV and cellphones by the end of decade.

- **2010’s**

By 2012 over 2 billion people used internet, twice the number in 2007.

By 2015 tablet, smartphones were expected to exceed personal computers in internet usage.

By 2016 half of world’s population was connected.[2]

RISE IN DIGITAL TECHNOLOGY (1980-2016)

In late 1980s less than 1% technology stored information which was in digital format. Technology covered 94% of population by 2007, with more than 99% in 2014. It has been estimated that world’s capacity to store information has increased from 2.6 Exabyte’s in 1986 , to some 5000 Exabyte’s in 2014 (5 zettabytes).

- **1980**

Cell phone subscribers were 11.2 million .

All Internet users at this time were indexed in a phone book sized directory.

- **1990**

Cell phone subscribers were 12.4 million (0.25% of world population in 1990).

Internet users were 2.8 million (0.05% of world population in 1990).

- **2002**

Cell phone subscribers increased to 1,174,000,000 (19% of world population in 2002).

Internet users became 631 million (11% of world population in 2002).

- **2010**

Cell phone subscribers highly increased to 4 billion (67% of world population in 2010).

Internet users became 1,800 million (26.6% of world population in 2010).[3]

EDUCATION IN DIGITAL ERA

Once upon a time was an era where information was available or accessible to limited parts. Now is the era where information is available to every part of the country. Earlier everyone was behind information and now everyone wants knowledge. This knowledge becomes easier and effective to be obtained digital tools. [4]

Technology is being utilized on large scale in education

- 42% of teachers use at least one device related to technology.
- Children choose digital learning rather than textual studying.
- Children refer pc's, tablets, smartphones, for gaining info.
- 88% of schools allows mobile. Phone usage, while, while. 46% provide mobile applications. [5]

It is believed that the technologies used by teachers in classrooms this are "made for education".

However for a teacher to focus on every single student is not possible. A teacher can't reach to a conclusion whether the students understand their teaching or not. But, yes !! this is a digital era, which makes this possible. So an app has been developed to take in account which questions are answered by student or not answered. During past year's student's used pen's and paper's for every single piece of note, in this era notes are stored on a single click i.e. pictures. Whatever urgent notice to be sent to students are immediately sent.

No doubt !digitization has large impact and changing way of education, but it's up to us how to use it.[6]

DIGITAL ERA AND HEALTH CARE'S

Not staying behind, multiple technologies are discovered for medical sectors. Talking about medical sectors and digital era, digital era covers three sections for future of medical sectors:

- 1) Digital transformation
- 2) Block-chain technology
- 3) Machine learning and artificial intelligence

1] DIGITAL TRANSFORMATION:-

Through a study of Forbes Insights over 90% of global production uses digital strategies. Similarly health cares believes that using digital strategies would provide better outcomes and services.

2] BLOCKCHAIN TECHNOLOGY:-

Block-chain is not only about Crypto-currencies. Block-chain is all about formation chains i.e work flow is in linear format and makes data management easier. Following are technologies introduced by Block-chains for medical sectors:-

- MEDICHAIN: Fast usage and exchange of medical data.
- MEDIBLOCK: Provides indexed list of patient's history.
- DENTACOIN: Allows cost reduction and various benefits in form rewards (similar to cryptocurrency).

3] MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE:-

Along with other sectors, AI plays vital role in medical sectors also, providing better outcomes. Since 2012, AI Global Funding For Healthcare has grown by \$1.5 billion and is developing.[7]

DIGITIZATION AND EMPLOYEMENT

One of the major impacts of digitization is on industries and companies. Companies search an employee who has skills based on digital technologies. Using digital tools has increased the productivity to about 30-40%. Utilization of digital technology brings complete ease to companies and industrial sectors. All the industries in today's era make's use of machineries. In a recent study by Frey and Osborne in 2017 which reached to a conclusion that approximate 47% US labour's will be replaced by machine in next two decades.[8]

WHY USE DIGITIZATION???

It's not only about a single or particular field where digitization is used. The use of digitization is in each and every field. Digital strategies help in taking correct decisions. Manually performed tasks require hours to be completed, but digital technology helps completing the same tasks within minutes. Maintaining papered

documents is a hectic job , whereas the same in computerized format becomes easier to maintain and access. Using digital tools provides privacy and security , rather than paper works that can be easily destroyed or manipulated. Storage of information becomes easier, rather than storing stacks of papered documents. Using digital tools helps storing of information on single device. By accepting digitization customers get better services through banks. Digitization helps building loyalty to customers and reduces human errors.[9]

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A STUDY ON THE SCOPE OF E-RETAILING IN INDIA

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ABSTRACT

This research paper is based on the scope of e-retailing in India. Electronic retailing refers to the sales of goods and services on the internet. People all over the world mostly shop online. In India, however, the pace of growth of e-retailing is slow. This study will help to understand peoples preferences, the reasons for the growth of e-retailing and the challenges faced by e-retailers in India. This research papers also discovers the reasons for some people not wanting to shop online.

Keywords: E-retailing, Online shopping, Consumers, Payment, internet.

INTRODUCTION

This Research paper concentrates on the modern trend of selling of goods and services on the internet in India. The term “e-retailing” refers to sale of goods and services online. These transactions include Business-to-Business (B2B) and Business-to-Consumer (B2C). Electronic Retailing requires many products and service displays and specifications, giving shoppers a personal feel for the look and quality of the offerings without requiring them to be present in a store. The concept of E-retailing was introduced in the early 1990s in India. Since then online shopping has gained popularity. The payment for online transactions take place either by electronic payment (through credit cards, debit cards, etc.) or by Cash On Delivery (COD).

AIMS AND OBJECTIVES

This research aims at reaching the following objectives:

To get in depth knowledge about E-retailing

To know the position of E-retailing in India

To discover if people find online shopping trustworthy

To discover the reasons why some people don't prefer E-retailing

RESEARCH METHODOLOGY

For gaining broader knowledge, this research topic is based on Mixed data i.e. Primary data as well as Secondary data. Primary data refers to gaining first hand information to researchers, this information can be collected by way of survey i.e. questionnaire method. Secondary data is prepared by using the magazines, websites, books, etc.

LITERATURE REVIEW

VAITHIANATHAN, 2010; AWAN AND KHAN, 2016: E-commerce/E-retailing usage in developing countries is low compared to developed countries. One of the main reasons for this gap is challenges encountered during the implementation of different types of strategies.

SAHOO, S.C. ET AL., (2010): In their study recognized six ways in which Indians make decisions. These are price consciousness and variety seeking. They did not attest the other four styles i.e. fashion consciousness, brand consciousness, impulsiveness and brand loyalty. Young consumers between the age group of 11-20 years are mostly recreational in their shopping.

FINDINGS

E-retail refers to selling of goods and services over the internet. E-retailing consists of both Business-to-Business (B2B) as well as Business-to-Consumers (B2C).

Some of the e-retailers are Flipkart, Amazon, Snapdeal, Myntra, Jabong, etc. If we look at the wholesale market (B2B) we have players like best price (Wal-Mart) who is operational online space. In Consumer-to-Consumer (C2C) we have E-bay, Olx, etc.

REASONS FOR GROWTH OF E-RETAILING IN INDIA

With the growth of online shopping e-retailing got a boost. The reasons for the growth of e-retailing in India are as follows:

1. Increased Internet Penetration

India is the youngest online population when compared with other BRIC nations. Though Indian users spend less time online per capita than users in developed countries, their pattern of online behaviour is rapidly

converging. There was growth and development in both fixed and wireless broadband connections. Apart from growing internet connections, the rise in smartphone usage, digital knowledge, and purchasing power have seen extensive growth of online retail.

2. Easy Payment Options:

The availability of online payment options, availability of variety of products, being able to track your shipment, 24/7 customer support service, a larger internet reach, and cheaper costs have increased the demand for online shopping among the population.

3. Increasing Time-Poverty:

As a result of people having hectic schedules and dedication to work hours, people do not get time to shop. So consumers are trying to find different ways to free up more time in their packed-up schedules. Most of these consumers also spend a majority amount of time at work and at home with access to internet-enabled devices, hence the growth rate has increased in the adoption of the internet and mobile retailing.

4. Younger Demographics:

The young Indian population and their increased expendable income levels have contributed to the growth of the Online Retail Market in the country in recent years. India has a population of youngsters having a large amount of mass of people in the 15-35 years age group, which is one of the largest consumer markets in the world. This population has access to smartphones and internet and is driven by the convenience of online shopping.

5. Growing Popularity of Celebrity Fashion:

In the same way, the popularity of celebrity fashion has resulted in the growth of online sales in India in recent years. Production houses have collaboration with fashion websites where they collectively release their unique collections, mostly designed for traditional occasions such as Diwali, and fashion and lifestyle retailers are taking advantage of celebrity fashions.

6. High Growth During Festive Seasons:

After 2010 the online purchases for products such as cell phones, e-tablets, consumer electronics, home appliances, home décor, furnishings, and apparel increased. To appeal to festive shoppers, online retailers offer huge discounts and interesting deals during the season.

Therefore, the youngsters of India who are often busy are the ones who serve advantage to the online retail market in the country.

CHALLENGES FOR E-RETAILERS IN INDIA

There are a number of challenges that e-retailers face in India. These challenges are as follows:

1. Poor Internet speed:

One of the major problems India faces is the speed of the internet which is slow can affect the electronic retail market drastically. The average internet speed is very less which makes it one of the low ranked nations in global scenario with respect to internet speed. The slow speed of internet can reduce the number on people wanting to buy things from online websites.

2. Customer Trust and Loyalty:

Indian public has lack of trust in the online retailers. Even though we have trusted players like Flipkart, Myntra and Jabong, other retailers were not up to the mark compared with other players. The entry of foreign online retailers like Amazon has forced Indian retailers to improve customer loyalty. Different online retailing websites have come up with different ways to build customer loyalty.

3. FDI policy in B2C ecommerce:

India's FDI policy restricts having full amount FDI in Multi brand retail which is applicable to e-retail activities also. In online Business-to-Business e-retail 100% FDI is allowed but this is not applicable to Business-to-Commerce e-retail activities. Government allowed more than half of the FDI in B2C e-commerce for retailers with brick and mortar operations. Currently most retailers are following a market place model in which online retailer provides a platform for probable buyer and sellers. This can result in limited growth, limited control over product, service and delivery speed. The limitations with respect to FDI is influencing the growth and expansion plans of online retailers.

4. Overcoming touch and feel mental barrier of Indian customers:

Indian customers prefer to see the product in person before they purchase it. The biggest challenges faced by online retailers to overcome this obstacle. Online retailers are trying to overcome this barrier by

cluding more detailed information about the product online. They also share feedbacks given by other customers to enhance the confidence of customers in their products.

5. COD and Returns management

Cash on delivery has become the preferred mode of payment by online customers. This has created certain serious problems for online retailers. Some of the logistics providers charge extra charges from the customers which can affect the retail business in long run. Delay in payment of the Cash collected by logistics providers from customers can reduce the expendable amount for online retailers. Another important problem faced by online retailers is the returns by the customers and handling it. Some of the logistics are unable to handle the returns of the customers. More importantly, this can create an additional cost for the retailers which is an important problem faced by online retailers. Due to this reason some of the retailers have started their own logistic team to address these problems in a better manner which can improve customer trust and convenience. Moreover this can provide the cost savings for online retailers for a long time.

6. Complex tax regime

One of the major restrictions faced by e-retailers is the complex taxation system in India. Non uniform VAT (Value added tax) are charged by different states. Sometimes, the state governments charges VAT for products sold with in a state in which storage places are located. This has led to increase in the cost of sourcing and delivering for products and services for online retailers. Multiple point taxation, shipping charges and entry taxes are other major disadvantages in India which can affect online retailing in India. It also forced some of the retailers to open warehouses in different states to reduce the entry and other taxes. Online retailers looking at implementation of uniform Goods and Services tax (GST) which can add operational convenience to online retailers.

As we see, e-retailing is gaining importance but there are still problems that e-retailing is facing in India.

QUESTIONNAIRE

1.Age of the respondent

> 18-25

> 26-30

> 31-40

2. Gender

> Female

> Male

3. Do you prefer online shopping over shopping at physical stores?

> Yes

> No

4. Do you find online shopping trustworthy?

> Yes

> No

5. How often do online shopping apps/websites fulfil your requirements?

> Everytime

> Sometimes

> Never

6. What do you feel is the reason for some people not wanting to shop online?

> The rates of the product

> The delivery duration

> Lack of confidence in online payment

> Not being able to see the product in person before buying

> All of the above

DATA INTERPRETATION

The sample size for this research is 52 out of which 69.2% were of the age group 18-25, 12.5% were of the age group 26-30 and 17.3% were from the age group of 31-40. The majority of 65.4% were females, whereas, 34.6% were males. About a 46.2% of people prefer online shopping over shopping at physical stores and 53.8% do not prefer online shopping over shopping at physical stores. On the question of trustworthiness of online shopping, 40.4% find online shopping trustworthy while 59.6% do not trust online shopping. 19.2% of the peoples requirements are fulfilled every time by online shopping apps/websites, 73.1% of the peoples requirements are fulfilled sometimes while hat of 7.7% are never fulfilled. When asked about the growth of e-retailing's contribution to the development of the economy, 55.8% believe that e-retailing will contribute to the development of the economy, 5.8% think it will not be a contribution and 38.5% feel that r-retailing maybe contribute to the development of the economy. There are some people who don't prefer shopping online and while wanting to know the main reasons why so it was discovered that 3.8% think that it is due to the rates of the products online, 1.9% think that it is due to the delivery duration of the product, 9.6% feel that it is due to lack of confidence in online payment, 38.5% feel that it is due to them not being able to see the product in person before buying it and the majority of 46.2% think that all of the above four cases are the reasons why some people are not wanting to shop online.

CONCLUSION

The above research shows that the youngsters are the ones that prefer online shopping. Still, a lot of people do not find online shopping trustworthy. A large amount of people get their requirements fulfilled by online shopping sometimes, which means that there are people who are not satisfied with online services. While discovering the reasons for people not wanting to shop online a large mass of people feel that not being able to see the product in person before buying is a very important reason, a few people think it because of the lack of confidence that people have in online payments, very less amount of people feel that it is due to the rates of the products and the duration of the delivery. Although, a majority of people think that people do not want to shop online because of all the above cases combined. A large amount of people feel that the growth of e-retailing will contribute the development of the economy, whereas others aren't sure of it.

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**INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) – IMPACT ON EDUCATION:
OPPORTUNITIES AND CHALLENGES IN CURRENT SCENARIO**

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ABSTRACT

In today's developing countries, economic process and technological changes has given a distinct section to the economy, whereby the society are jointly facing the priority of the competition in numerous sectors, that conjointly includes the education system. Within the international economy, technologies play a significant role because of which the importance of ICT- Information and Communication Technologies encompasses a continual growth universally. It's usually aforementioned that ICT in education means that "Teaching and Learning with ICT" as a result of "Tech offers learners a voice". The evolution or the looks of ICT has many implications for the academic establishments, wherever it's burning up serious knowledge and information. As numerous challenges are arising in education system, ICT will empower lecturers and learners creating it compelling for his or her literature, researchers, schoolings, trainings and achievements. ICT in education which incorporates numerous technologies like computers, internet, televisions, and therefore the whole digital world became terribly powerful tools within the education system that helps in increasing& strengthening the academic quality. However, the usage and impact of ICT on the learners, teachers and researchers have its own professionals & cons; in alternative words ICT faces opportunities & challenges globally. There's an unlimited distinction as compared of ancient practices of technologies in education & trendy technologies wherever it includes numerous ways and techniques in education like audios, visuals, e-learning, e-books, multimedia, etc. ICT in education offers a typical quality in gaining totally different skills and information. This analysis paper may be a study on ICT- info and Communication Technologies in education that helps to work out and highlight the impact, its opportunities and challenges as compared to ancient and current state of affairs of education system. The research worker has used qualitative methodology of analysis through secondary knowledge obtainable from numerous sources. Additional once content analysis the research worker can offer suggestions to beat the challenges and the way to reinforce the employment of ICT.

Keywords: ICT, Education, Opportunities, Challenges.

INTRODUCTION

ICT stands for Info and Communication Technology. Information refers to varied data obtained from differing sources like reading, research, study and plenty of a lot of ways in which. Communication refers to an act of transition of information from one supply to a different. Technology means the application of scientific knowledge for practical purposes in all factors. Information and Communication Technology (ICT) have extended to wider scope wherever education isn't an exception. ICT in education which has numerous technologies like computers, internet, televisions, and therefore the whole digital world became terribly powerful tools within the education system that helps in increasing& strengthening the tutorial quality. ICT will even create a strong contribution to teaching and learning the least bit stages and across all areas of the syllabus. ICT ought to have a good impact on all education establishments and within the teaching that takes place there. "The terribly expression info and Communication Technology has many ideas in it. It's not simply exploitation gadgets. The purpose of convergence is on what's being transacted through this medium.

LITERATURE REVIEW

The below review of literature has been covered few of the following aspects of ICTs in education and teaching – learning assessment for learners and educators

Papert (1980): The study focused on 'Children, computer and powerful idea'. The study also revealed the role of digital media in enabling the children to learn better with a constructivist learning environment.

Davis (1993): This study states that 'Tools for learning' it believes that there is no single magical formula for motivating students. Teacher's uses various teaching methods which go beyond the conventional classes that gain the learners' attention, motivate students to spend more time on learning activities with greater concentration, and engage them through production work.

According to Chris Dede (2005): Its states that "Rapid advances in information technology are reshaping the learning and teaching styles of many students and teachers in education system" This advances in technology which create new opportunities for higher education; emerging

Pelgrum and Voojt (2009): suggested the use of ICT is not about introducing a new tool in education, but the integration of ICT in educational practice has the potential to facilitate new pedagogical approaches and learner-centered educational practices. It gives a positive effects of ICT used in education.

Brosseuk (1998): The study was conducted on 'Using a data-base in the lower primary Classrooms'. It gave a clear view that when student use data bases and spread sheets it Leads to a real life context enhanced the teaching and learning in an enjoyable and Practical way, and developed students' general thinking processes and problem solving Skills. Students were enthusiastic and fascinated when using the electronic tools to solve Problems.

OBJECTIVES OF THE STUDY

1. To study the role & opportunities of ICTs in education.
2. To understand and analyze the challenges of ICTs in education
3. To provide suggestions in overcoming the challenges of ICT in education.

SCOPE OF STUDY

The researcher focuses majorly on technology-supported learning environments, they will interact students in learning method and may have a positive impact on student out comes in pedagogy as a result of that's the underlying driver of this study. The discussion specialize in ICT's impact on pedagogy students' characteristics of ICT's edges to students in their learning method and conjointly on lecturers and their teaching ways and associated challenges. Further, this section addresses the analysis objective, "to understand the strengths of ICT in pedagogy context and also the principle of using In this analysis paper the man of science had a qualitative approach of study concerning the ICT in Teaching and learning assessment (education). The impact of the ICT on learning will be approached in several ways in which.

METHODOLOGY

Sources of data collection

Secondary data: It majorly consists the information collected from various sources like books, websites, journals etc.

This paper will discuss the questions concerning about ICT and education. Here secondary data collections were done. The main research question concerned the challenges of ICTs in education. To know more about this future, several scenarios on future developments in education have been studied. The researcher has first studied the ICT and its impact in education as well as teaching and learning assessment and it benefits through Literature review.

Significance of ICT in Teaching-Learning Assessment

The ICT has modified the education state of affairs within the previous few decades by rising mutually of the foremost economical tools employed in the training method, by lecturers, leaners, and researchers in addition. Searching for matter on the far side the text books isn't any longer a challenge with relation to time and resources any longer. Integration of ICT has a very important significance within the learning perspective of teaching, creativity and construction of data, issues determination and talent development, additionally necessary for creating teaching and learning methods, additionally in analysis work.

The Uses of ICTs

Many variable uses of ICT in education are doable. These vary from exploitation ICT as tools to support typical ways in which of teaching to totally ICT-enabled courses that brings concerning a totally completely different manner of teaching. Below is a few proof of the impact of ICT on instructional achievements and on the manner ICT is employed in education. The past few researcher's read that the findings of the study offers associate immeasurable advantages to students, parents, policy manufacturers, planners of programmer, researchers, instructors and also the society generally. It helps to cultivate productive habit of this technique. Education policymakers and planners should first of all be clear concerning what instructional outcomes are being targeted. These broad goals ought to guide the selection of technologies to be used and their strategies of use. The potential of every technology varies in step with howeverit's used. There are alternative ways of technology to be employed in education like presentation, demonstration, practice, interaction, and collaboration. every of the various tools of ICTs are print, audio/video , radio and television broadcasts, computers and plenty of a lot of technologies brings out nice impact of those communication technologies on education. Web is wide used for presentation, demonstration, preparation. Ninetieth of the colleges, colleges, universities currentlyoffer the facilities of assorted technologies or goodcategorywithin the field of education. Students and lecturerseachhave

become a lot of assured and also the use of technology helps our teaching field to a good extent. Education systems are becoming developed and also the results have improvement in post ICT.

The impact of ICT in education and teaching and learning assessment ICT is evolving technologies and their effects are tough to isolate from their atmosphere. Today's generations look to possess a forceful impact on associate degree individual's intellectual development. As a result, it's probably that the speedy social group and technological changes will have an enormous impact on however students suppose and learn. Presently the social networking applications like blogs, wikis, and twitter and plenty of such social sites that are even unknown and is being obsessed by many folks, particularly by the youth. Lecture rooms of any establishments have to mirror what goes on around outside. Technology interacts with several variables, student preparation and motivation, however the scholar or educator uses technology, and the way well the atmosphere supports learning.... rather than raising what impact technology has on student learning; ask however one will incorporate the known principles concerning teaching and learning, exploitation technology as a tool for innovation. Now-a-days faculties, schools try to bridge the gap between lecture rooms and real-world eventualities, that has truly become one in all outstanding activity for the academics in education sectors. With this, ICT has intended the scholars, academicians, researchers, academics with their creativities, development of upper order essential thinking skills and drawback finding talents facilitate the event of deeper and richer information structures. One of study by the investigator at the University of Maryland on the impact of communication and technologies like cell phones, social media and also the net on Yankee school students, two hundred students were asked to provide up all media for one full day (The big apple Times, April 23, 2010). The higher than study found that when twenty four hours several of the scholars showed signs of withdrawal, desire to associate degree anxiety together with an inability to operate well while not their media and social links, that connects conjointly, connects to education still as alternative activities. This offers a transparent tread concerning the impact of technologies on today's youth. though this action analysis reveals that ICTs will empower learners still as academics and researchers, which offer a learning atmosphere that helps to deal with completely different learning designs, and foster the event of '21st century skills'. Overall ICT has been shown to completely influence on students learning once students explore technology still as in teachers-learning assessment. Students, teachers, academicians, researchers will use ICTs, no matter any locations a lot of often and with confidence. It offers impact on each effectiveness and engagement.

Findings were as follows

- From the study, it was found that complementary relationship exists between technology and constructivism. To create a constructivist framework, the technology has to be integrated with the classroom learning, the implementation of each one benefiting the other.
- In ICT with the help of various tools like colorful and attractive diagrams and graphics, charts, interesting and illustrative animations, along with appropriate sound effects, ICT provides multisensory stimulations and real-world experiences
- Due to ICT in education, new approach of pedagogical which refers to the interactions between teachers, students, and the learning environment and the learning tasks that include how teachers and learners relate together as well as the instructional and systematic approaches are being implemented in the classroom. This approach uses problem-based learning provides vast opportunities for educators to employ ICT tools to support and enhance teaching and learning.
- Now-a-days classroom environment is moved from teacher-centered to student-centered to blend learning approach which makes learners more responsive, ICT usage are inclusive of smart boards, virtual learning, computers, the Internet, and electronic delivery systems such as audios, PDAs, televisions, and projectors among others.
- ICT is growing rapidly not only in developed countries but also in developing countries like rural areas where technologies are being used at every level in respect of education, required training are being provided to learners and educators, researchers as well.

CONCLUSION

Education is basically termed as one of the most and basic requirements on which great nations are built. It is a kind of an investment that takes its time to pay dividends but, generates the highest returns when compared to any other avenues where resources can be committed. In today's globalized era and modern generation of ICT, the whole society are enlightened to accept new ideas, show creativity, develop critical thinking and above all, enable themselves to absorb surrounding information for informed decision-making at any later stage in life,

have the ability to adopt various technologies, in regard to this computer studies or ICT becomes immensely important in day-to-day basis.

It is very crucial and can be even impossible to figure out the future learning environments that are not supported, by Information and Communication Technologies (ICT) in either of the ways.

When looking at the current scenario the spreading of ICT and its uses more widely done in modern societies. Especially by the young the so-called digital generation. Will effect on the complete learning process today and in the future. It really bridges the gap between classrooms and real-world scenarios. It has become one of the most substantial driving forces for promoting economic growth in the economy and also in other aspects.

SUGGESTIONS

- ICTs in education should be more implemented in a very constructive manner where it becomes easy for the learners and teachers to clear the obstacles where an institution faces due to lack development.
- Government should make strategies to support ICTs in education and teaching- learning assessment especially for developing countries and rural areas.
- New theories should be invented for teaching- learning process in digital era.
- In order to bridge the gap, it is necessary to focus on improving four aspects of ICT - access, usage, economic impact and social impact.
- There should be proper resources for mobilization of funds for the upliftment of ICT education in rural areas.

SCOPE FOR FURTHER RESEARCH

The study also has the potential to investigate the aspects of modernized technology to fit the digital world. The study will have an advantage to explore the various learning phases of ICT related to education. The technical and educational aspects can be further researched to overcome the challenges faced due to the implementation of ICT.

LIMITATIONS

The study has been conducted by using secondary data sources. The findings developed through the study might reveal variations due to the different methods of ICT in various phases learning and teaching.

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WORKFORCE DIVERSITY- A CHALLENGE FOR HUMAN RESOURCE MANAGEMENT

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ABSTRACT

Organizations are becoming increasingly diverse with respect to their workforce. It includes recognizing, understanding and accepting individual differences irrespective of their gender, caste, age, ethnicity, physical ability, sexual orientation, and so on. If everyone in the organization is exactly same as one another, then no diversity would ever exist. Every individual is unique in their own way. Qualities which differ one individual from another known as "Dimensions" can be of two types: PRIMARY DIMENSIONS and SECONDARY DIMENSIONS. Primary dimensions such as age, gender, etc. describes the main differences between various individuals. These primary dimensions give the most impact on initial encounters and can be easily noticed. The secondary dimensions such as religion, education, geographical location, income, etc. are those qualities which cannot be easily noticed. These qualities can only be noticed after some interactions between two. Diversity can result into a problem for an organization but can also be a solution. In recent years, increasing and improving workplace diversity has become an important issue for management for recognizing how workplace is changing. This is still a challenge for organizations, and for this managers tend to learn managerial skills which are needed in a multicultural environment. For some business leaders and managers point of view, diversity is a big challenge to them although it knows no organizational boundaries and has no limitations.

INTRODUCTION

Earlier, organizations were not concerned about the effect of culture or the diversity of employees on their work. Due to Globalization, they came to know that the culture, customs, castes, environment from which the employees belong, gives a huge impact on their work. So, organizations, now days, are gradually affirming their strategic role. Need of highly qualified managers is been increasing day- by -day, as many organizations had globalised their operations. There are employees from different cultural diversities, different environment, and various economic conditions. Effects of cultural diversity on organizational behavior are complex and powerful. Managers are to be especially skilled so that they could tackle the situations.

Organizational behavior and employee's behavior, they both are directly proportional. If the employees are been provided with the best they deserve and they are satisfied with the organization, then they will perform better and then ultimately will affect the organizational goals. Every organization wants to make their workers to perform more efficiently to accomplish the final goals, and for this they have been providing the good and healthy environment and an organization with multicultural diversity.

Many businesses have realized that a diversity program will help them in accomplishing their strategic roles. To understand and to implicate on the ideas of a multi-culture environment, organization as well as employees should take its advantages and disadvantages into consideration. Organizations may want to jump immediately into a design and implementation, or launch an initiative for a completely new diversity program.

In this paper, will be examining the ways by which managers and employees can learn about diversity, understand it and respect it on a day -to-day basis on dealing with people from other diverse backgrounds.

OBJECTIVES OF THIS STUDY

- To examine the relationship between employee perceptions of diversity, and organization's perceived performance.
- To examine how the perception of diversity varies among employees, who are from different diversity backgrounds.
- To make the people learn more about the importance of workforce diversity.
- To spread awareness in all staffs with respect to the rights and responsibilities with regards to the fairness and equality for all aspects of diversity.
- To make organizations and employees familiar with this thing as many are there who are not aware of thing called workforce diversity.

HOW TO SUCCESSFULLY BUILD A DIVERSE?

Key to successfully building a diverse: High-quality workforce for tomorrow begins today – Strong Leadership Commitment and knowledge of the state of the business today.

Successful diversity initiatives depend on first positioning the business. It is very important to see a realistic picture of the future one want to achieve. For this organization must thoroughly understand its current demographic status. Once it is been understood, they can analyze workforce trends and projections. This will allow the organization to exhibit a successful planning strategy. It also allows managers to be focused on the goals and the areas to produce a high performance. By planning these things will show the correct picture of how much the current workforce will assist in meeting tomorrow's goal.

- Encourage leadership skills for planning and performing which will create an environment of different values.
- Ensuring that senior managers are directly involved in planning and conducting diversity activities.
- Training the employees in multicultural communication to know differences in the communication across cultures.
- Information from one another should be assessed and integrated into the existing workforce. It can be then used to target the future opportunities for hiring and retentions.

By following these key points, every organization would be able to build a successful diverse environment.

WORKFORCE Workforce or labour force is a labour pool in employment. It is usually used to describe those employees who are working for any company or industry. They can also apply in any other city, country or other geographical region. Within an organization, its value is been labeled as "workforce in place".

DIVERSITY Every individual is unique and different in their own way. They are recognized by their individual differences. These differences can be on the basis of age, gender, religion, caste, language, or any other factor.

DIMENSIONS OF WORKPLACE DIVERSITY

When we think of workplace diversity, the first image comes up in our mind is an organization having people of different racial or ethnic backgrounds, or perhaps an even balance of men and women. But, there are so many other things about diversity other than what we think. They are:

- **PRIMARY DIMENSIONS:** It shows the mains differences among the individuals. These include Age, Gender, Height, etc. which are easily noticeable. These differences also give the most impact on the initial times and also act as filters for distinguishing between one another.
- **SECONDARY DIMENSIONS:** This shows those differences which are not been noticed at once, and can also change with the time. These include caste, religion, community, language, education, geographical location, etc. These qualities can be noticed just after some interactions among the individuals.

IMPORTANCE OF WORKFORCE DIVERSITY

- It drives economic growth.
- A diverse workforce can contribute a great share in the consumer market.
- It helps business to avoid employee turnover cost.
- It promotes more creative and innovative workforce.
- It acts as a key aspect of entrepreneurialism.
- It also creates a competitive economy in a globalized world.

HUMAN RESOURCE MANAGEMENT

HUMAN- it refers to the skilled manpower in an organization.

RESOURCE- it is a limited or scarce factor.

MANAGEMENT –it means to make out an ultimate use of such limited factor so as to meet the final organizational goals.

In every organization, there is a strategic approach to the effective management of people, so that they could help the business with competitive advantage. It is been designed to maximize employee performance in service. It is the process of recruiting, selecting, training and development, motivating employees, welfare and healthy measures in compliance with labour laws of the land.

HRM includes

- It involves development and maintenance of human resources.
- It is a multidisciplinary subject. It includes study of psychology, communication, economics and sociology.
- Helps to achieve individual as well as organizational goals.
- Involves team spirit and team work.

Behind working of any organization, there is an intellectual human mind, efforts and so many man hours. No business can exhibit its working without the help of human minds. Human beings are the core component of every organization. They are the fundamental resource of making or constructing anything. Every organization desire to hire skillful and competent people to make their organization best.

There are five Ms of management i.e. men, money, materials, machine and methods. Human Resource Management deals with the first M, which is Men. It also been seen that among these five Ms, the first M is not so easy to manage. Human beings are very complicated, having different needs, behavior, moods, reactions, etc. They are totally different from the other 4 Ms. Men have the power to manipulate other Ms. Rest of the Ms is lifeless and not has the power to think, react and decide what is good for them.

HUMAN RESOURCE MANAGEMENT AND WORKFORCE DIVERSITY

Workforce diversity is been considered as the biggest and most difficult challenge for the HRM. To study the people, their needs, wants, comfort zone, working patterns and reactions towards the organizational goals is not easy. For this there has to be an especially skilled team who is well trained and know how to treat and tackle the workforce. Earlier, HRM was only supposed to deal with the hiring and recruiting the man force. But, in recent years, HRM has become the most important strategic approach of the management. It handles all the aspect of the employees and is meant for proper utilization of available skilled workforce.

The best example in present situation is construction industry. They are facing a serious problem of shortage of skilled workers. It is been expected that is will triple in the next decade by 30%, and this will negatively impact on overall productivity of the respective industry. Today, many experts claim that machines and technology are been now a day's replaced by humans. However, machines and technologies are the result of human minds, and they need to be operated by humans. That is why; companies are always in the search for talented and skilled workers for continuous and effective working of the organization.

Therefore, humans are considered as the most important asset of the organization. To maintain the balance between the human resource and the other resources, HRM have to face many challenges.

CHALLENGES FOR HUMAN RESOURCE MANAGEMENT

- Increasing cut-throat competition.
- Globalization.
- Technological changes.
- Changes in political and legal issues.
- Mobility in professional personal
- Revolution in information technology.

WAYS TO OVERCOME THE CHALLENGES

- Train the employees about the cross culture, so that they could know about the other culture people.
- HRM has to motivate the personal so that they do not change the organization more frequently.
- To reduce the professional mobility, there must be a proper evaluation system and proper career development plans.
- HRM must ensure that personal and managers are personally communicated.
- A proper communication chain should be established.
- As economy is changing very rapidly, HRM should setup their plans and update them according to the changes in the economy.
- One should encourage the point of view of every individual, and respect everybody's openness and opinion.

- HRM should try to involve as many employees as possible in the formulation of policies and targets.
- Technology is advancing every second, and it often requires some additional trained employees. This creates another challenge for human resource managers. They have to first determine what training is to be provided and then implementing the training measures. And then also ensuring that each and every employee should learn and keep up the technical changes.

FINDINGS AND CONCLUSIONS

Form the above study, it can be concluded that HR practices is becoming more challenging day-by-day. They have to face many problems like attraction of employees, dealing with multicultural people, analyzing the behavior, managing workforce diversity, technological changes and information changes. To overcome these challenges training in respect of cross culture and technological and information changes is necessary of HR people. To reduce these challenges and maintaining the relationship with the personal, HR managers have to motivate them with monetary and non-monetary techniques.

Workforce diversity represents both challenges and befits for the organization. Now, businesses know the value of workforce diversity and are now realizing the need of workforce diversity. At what extent the managers are recognizing diversity and determining its advantages and disadvantages defines their approach of managing the workforce diversity. No organization can survive in the world of globalization, without managing the workforce diversity. Organizations are still learning and been stuck on the problem of getting people to value the diversity and haven't determined the ways to utilize and exploit it. It takes time to create a diverse workforce and reaping the benefits. As there are no immediate result, but then also managers should not lose focus and interest in creating a diverse workforce.

RESEARCH DESIGN

For completing this review of literature, secondary data is been used like, newspapers, magazines, internet, several research papers, journals, blogs. This study is been done in descriptive manner.

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**A STUDY ON WORK-LIFE BALANCE OF WOMEN EMPLOYED IN TEACHING PROFESSION
(JUNIOR AND DEGREE COLLEGE - MUMBAI SUBURBS)**

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ABSTRACT

In India changing societal attitudes, inflation and rising educational levels made more women than ever before to drive into the paid workforce. The Indian women, who were confined only to the socially acceptable jobs like banks, teaching, nursing etc., are now stepping into various sectors.

Irrespective of education, income and employment, professional women in India are still doing three jobs - office, housework and child care. Professional women hardly find space for themselves to accomplish basic necessity of life like adequate sleep, exercise and a healthy diet. Domestic pressure, stress at work, child mental or physical distress due to lack of attention adds on to the psychological effect among working mothers. They also find it difficult to make up for the loss of experience and hence maternity leave can cause a major setback to their career advancement and personal growth.

The purpose is to arrive at suggestions and recommendations to improve the work life balance among women employees in order to increase the efficiency level.

To know how working female teachers manage their work life and family life. To gain an insight into current working time policies and practices, as well as work-life balance issues in private colleges of Mumbai, India.

To understand the stress level of working female teachers at work place

Keywords: Work-Life Balance, Work Family Conflict and Family Work Conflict, Women in various roles, Career Advancement, Work Stress, Child care

INTRODUCTION

Liberalisation, extending Privatisation and Globalisation policy has created a drastic change in an Indian economy in the past twenty years. More women are venturing into areas that were traditionally dominated by men. Women have now become a visible part of the workforce. Work Life Balance of Women employee has become an important subject since the women are equally sharing the earning responsibility for the betterment of their family. Women are getting into jobs and they continue to work even after marriage. A married woman has more responsibility than man in taking care of young children and family. The working women efficiently overcome difficult situations by their commitment and perseverance. The participation of women in income generation activities lends them to satisfy their home needs to a greater extent. This paper aims to review the existing literature on Work Life Balance of Women Employee with an identification of various characteristics towards the achievement of WLB.

WHAT IS WORK LIFE BALANCE?

Work-life balance refers to the level to which an employee experiences feeling fulfilled and having his or her needs met in both work and non-work aspects of life. Through experiencing greater work-life balance, individuals details feeling better in general (e.g., greater job and life satisfaction) and tend to behave in favourable ways (e.g., lower turnover and absenteeism).

Need for ensuring work-life balance of female employees

- (a) Being able to effectively manage multiple responsibilities at home, work and in the community without guilt or regret.
- (b) Being part of a supportive workplace that values and trusts staff.
- (c) A good quality of life
- (d) An enjoyable work life and career progression

FAMILY PURPOSE OF THE STUDY

This project is based on the work life balance prevailing among women employees working in private colleges in the city of Mumbai. An attempt is made to analyse the company's performance through the employees' satisfaction about the work life balance. The purpose was to arrive at suggestions and recommendations to improve the work life balance among women employees in order to increase the efficiency level.

STATEMENT OF THE PROBLEM

One first needs to understand about work life imbalance, as with the understanding of the origin, causes and effects of this imbalance, the balancing act becomes easier. Due to this work pressure it becomes exceedingly difficult to maintain a family life. This study aims at identifying the level of work life balance among women faculties in private colleges in Mumbai, India.

OBJECTIVES OF THE STUDY

- (1) To know how working female teachers manage their work life and family life.
- (2) To gain an insight into current working time policies and practices, as well as work-life balance issues in private colleges of Mumbai, India.
- (3) To understand the stress level of working female teachers at work place.
- (4) To give recommendations to the Management to improve work life balance among women employees working in private colleges.

STATEMENT OF HYPOTHESIS

- (1) Null Hypothesis Ho: There is no significant difference between women taking work home and women working more than agreed number of hours in private sector colleges.
- (2) Alternative Hypothesis H1: There is significant difference between Women taking work home and women working more than agreed number of hours in private sector colleges.

LITERATURE REVIEW

Work Life Balance means the competence to schedule the hours of an individual Professional and Personal life so as to lead a healthy and peaceful life. It emphasizes the values, attitudes and beliefs of women regarding their age to work in organizing and balancing their work and personal life. (K. Santhana Lakshmi and S. Sujatha Gopinath, March 2013). The following variables influencing the experience of WLB were identified while reviewing the various literatures.

Krishna Reddy and Vranda (2010) discuss the issues of Family and Work Conflict and Work Family Conflict are more likely to exert negative influences in the family domain, resulting in lower life satisfaction and greater internal conflict within the family variables impact the experience of WFC and FWC.

While the conflict between work and family may be inevitable, researchers such as Friedman and Greenhaus (2000) suggest alternative methods for reducing the stress. For example, more autonomy in the workplace and networking with peers can increase the quality of work life.

RESEARCH METHODOLOGY

The present research is conclusive, descriptive and based on single-cross sectional design. Quantitative data was generated to test the research hypothesis.

In order to collect data on the dimensions of the study, a research instrument was designed. The study was conducted on private college's teachers in Mumbai with the sample size 120. At colleges level data was collected from professional courses, as college's faculty at professional level. Appropriate design gains an insight into the "how" and "why" of teachers attaining work-life balance. A research instrument designed for the purpose was personally administered to the teachers through personal interview and survey through questionnaire.

FINDINGS & CONCLUSIONS OF THE STUDY

- 1) 84% of the respondents feel that they are able to achieve work-life balance to a great extent
- 2) 87% of the female teachers are satisfied with the working hours
- 3) Maximum female teachers i.e., 57% occasionally work on holidays or overtime
- 4) 77% of the female teachers sometimes miss out their family and friends time
- 5) 83% of the female teachers state that their institution doesn't take initiatives of employee work life balance
- 6) 63% of the female teachers sometimes feel tired and depressed due to work
- 7) 73% of female teachers agree with the fact that the institution involves family members in at reward functions
- 8) 53% of the female teachers are happy with the amount time spent on working

- 9) 70% of the female teachers say that their institution's management is approachable.
- 10) All the female teachers state that they are provided with health care programs by the institution but not any other facilities.
- 11) Maximum female teachers devote more of their time to job related activities than that of the family.

CONCLUSION

With dual career couples widely prevalent in this modern era, there is a need for systematic research into the nature of work-life conflict and further insight is required into ways by which the work-home interface can be more effectively managed. Considerably more research is needed to gain additional insight into the meaning and consequences of work-family balance. This study was able to measure employees' work-life balance and found weekly hours of work and the stress associated with work were very important determinants of employees' work-life balance, alongside their occupations, age and caring responsibilities. Conflicts in work-life balance of working women affects their health who report more stress, headaches, muscle tension, weight gain and depress than their male counterparts. Juggling between the obligations towards the families and expectations of the organisation and constant struggle to maintain a balance between work and family can have serious implications on the life of an individual by affecting their well-being and overall quality of life. There is a widespread demand from employees for the right to balance work and home life in today's busy world where finding time for oneself seems impossible. Health and wellness programs can, for sure help working women in balancing their personal and professional life. But they alone cannot be the answer to addressing the problems of imbalance. The problems and difficulties of women are multi-dimensional as evident from the literature reviewed; therefore, they require further probing to help working women in balancing their work and family life. Indeed, women in the work place can be blessings only when both family as well as organization will receive proper service from them and they will be able to contribute to both family as well as organization only when the origination will ensure flexible working hours (roistered days off and family friendly starting and finishing times), transport facility, residential facility, child care center, flexible work arrangements/ job sharing, reduced working hours and workload and child.

To conclude, there can be no debate on the fact that work life balance is essential and important for a stress free and fulfilling life, especially for a woman. Juggling between the burden, obligations and responsibilities of work and multiple family roles, balancing becomes an uphill and an ongoing task for teaching professionals, as much as, if not more than any other working woman. The findings of the study can justify its utility since knowing the faculty members precisely and reaching out to them in the effective way, is the key to minimize stress. The study can also direct employers of institution to evolve flexible work strategies and provide better working conditions which will help in overcoming stress in faculty members to some extent.

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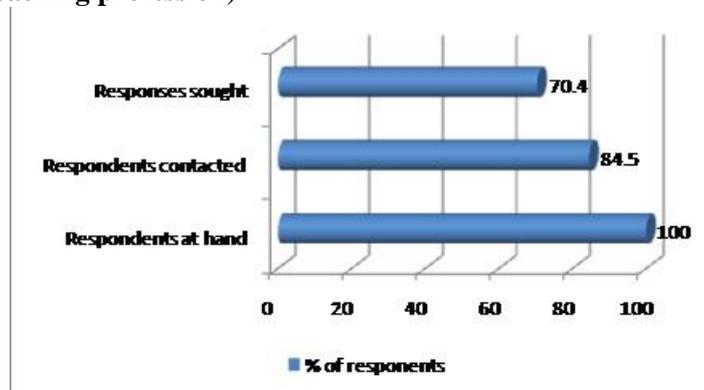
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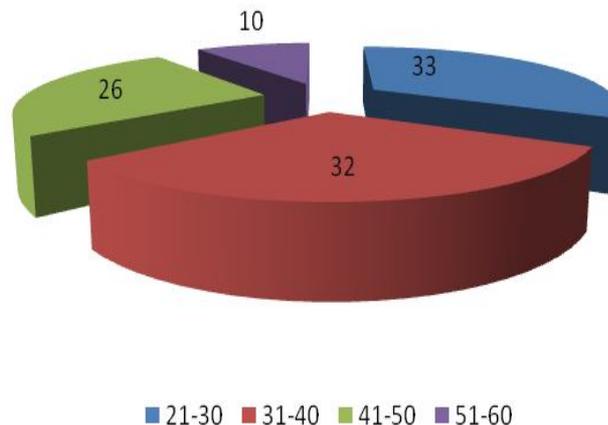
ANNEXURE

Following are the observations obtained through closed ended questionnaire distributed to collect specific responses from the respondents.

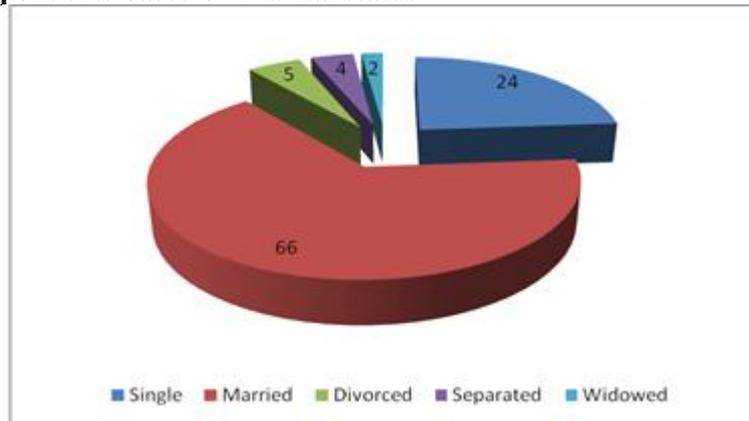
1) Figure showing Sample selection (Women working in teaching profession)



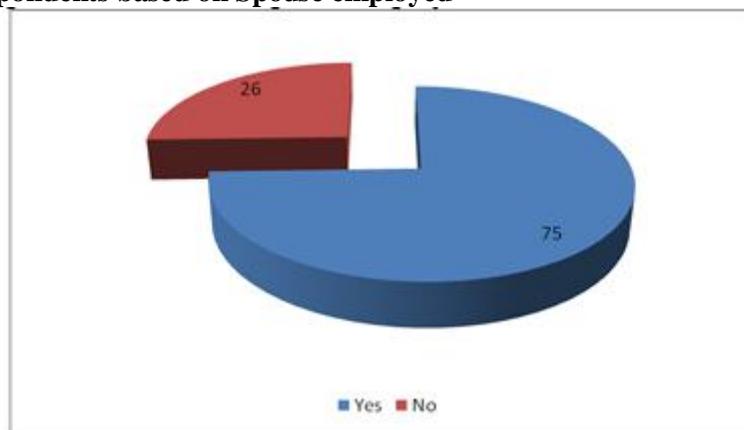
2) Distribution of respondents based on Age



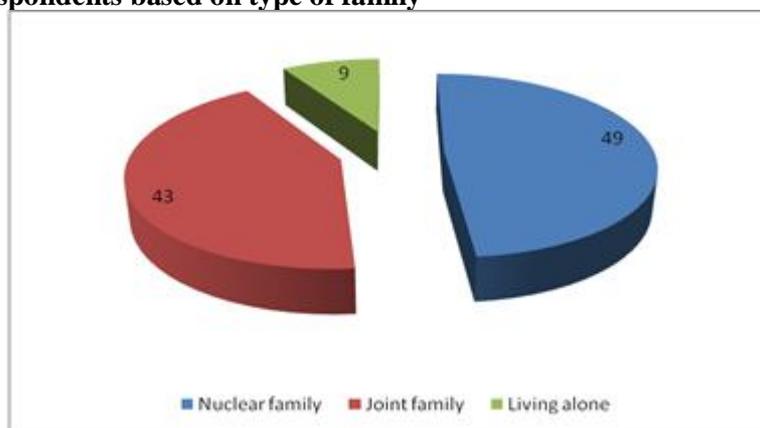
3) Distribution of respondents based on Marital status



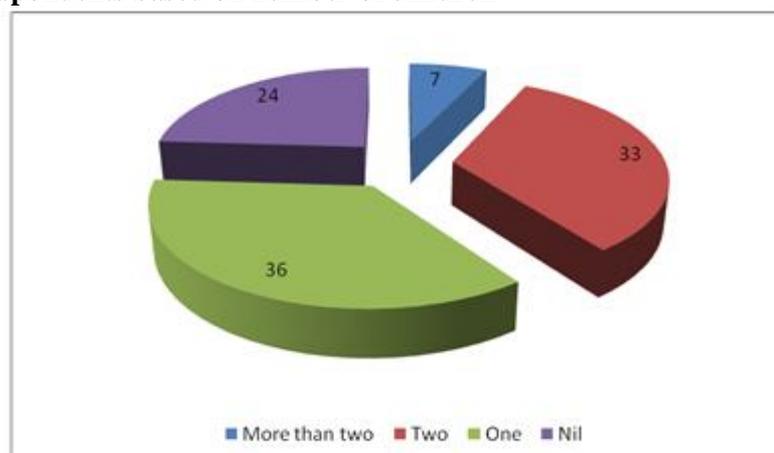
4) Distribution of respondents based on Spouse employed



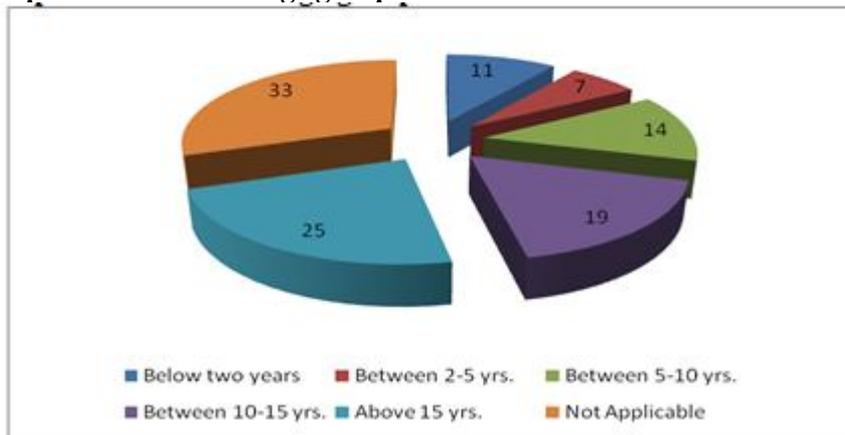
5) Distribution of respondents based on type of family



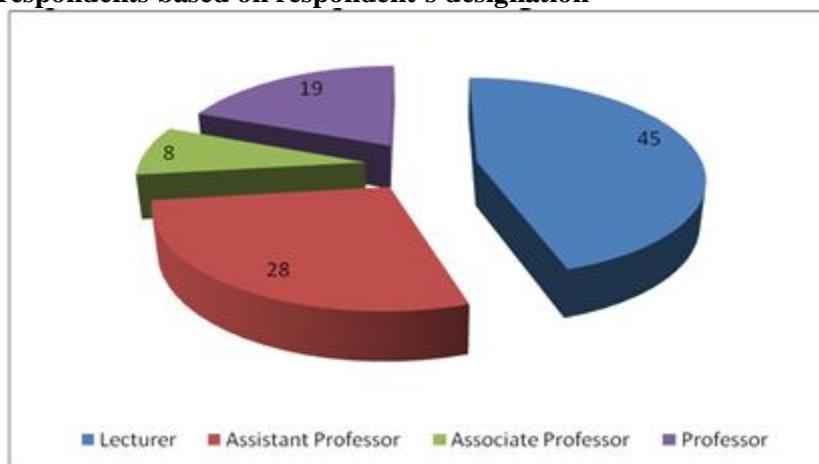
6) Distribution of respondents based on number of children



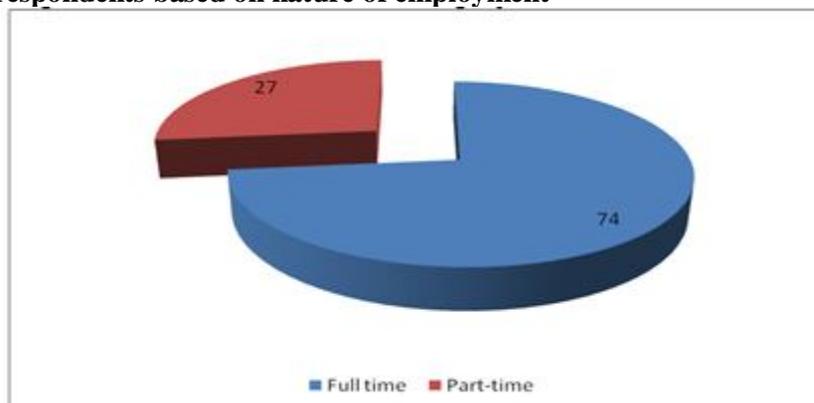
7) Distribution of respondents based on age group of children-



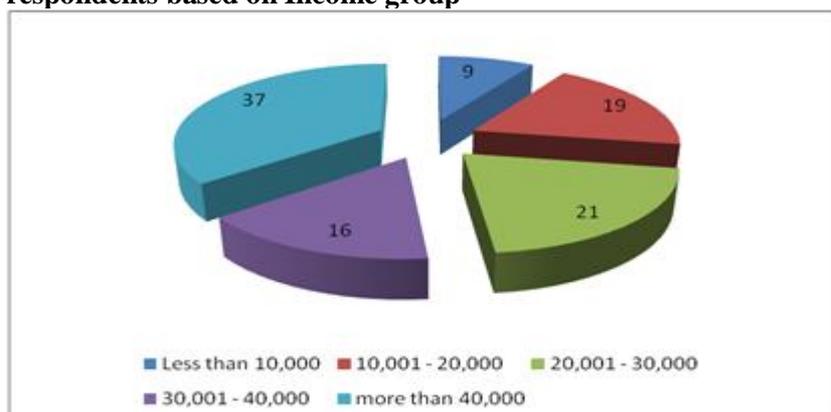
8) Distribution of respondents based on respondent's designation



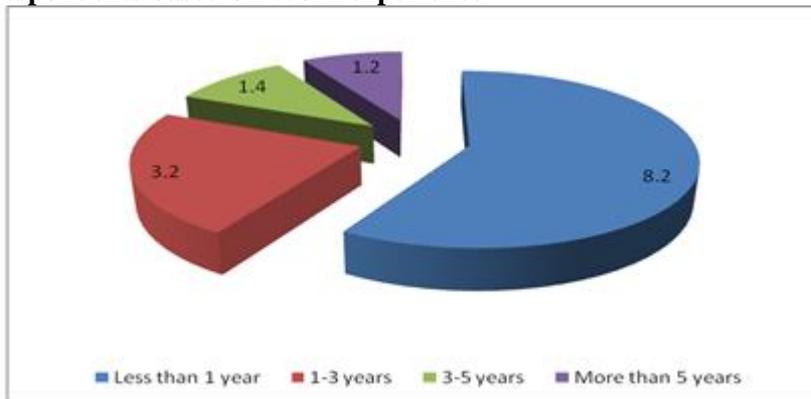
9) Distribution of respondents based on nature of employment



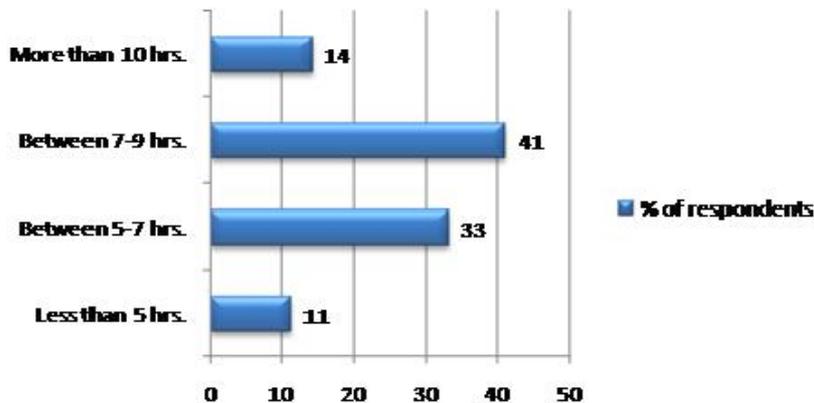
10) Distribution of respondents based on Income group



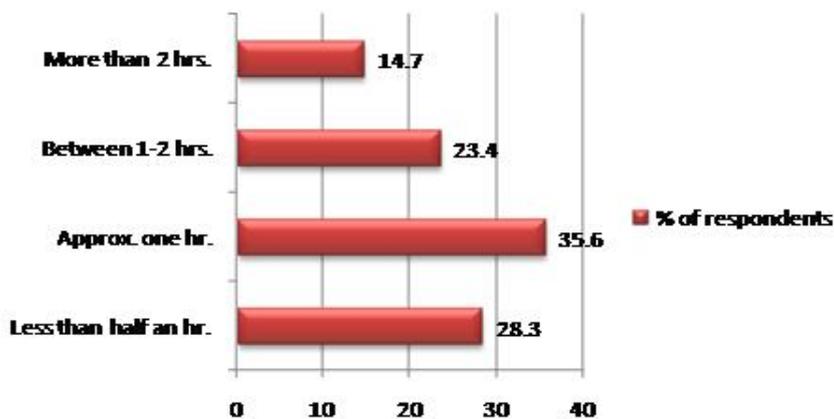
11) Distribution of respondents based on Work experience



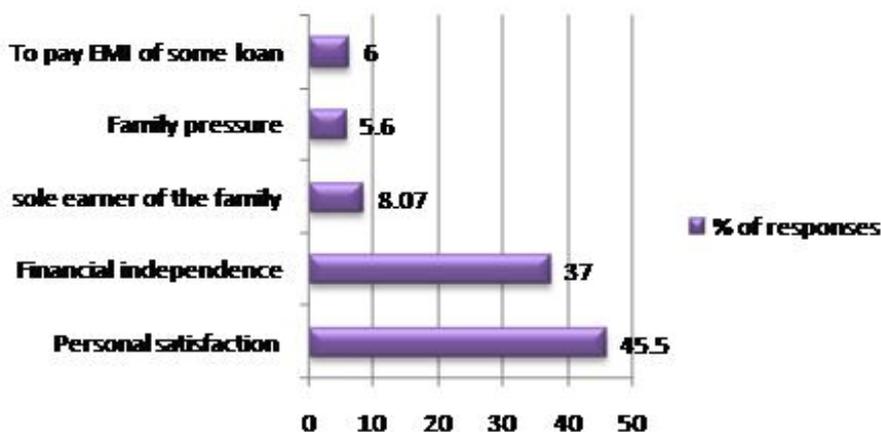
12) How many hours do you work in a day?



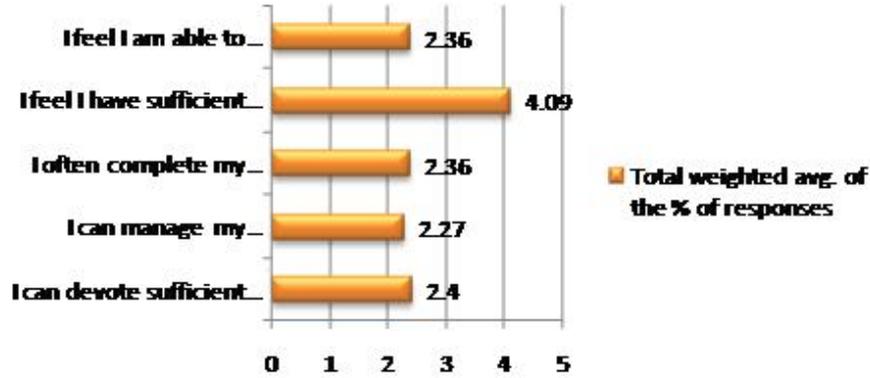
13) How many hours do you spend travelling to the workplace



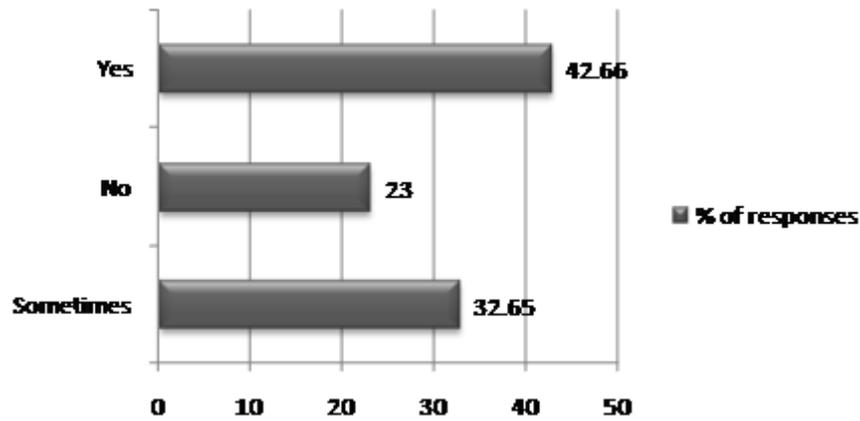
14) Which factors motivate you to work?



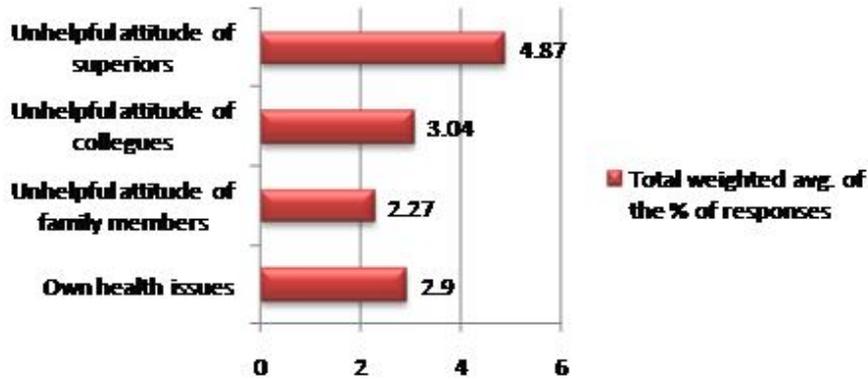
15) Mark the most appropriate option indicating work-life balance on the scale of 1-5 for the statements given below.



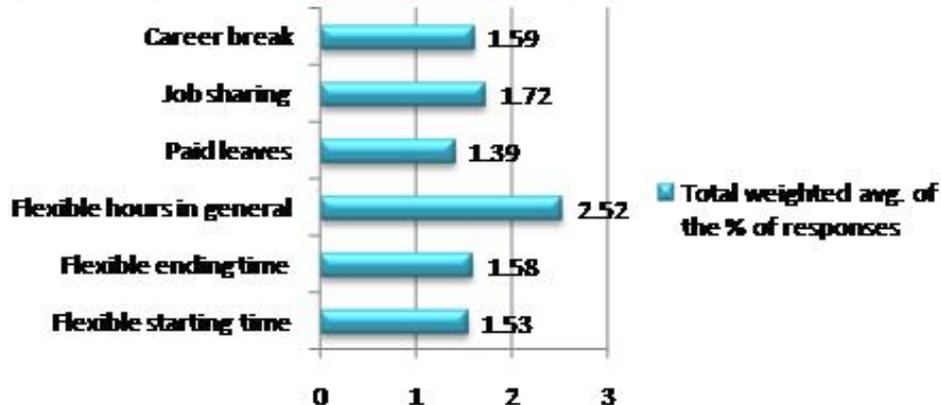
16) Do you have to complete all your household work by yourself?



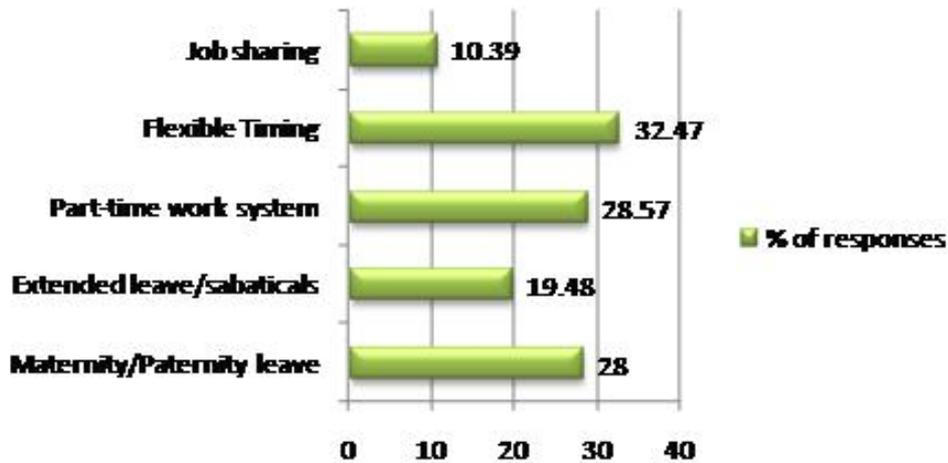
17) Do you experience following hindrances in work-life balance?



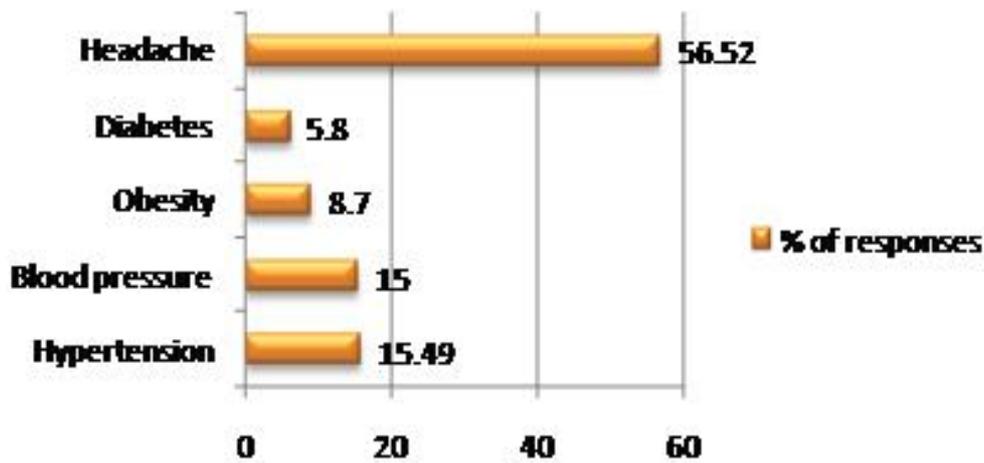
18) Does your organization provide you with following work provisions?



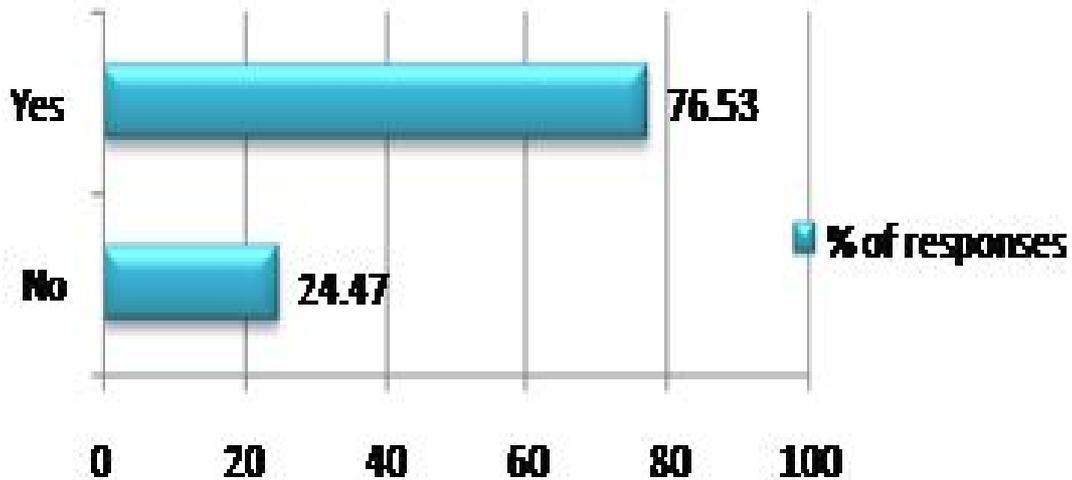
19) Have you taken advantage of any of the following policies of the organisation?



20) Do you suffer from any disorders related stress caused by work pressure?



21) Does your professional life has any negative impact on your personal life?



Hypotheses testing

Statement of hypotheses

- 1) Null Hypothesis H_0 : There is no significant difference between Women taking work home and women working more than agreed number of hours in private colleges.
- 2) Alternative Hypothesis: H_1 There is significant difference between Women taking work home and women working more than agreed number of hours in private colleges.

CALCULATION OF TEST STATISTIC FOR PRIVATE COLLEGES

Formula	Observed Frequencies				
	Particulars	Never	Generally	Always	Total
	Taking work home	31	23	6	60
	Working more than agreed work-hours	13	35	12	60
	Total	44	58	18	120
	Expected Frequencies				
	Particulars	Never	Generally	Always	Total
	Taking work home	22	29	9	60
	Working more than agreed work-hours	22	29	9	60
	Total	44	58	18	120
O - E	Taking work home	9	-6	-3	
O - E	Working more than agreed work-hours	-9	6	3	
(O - E) ²	Taking work home	81	36	9	
(O - E) ²	Working more than agreed work-hours	81	36	9	
$\chi^2 = \sum \frac{(O - E)^2}{E}$		3.68181	1.241379	1	
$\chi^2 = \sum \frac{(O - E)^2}{E}$		3.68181	1.241379	1	
Chi-square		11.8462			

Level of Significance: $\alpha = 0.05$.

Degree of Freedom: $(R-1) (C-1) = 2 * 1 = 2$

Critical Value: The table value for χ^2 at $\alpha = 0.05$ for 2 d.o.f is 5.991.

EMPIRICAL STUDY OF IMPACT OF NON PERFORMING ASSETS ON PROFITABILITY OF THE BANKS

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Bal Bharati College

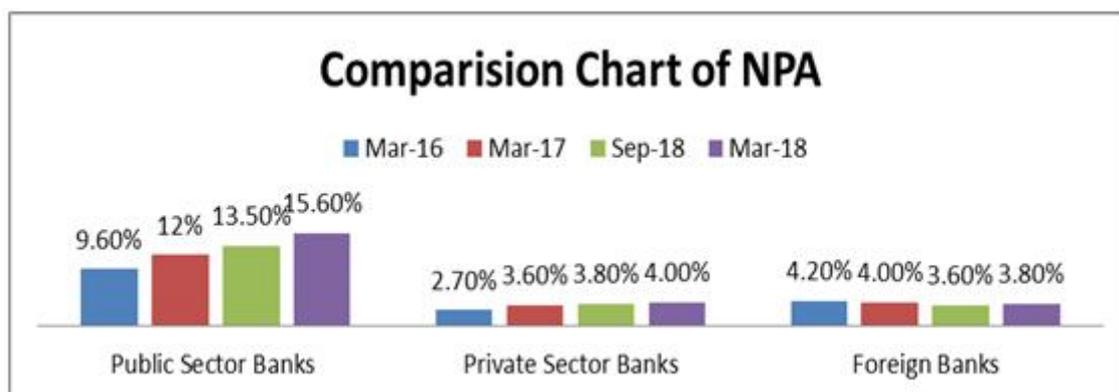
ABSTRACT

Non-performing Asset is an important parameter in the analysis of financial performance of a bank as it results in decreasing margin and higher provisioning requirements for doubtful debts. An asset which ceases to generate income for the bank is called Non-Performing Asset. The best indicator for the health of the banking industry in a country is its level of Non-performing assets (NPAs). It reflects the performance of banks. NPAs in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. The paper mainly focuses on the status of current NPA level in banks. The paper deals with mainly the private sector banks and public sector bank's NPA comparison and also studies its impact on profitability of these Banks. This paper basically deals with the trends of NPA in banking industry, the factors that mainly contribute to NPA raising in the banking industry and also provides some suggestions on how to overcome this burden of NPA on banking industry. This is a descriptive study which is based on the financial statements collected from bank's official websites and the NPA data collected from the Reserve Bank of India website. Tools used in the research are Coefficient of Correlation and other statistics.

1.1 INTRODUCTION

The non-performing assets are considered as an important parameter to judge the performance and financial health of banks. The level of NPA is one of the drivers of financial stability and growth of the banking sector. A non-performing assets is defined as a credit facility in respect of which the interest and / or installment of bond finance principal has remained past due for a specified period of time. NPA is used by financial institutions that refer to loan that are in jeopardy of default. Non-performing asset is one of the most severe plaguing the Indian Banking sector posing questions over the stability of Indian Banking System.

As per RBI Report, in 2017-18, public sector banks accounted for NPAs worth almost Rs 9 lakh crore. In sharp contrast, private banks accounted for just 1.3 trillion of NPAs while foreign banks accounted for barely Rs 138 billion. As a result, in 2017-18, you have Public Sector Banks accounting for 14.6% of gross NPAs, while private banks registered 4.7% and foreign banks 3.8%. Collectively, all scheduled commercial banks accounted for gross NPAs of 11.2%.



(Source: Data RBI website)

The chart above can explain the terrible state of public sector banks (PSBs) compared to private and foreign banks. Current capital adequacy norms require banks to have at least one-tenth of their advances as owned funds (share capital plus reserves). With gross NPAs hovering at 11.2%, it is quite clear that the banking sector has eroded its own capital.

Punjab National Bank, a public sector bank had recently been highlighted regarding the loan worth ₹ 14,356.84 crore (US\$ 2.1 billion) issued by its Brady House branch in Fort, Mumbai to Nirav Modi, making Punjab National Bank liable for the amount. The bank recently recovered Rs. 60 crore from disposing some of Modi's assets in the US. This was the major reason for increased in the public sector banks NPA level.

ICICI Bank granted a Rs 3,250 crore loan to Videocon Industries in 2012 mainly due to the business relations between Deepak Kochhar and the Videocon Group. The Videocon loan had later turned a non-performing asset.

1.2 RESEARCH METHODOLOGY

This is a Descriptive research based on the secondary data published by various agencies and organizations. For the study one public sector bank (Punjab National Bank) and one private sector bank (ICICI Bank) has been taken. The Data has been collected from RBI official website and the bank's annual reports.

1.2.1 DATA COLLECTION

The present study is mainly based on secondary data. The required data were collected from the annual reports of the Banks through their websites and from Reserve Bank of India's official website and reports. For the Study we have taken data from last 6 financial years.

1.2.2 OBJECTIVE

- To find out trend in NPA level.
- To find out the factors that contributes to NPA.
- To measure the impact of NPA on profitability
- To analyze NPA to Advances Ratio.

1.2.3 HYPOTHESIS

- Null Hypothesis (Ho) -There is no relationship of NPA with the profit of the Bank.
- Alternative Hypothesis(H1)- There is a relationship between profit and NBA of the Bank.

1.3 IMPACT OF NPA

1.3.1 Profitability: NPA means booking of money in terms of bad assets, which occurred due to wrong choice of client. Because of the money getting blocked the prodigality of bank decrease not only by the amount NPA but also NPA lead to opportunity cost as that much of profit invested in some return earning project/assets. Another impact of reduction in profitability is low ROI (Return on Investment), which adversely affect current earnings of bank.

1.3.2 Liquidity: Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for short period of time which lead to additional cost to the company. Difficulty in operating the functions of bank is another cause of NPA due to lack of money, routine payments and dues.

1.3.3 Involvement of Management: Time and efforts of management is another indirect cost which bank has to bear due to NPA. Time and efforts of management in handling and managing NPA would have diverted to some fruitful activities, which would have given good returns. Now days bank have special employees to deal and handle NPAs, which is additional cost to the bank.

1.3.4 Credit Loss: Bank is facing problem of NPA then it adversely affect the value of bank in terms of market credit. It will lose its goodwill and brand image and credit which have negative impact to the people who are pulling their money in the bank.

1.4 DATA ANALYSIS AND INTERPRETATION

To test the impact of NPA on profitability, two banks has been taken for the study. One Public Limited bank i.e. Punjab National Bank and another is a Private Limited Bank i.e. ICICI bank. The two banks has been analyzed separately.

1.4.1 Punjab National Bank

Table-1: Profit and NPA data of Punjab National Bank (Amt in Cr.)

YEAR	Gross Profit	Net Profit	Advances	Gross NPA	Advances to NPA Ratio (%)
2012	30,050.63	4,884.20	2,93,774.76	8,719.62	2.97%
2013	33,558.58	4,747.67	3,08,725.21	13,465.79	4.36%
2014	31,767.79	3,342.57	3,49,269.13	18,880.06	5.41%
2015	33,717.04	3,061.58	3,80,534.40	25,694.86	6.75%
2016	26,374.69	-3,974.39	4,12,325.80	55,818.33	13.54%
2017	34,294.36	1,324.80	419493	55,370	13.20%
2018	13,498.28	-12,282.82	433735	86,620	19.97%

It has been seen from the above chart that there is a drastic decline in the profitability of the bank over last 7 years. Even it has been observed that the gross NPA has terribly increased in 2018 as compared to 2012. Even Being a public limited bank, the advances to NPA ratio is disturbing in PNB. The same has increased to 2.97 % in 2012 to 19.97% in 2018. The loan given to Diamond men Nirav Modi has actually eroded the profit of the bank. In FY 2018, the bank has recorded the huge losses of around 12,282 crores.

To know the relationship with NPA and profit we have calculated Coefficient of Correlation, which is used to calculate the relationship between two variables.

Table-2: Calculation of Coefficient of Correlation (Amt in Cr.)

YEAR	Net Profit	Gross NPA
2012	4,884.20	8,719.62
2013	4,747.67	13,465.79
2014	3,342.57	18,880.06
2015	3,061.58	25,694.86
2016	-3,974.39	55,818.33
2017	1,324.80	55,370
2018	-12,282.82	86,620
Coefficient of Correlation		-0.931374608

The table above shows the perfect negative relationship of Net profit with the NPA level. It means that when Gross NPA increases the profit has started declining. The same can be interpreted from the above data. It means that PNB need to be very specific in terms to loans given, as any more addition in NPA numbers can worsen the condition of the bank even further.

The simple regression function is used to analyze the impact of non-performing assets (NPAs) on the performance and profitability. The net profit has taken as dependent and nonperforming assets as independent variable in the bivariate regression model. Results are in Table-3.

Table-3: impact of non-performing assets on profitability of PNB

Regression Equation	Intercept	Bi Value Of Npa	T-Value	R Square	D.F.
1	8445.155785	-0.21282677	0.007668*	0.860487132	5

* Significant at 5 percent level.

Thus the R square value is 0.86 that indicates that 86% of the variation of net profit is explained by Gross NPAs. That shows the great impact of NPA on profitability of Punjab National Bank. The B value is -0.21 that indicated that the impact is negative. Theoretically it explains that one percent change in NPA would decrease profit of PNB by 0.21%. Overall F-value and t-value is significant which shows the correctness of the model. So our null Hypothesis that there is no relationship between profit and NPA has been rejected.

1.4.2 ICICI Bank Limited

Table-4: Profit and NPA data of ICICI Bank Limited (Amt in Cr.)

Year	Gross Profit	Net Profit	Advances	Gross Npa	Advances To Npa Ratio
2012	31,611.93	6,465.26	2,53,727.66	9,475.33	3.73%
2013	37,605.88	8,325.47	2,90,249.44	9,607.75	3.31%
2014	41,670.76	9,810.48	3,38,702.65	10,505.84	3.10%
2015	45,871.45	11,175.35	3,87,522.07	15,094.69	3.90%
2016	47,311.11	9,726.29	4,35,263.94	26,221.25	6.02%
2017	43,697.57	9,801.08	5,15,317.00	42552	8.26%
2018	39,374.60	6,777.42	5,66,854.00	54063	9.54%

ICICI bank also has recorded the increase in the Gross NPA over the years. However, the magnitude of the ratio is quite low as compared to Punjab National Bank. However, there has been noted continuous increase in the Advances to NPA during the years under study.

Table-5: Calculation of Coefficient of Correlation (Amt in Cr.)

YEAR	Net Profit	Gross NPA
2012	6,465.26	9,475.33

2013	8,325.47	9,607.75
2014	9,810.48	10,505.84
2015	11,175.35	15,094.69
2016	9,726.29	26,221.25
2017	9,801.08	42552
2018	6,777.42	54063
Coefficient of Correlation	-0.18202751	

The above table indicate again a negative relationship between profit and NPA. However, the correlation coefficient i.e. -0.18 indicates that the NPA has less magnitude of impact on the profit of ICICI bank. There might be other factor that would also impact the profit rather than NPA.

Table-3 Impact Of Non-Performing Assets On Profitability Of Icici Bank

Regression Equation	Intercept	bi Value of NPA	t-value	R Square	D.F.
1	10435.04839	-0.044254618	0.2731*	0.287119052	5

* Significant at 5 percent level.

For ICICI bank, the regression results shows that the R square is 0.28 that means that only 28% variation in profit is due to NPA. rest 72% variation is due to other factors that contributes to profit. That even support the result of coefficient of correlation, that NPA has not has a great impact on the profitability and there are many other factors that effects the profit. However the t-value is not significant for ICICI bank.

1.5 CONCLUSION

The Non-Performing Assets have always created a big problem for the banks in India. It is just not only problem for the banks but for the economy too. The money locked up in NPAs has a direct impact on profitability of the bank as Indian banks are highly dependent on income from interest on funds lent. This study shows that extent of NPA is comparatively very high in public sectors banks. Although various steps have been taken by government to reduce the NPAs but still a lot needs to be done to curb this problem. The NPAs level of Punjab National Bank is still high as compared to ICICI bank. It is not at all possible to have zero NPAs. The bank management should speed up the recovery process. The problem of recovery is not with small borrowers but with large borrowers and a strict policy should be followed for solving this problem. So the problem of NPA needs lots of serious efforts otherwise NPAs will keep killing the profitability of banks which is not good for the growing Indian economy at all.

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A STUDY ON GREEN BANKING INITIATIVES TAKEN BY PUBLIC AND PRIVATE SECTOR BANKS IN INDIA

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ABSTRACT

Banks are the financial institution whose basic purpose is to accept deposits and lends loans. Banks have always tried some innovations and new policies that satisfy the demand for consumers and society. As the world is moving towards global warming, it is important for Banks to contribute towards environment protection and sustainability. Green Banking is the innovation (new concept) adopted by banks now a days. Green Banking refers to banking activities that are environment friendly. It aims to make banking processes and the use of IT and physical infrastructure as efficient and effective as possible, with zero or minimal impact on the environment. In this paper, researcher tries to study about the various Green Banking activities undertaken by Banks in India, challenges faced by them and their contribution towards economy.

Keywords: Banks, Green Banking, Innovation

INNOVATION, TRANSFORMATION AND CHALLENGES**INTRODUCTION**

Green Banking is form of banking from that the country and nation gets environmentally benefits. An orthodox bank becomes a green bank by directing its core operations toward the betterment of environment. The banking sector can play an intermediary role between economic development and environment protection by promoting environmentally sustainable and socially responsible investment. The concept of green banking was started in western countries. Green Banking was started in the year 2009 in USA. SBI Bank was the first bank to start Green banking in India.

Some of products of Green Baking are:

1. **Green Mortgages:** Green mortgages/ energy efficient mortgages (EEMs), provide retail customers with considerably lower interest rates than market rates for clients who purchase new energy efficient homes and/or invest in retrofits, energy efficient appliances Banks can also choose to provide green mortgages by covering the cost of switching a house from conventional to green power, as well as include this consumer benefit when marketing the product. These retail products come in different designs, some of which have met more success than others.
2. **Green Home Equity Loans:** Reduced rate home equity loans, sometimes referred to as ‘second mortgages’, can help motivate households to install residential renewable energy (power or thermal) technologies. In designing and offering these incentive-based products, a number of banks have also partnered with technology providers and environmental NGOs.
3. **Green Securitization:** A variety of innovative environmental securitization techniques have begun to emerge, including: forest eco-securitization pilot programs; and green mortgage-backed securities.
4. **Carbon Funds:** Collaboration between multilateral development banks and private financial institutions has led to the emergence of a variety of carbon funds to help finance GHG emission reduction projects to curb climate change. Where government-led carbon funds offer a compliance tool for governments to meet their Kyoto objectives, private carbon funds offer regulated companies a cost-effective compliance instrument, and also provide traditional investors with the potential for cash returns and marketing and CSR opportunities.
5. **Green Credit Cards:** A green credit card allows cardholders to earn rewards or points which can be redeemed for contributions to eco-friendly charitable organizations. These cards offer an excellent incentive for consumers to use their green card for their expensive purchases.

OBJECTIVES OF STUDY

1. To study about green banking initiatives taken by Banks in India.
2. To study about the challenges faced by banks in adopting green Banking.
3. To suggest measures to create awareness.

REVIEW OF LITERATURE

1. Kavita Vadrade (2016) has researched about the green banking initiatives taken by public and private sector banks in India. The study was limited only to SBI, Bank of Baroda, Punjab National Bank, ICICI Bank, HDFC, Axis Bank.
2. Suresh Chandra Bihari & Bhavna Pandey(2014) has studied about the concept of green Banking and the process to adopt Green Banking. The researcher also tries to know the awareness of green banking among public, employees, consumers.
3. Divya Rani M.P & Lakshmi V(2017) has focused on the opportunities for green Banks in India and their benefits.
4. Jaggi Geetika (2014)evaluated the green banking initiatives taken by SBI and ICICI bank.
5. Jha, N. and Bhome, S. (2013) presented a study to know the level of customers' awareness on Green Banking products and services by commercial banks in Mauritius. The study was conducted through primary research where 200 respondents were interviewed

RESEARCH METHODOLOGY

The present study is based on secondary data which is collected from various websites, online published journals and articles.

GREEN BANKING INITIATIVES BY INDIAN BANKS**1. SBI Bank**

- SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat. SBI bank become the first bank by taking green initiatives and installing windmills. It aims to save
- Project SBI Corbett has implemented for creating systems of waste management which includes awareness & waste collection for the rural community around Corbett Tiger Reserve and conducting research for zero waste management and training for SHG workers for waste collection. The project has implemented in partnership with Waste Warriors. The project will be across 37 villages in the eastern periphery of Corbett Tiger Reserve in the state of Uttarakhand.
- Establishing Digital Banking platforms
- Adopting Environmental best practices, such as, establishing a robust environmental management system, installing mechanisms to harvest rainwater, setting up Solar ATMs across India, using LED lights across all the office building, composting waste etc. wherever possible.
- Taking Go green Initiative further, SBI has install solar panels on around 10,000 of its ATMs. The aim of the bank is to go carbon neutral by 2030.
- Bank gives project loans at concessional rate of interest to encourage reduction of green house gases by adopting efficient manufacturing practices

2. AXIS BANK

- Axis Bank has started 'Sustainable Lending Policy and Procedures' (SLPP) that strengthen the way bank assess environmental and social risks in our lending decisions.
- Bank has started new mechanisms such as renewable energy, waste to energy, waste management, mass rapid transportation, and sustainable which play a important role in defining the low-carbon growth
- In RE- Invest 2015 Bank has financed of Rs .100 billion for renewable energy projects equivalent to 2,000 MW installed capacity
- Bank has made concerted efforts to reduce their energy intensity by undertaking various efficiency measures which resulted in reduction of 12% in our energy intensity. Some measures are :
 - Installation of a total of 3 MW of solar energy systems which translates to an annualized estimated low carbon energy generation of 4,136 Mwh during the year and a reduction in emissions of 3,294 tCO₂.
 - 400 branches are now installed with a remote-managed smart energy control system. The system enables central monitoring of the office energy consumption on a real-time basis, benchmarking of energy performance and sending reports to different unit managers for proactively improving energy efficiency.

- CFL lights are replaced with LED lights at Axis Branches.
- Axis bank motivates customers towards green banking by encouraging them with vouchers/ rewards that opt for e- statements. To encourage employees, online quiz is conducted on World Environment Day.
- Bank has created record in Limca Book of Records for 'Largest Plantation Drive Across Most Locations'. More than 1,27,000 saplings were planted as part of the #Rootforplanet campaign.

3. HDFC BANK

- HDFC bank has started campaign for paper less banking by motivating clients to opt for net banking.
- HDFC bank has initiated "carbon footprint" calculator where customers are required to calculate the carbon emitted by them, and the result shows the carbon emission done by them and to solve the carbon effect, the answer displayed is number of trees to be plant by them
- Solar ATM: The Bank in order to control its environmental footprint has introduced solar ATMs. These use rechargeable Lithium Ion batteries which use solar energy for their functioning, thereby reducing the consumption of conventional energy.
- Energy Management: Bank has initiated "Energy Management Module" in 100 select branches across 4 metro cities to pull data from sensors to monitor real time usage and based on analytics will help control electricity wastage. This system will also monitor diesel consumption of DG sets.
- Sustainable Plus: Sustainable Plus is the world's first and only corporate sustainable label. It is based on comprehensive ESG analysis of companies which helps them to measure performance as well as identify risks that challenge sustainability of their business.

4. ICICI BANK

- ICICI bank has initiated "carbon footprint" calculator where customers are required to calculate the carbon emitted by them, and the result shows the carbon emission done by them and to solve the carbon effect, the answer displayed is number of trees to be plant by them
- Bank has started going paperless by starting net banking and e-statements.
- Bank promote the use of carpool and public transportation among our employees
- Bank also practice of reusing paper
- Bank has started an internal movement towards environment-friendly operations by are generation by employees through contests. Ideas included dateless diaries, visiting cards on recycled paper, sapling plantations and green walkathons

CHALLENGES IN GREEN BANKING

1. **Legal risk:** Banks like other business entities face legal risk if they do not comply with relevant environmental regulation.
2. **Brand Risk:** If banks involved in Green banking operations, such projects will damage the environment where they are prone to loss of their brand reputations.
3. **Operating Cost:** Green banks require talented, experienced staff to provide proper services to customers which requires higher the operating cost. Experienced loan officers are needed with additional experience in dealing with green businesses and customers.
4. **Startup face:** Many banks in green business are very new and are in startup face, generally it takes 3 to 4 years for a bank to start making money thus it does not help banks during recession

SUGGESTIONS

- Banks should create more awareness in society by advertisements, awareness campaigns, displaying on website.
- To give rewards to customers / employees who opt for green banking.
- To motivate staff and society for green banking.
- Banks should appoint relationship manager who takes care of green initiatives.

CONCLUSION

Banks play a important role in development of economy. Now a days, many banks voluntary take initiatives towards environment protection and introduce new techniques towards green banking. Even, Government has laid laws and regulations which are mandatory to follow. Also, there are various benefits banks get from government, when they opt for green banking. Banks consider this as a part of their CSR.

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MICRO FINANCE IN INDIA- CHALLENGES AND FUTURE PROSPECTS

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ABSTRACT

Micro finance is the provision of financial services consisting of savings, credit and insurance to the disadvantaged sections of the society. It is strategic tool for poverty alleviation in India. Taskforce on Supportive Policy and Regulatory Framework for Microfinance formulated by NABARD defined microfinance as “ the provision of thrift, saving, credit and financial services and products of small amount to the poor's residing in rural, semi urban and urban areas for helping them to raise their income level and improve their standard of living.” This paper attempts to provide an overview of micro finance in India along with explaining the different models of delivery of credit, the challenges being faced by the sector and the future prospects of micro finance in India.

Keywords: Micro finance, poverty alleviation, NABARD, challenges, future prospects.

INTRODUCTION

Micro finance has been one the most discussed topics in the last two decades throughout the world. The micro finance programs and institutions serve as an important strategy in poverty reduction and promotion of small and medium sized enterprises.

Microfinance is a provision of financial services to low-income individuals or to those who do not have access to formal banking services. Micro Finance provides a broad category of services including provision of thrift, credit, insurance and other financial services to the low income group in rural, semi-urban and urban areas thereby enabling them to raise their income and living standards.

Microfinance is a dynamic field and there is clearly no best way to deliver services to the poor and hence many delivery models institutions are working. Some are in very good condition have been developed over a period of time.

This paper makes an attempt to explain the major challenges being faced by microfinance in India and the future prospects of micro finance sector.

OBJECTIVES OF THE STUDY

- To study the microfinance scenario and delivery models prevailing in India.
- To study the challenges being faced by microfinance in India.
- To suggest solutions and pave way for future prosperity.

RESEARCH METHODOLOGY

The data is collected from secondary sources. Various newspapers, magazines, research articles, books and websites are used for collecting and compiling the data.

LITERATURE REVIEW

Sibghatullah Nasir (2013) Studied the issues and challenges of micro finance and concluded that gaps like inefficient credit delivery, consumer duplication higher interest rates and inadequate collection methods exists in the micro finance sector in India.

Dr. Vinita K.Pimpale (2012) concludes that micro finance has made much progress but the problem remains unsolved. Majority of people earn less than \$1 per day and they lack access to formal banking services. The sector is experiencing a rapid growth and the inflow of capital into the industry is a risk unless managed.

Dr.Sidhartha in his study states that delivery involves many challenges. The macro challenges such as lack of access to services by poor, lack of orientation in marketing, demand and supply gap in provision of credit and savings. The micro challenges too persist such as high transaction cost, unavailable documentary evidence, and difficulty in reducing dependency of poor on money lenders.

Vipin kumar and co-authors (2015) concludes that SHG's and MFI's play a dominant in delivering microfinance services that leads development of poor and low income people. However, poor quality of SHG functioning, dropout of members etc., have been reported

D.Bansal (2011) explained the need for technical innovation to improve the quality of micro finance services. He emphasized the usage of electronic devices like mobile phones, computers, ATM etc to bring about a positive change in the micro finance sector and thereby expand the outreach.

Padmacholan Mahanta (2012) focused on factors associated with the evaluation of microfinance in the global context.

M.L Chippa (2011) emphasized on empowering women through micro finance. He considered the opportunities and challenges associated and gave recommendations for improving the situation.

OVERVIEW

The micro finance sector is much open for research. There is a vast literature available but an universally accepted definition to micro finance is hardly available. Researchers and micro finance experts have given numerous definitions in this context.

According to The Asian Development Bank (2000) microfinance is defined as the provision of broad range of services such as savings, deposits, loans, payment services, money transfers and insurance to poor low income individuals and their micro-enterprises. This definition of microfinance is not restricted to the below poverty line people but it includes low income households also.

According to The taskforce on Supportive Policy and Regulatory Framework for Microfinance constituted by NABARD microfinance is defined as “ the provision of thrift, saving, credit and financial services and products to the poor in rural, semi urban and urban areas for helping them to raise their income level and improve their standard of living.”

The need of microfinance urges with the low income and unbankable sections of the society - who do not have access to formal banking services, such people form the clients of the microfinance institutes who are normally employed in the informal sector, with interlinked household and business activities and earning low income.

DELIVERY MODELS OF MICRO FINANCE

SHG- Bank Linkage Programme (SBLP)

A SHG is a group of 10-20 persons from a homogeneous class of rural and urban poor that promote savings among members and the accumulated resources are used for meeting their credit needs. The group is formed democratically and the leaders are elected. SHGs consist of members of homogeneous group having common economic goal. The SHG-Bank Linkage Model is a dominant model in terms of number of borrowers and loans outstanding. It is flexible and imparts freedom of saving and borrowing. SHGs acts as an intermediary between the banks and the rural poor and help in reducing transaction costs. Resources are provided by the banks and the officials/ government agencies / NGO'S organize the poor in groups. Loans are provided to SHGs in three different models

Model I: SHGs Formed and Financed by Banks: Here the banks form and nurture the groups, open their savings accounts and provide them bank loans.

Model II: SHGs Formed by Agencies Other than Banks, but Directly Financed by Banks: Under this model, NGOs and other formal agencies organize, form and nurture SHGs and train them in credit management and thrift. The banks directly lend loans to SHGs.

Model III: SHGs Financed by Banks Using Other Agencies as Financial Intermediaries: Here the NGOs take role of financial intermediary along with forming of group. Where the formal banking faces constraints, NGOs are form groups and approach a bank for loan assistance.

Micro Finance Institutions (MFIs)

In this model MFIs borrow funds from apex financial institutions, donors and banks and lend to the individuals or groups. Financial services are provided to the individuals or to the groups like SHGs. They lend through the concept of Joint Liability Group (JLG). A JLG is an informal group of 5 to 10 members who come together and avail bank loans either individually or through group mechanism. MFIs in India exist in a variety of forms like trusts, Co-operatives and NBFC.

Grameen Bank Model

The Grameen Bank model has been exceptional success in Bangladesh. India adopted the model with little variations. The significant features of model are low transaction costs, repayment of loans in small interval, no collateral and quick loan sanctions. Further the interest rates are nominal enabling the poor to repay timely.

Bank Partnership Model

In this model, the bank is the lender and the MFI acts as an agent handles credit monitoring, supervision and recovery, it takes care relationships with the client, from first contact till final repayment.

Another variation is where MFI, an NBFC, holds individual loans on its books before securitizing and selling them to the bank. Refinancing enables MFIs greater funding access.

Banking Correspondents

The model allows banks to do 'cash in – cash out' transactions at a location closer to the rural population. It uses the MFI's ability to get close to poor clients – a necessity for savings mobilization from the poor – while relying on the financial strength of the bank to safeguard the deposits.

CHALLENGES IN MICRO FINANCE

Quality of SHG: Due to rapid growth of SHG Bank Linkage Programme the quality of MFI'S is deteriorating. This can be observed through indicators such as poorly maintained books of accounts, inadequate incentives to NGO'S, poor skill sets among the members. This challenge can be met through financial investment and technical support.

Regional imbalance in the spread of MFI'S: MFI's though were meant to serve the poor where formal banks failed to and thereby keep away the poor from private money lenders. But actually MFI's are active in the regions with strong banking network. Thus, this has led to regional disparity and uneven regional development.

Unreached poor: Micro finance delivery models have failed to reach the deserving poor living below poverty line. Further poor are not allowed to join the groups due to there poor credibility. They even lack confidence and hesitate to join the groups.

Lack of training: Working in the microfinance sector is different compared to the traditional financial sector. The microfinance officers and volunteers must be good at talking different languages so as to convince the clients, build lasting relationships with micro entrepreneurs, understand the needs of the poor. Thus, they provide special training to avoid problems of intimidating or under-serving clients.

Unregulated MFI'S: Micro finance sector in India is unregulated. Many entities comprising of banks, NBFC'S and agricultural credit societies provide financial services. But all of them are not subject to any regulations. Thus, they find it not necessary to follow rules and standard norms. This weakens the management of MFI'S.

Dual mission of MFI'S: Microfinance providers tend to forget their main objective is social development rather than profit creation. The profit-seeking MFIs end up targeting the same individual for multiple loans and cause multiple borrowing. At the end of the day, that individual gets burdened by mounting interest payments and is pushed deeper into poverty. Poor governance on the side of MFIs as well as the micro entrepreneur is to blame for this.

Lack of customized solutions: MFIs lack understanding of the needs of micro entrepreneurs. MFIs must try to gain information by spending time on the field with the clients and use the same to develop customized services fro the micro entrepreneurs.

FUTURE PROSPECTS

Growth prospects: Micro finance has a wider growth prospects in terms of outreach and services. There is a scope to reach the unreached poor. SHG's may be linked to post offices in rural areas for credit delivery and serve the unreached rural poor.

Reducing disparity: There is an ample scope to reduce the disparity. Microfinance programmes can spread in rural areas. Recently NABARD has indentified 13 states to scale up the programme and reduce regional disparity and this has shown a positive growth rate.

Regulation of MFI's: Microfinance sector lacks a single regulatory framework and this restricts the growth of the sector. Considering this GOI has framed a regulatory bill which is still under the consideration of parliament. This bill will serve as a single regulatory framework and provide regulatory authority to NABARD.

Insurance service: Rural poor are more prone to natural uncertainties and insurance is necessary there. Thus microfinance can provide insurance at lower cost for lower coverage of amount and tap the potential of insurance in rural regions.

Introduction of technical innovation: The quality of services can be improvised through technical innovation such as usage of mobile phones, ATM'S, computers etc. These facilitate better record keeping and quick settlement of transactions in remote areas. Even though this has been started by NABARD, but there is enough scope for introduction of such innovations.

CONCLUSION

Based on the above findings it is observable that there are many problems associated with micro finance. The sector poses the challenges of regional disparity, unregulated MFI's, Unreached poor etc. Though it has been successful in alleviating poverty, improving living standards of poor and enjoy prospects of future growth, if it eradicates the shortcomings it would have a positive impact on the economic growth of the country.

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ROLE OF FINTECH ENDURING CASHLESS ECONOMY

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ABSTRACT

Financial Technology, frequently abbreviated to FinTech or fintech, is the period of innovation and advancement that expects to rival customary monetary techniques in the conveyance of budgetary administrations. It is a rising industry that utilizes innovation to improve exercises in money. The utilization of cell phones for portable banking, contributing administrations and digital money are instances of advancements meaning to make monetary administrations progressively available to the overall population. The legislature of India is working dedicatedly to push India towards a cashless economy. With significant activities, for example, demonetization, Direct Benefit Transfers, BHIM and some more. Computerized India is the lead program of the Government of India. It was propelled on first July 2015 by Prime Minister Narendra Modi, with a dream to change India into a carefully engaged society and information economy. "Faceless, Paperless, Cashless" is one of the affirmed jobs of Digital India.

The issue of trust online has not left totally, however it is subsiding, as the discoveries in this study clarify. As FinTech reception gets on, it is inescapable that more shoppers will float away from customary money related administrations organizations. Banks and back up plans are as of now working with FinTechs through associations and acquisitions. In doing as such, they are implicitly recognizing that some dimension of conjunction between the new what's more, the old will be unavoidable later on.

I.INTRODUCTION**Innovation working together the monetary administrations in the Indian market**

Seen basically, fintech alludes to the extent of monetary administrations that can be accessible on advanced stages. This new disturbance in the banking and budgetary administrations division has had a wide-running effect. Key administration contributions to develop on advanced stages include:

Peer-to-Peer (P2P) Lending Services

Companies assume up various acknowledgment models and information sources to give buyers and organizations with quicker and simpler access to capital. P2P loaning enables online administrations to straightforwardly coordinate banks with borrowers who might be people or organizations. Precedents are Lendbox, Faircent, i2iFunding, Shiksha Financial, GyanDhan, and MarketFinance.

Payment Services

Companies enable both private people and organizations to acknowledge installments over the web and on portable without requiring dealer accounts. Exchanges are made specifically to the financial balance connected to the payee so as to verify against misrepresentation. Models are Mobikwik, Paytm, and Oxigen Wallet.

Remittance Services

A couple of startup adventures, yet enrolled abroad, are attempting to address the holes in settlement exchanges (both inbound and outbound) as the present procedure is awkward and costly. These new companies expect to upset the present restraining infrastructure held by firms like Western Union and MoneyGram. Models are Instarem, FX, and Remitly.

Individual Finance or Retail Investment Services

Fintech organizations are additionally developing around the need to give tweaked monetary data and administrations to people, that is, the means by which to spare, oversee, and contribute one's close to home funds dependent on one's particular needs. Precedents are FundsIndia.com, Scripbox, PolicyBazaar, and BankBazaar.

Different Software Services

Companies are putting forth a scope of distributed computing and innovation arrangements, which improve access to budgetary items and thus increment proficiency in everyday business tasks. The extent of fintech is quickly enhancing at both full scale and small scale levels, from giving web based bookkeeping programming to making particular computerized stages associating purchasers and dealers in explicit ventures. Models incorporate Catalyst Labs in the agribusiness division, AirtimeUp which gives town retailers the capacity to perform versatile best ups, ftcash that empowers SMEs to offer installments and advancements to clients through a portable based stage, Profitbooks (web based bookkeeping programming intended for non-bookkeepers), StoreKey, and HummingBill.

Value Funding Services

This incorporates crowdfunding stages that empower the subsidizing of an undertaking or business adventure by raising assets from an expansive number of individuals. Such web intervened stages are picking up prominence over the world as access to funding is regularly hard to verify. These administrations are especially focused at the beginning period of an organizations' activity. Models include: Ketto, Wishberry, and Start51.

Cryptographic money

India being an increasingly preservationist showcase where money exchanges still command, utilization of advanced monetary cash, for example, 'bitcoin' has not seen much footing when contrasted with global markets. There are, be that as it may, a couple bitcoin trade new companies present in India – Unocoin, Coinsecure, and Zebpay.

Right combination of incentives, policies, and regulation

Activities by the RBI and parallel government endeavors have concentrated on encouraging budgetary incorporation. This has implied empowering rivalry and development in India's beginning fintech part on a pretty much notwithstanding playing field. This has permitted both on the web and disconnected answers for develop and has made a more secure monetary framework with sweeping access.

Reserve Bank of India

The RBI has so far advanced the Unified Payments Interface and the Bharat Bill Payments System, just as computerized installments, P2P loaning, and the utilization of robotized calculations to offer monetary counsel. Additionally, the RBI has conceded licenses to 11 fintech substances to set up installment banks that give funds, store, and settlement administrations.

Government Schemes

Government-drove activities, for example, Jan Dhan Yojana, Digital India program, and National Payments Council of India (NPCI) have given critical empowering stages to innovation trailblazers. The evacuation of additional charges on electronic exchanges, tax breaks for customers and organizations utilizing e-installments, and changes in verification prerequisites are different instances of the administration's endeavors to energize the development of a fintech environment in India.

Fintech Startup Sector

This is likely the best enabling impetus towards the extension of fintech adventures in India. An empowering administrative condition has empowered the starting of more than 125 fintech new businesses in 2018 alone. As referenced before, a few national and worldwide banks and venture bunches are likewise putting resources into India's fintech new companies and financing fintech arrangements.

II.OBJECTIVES

1. To know consumer adoption of FinTech.
2. To understand the FinTech usage among Consumers.
3. To analyses the role of fintech in cashless economy
4. To identify the areas which require improvement to provide digitization Financial Services

III.METHODOLOGY**A) Data Collection**

- 1) **Primary Data:** First-hand information was collected through questionnaire via google form. (Annexure attached).
- 2) **Secondary Data:** The secondary data was collected from internet, e-journals & e-books etc.

B) Sampling

Sample of 50 responses were considered to understand FinTech consumer adaption

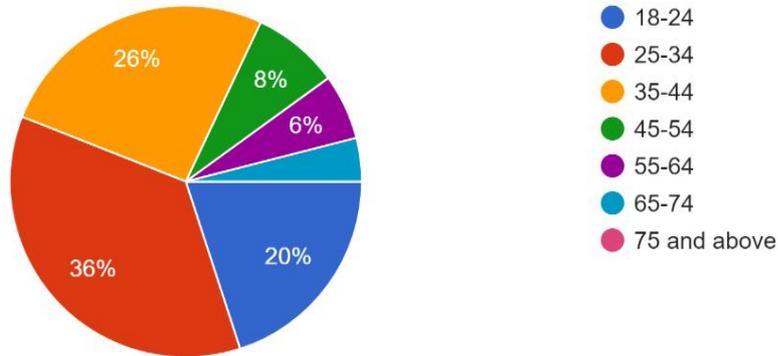
D) Method

Overall the study was descriptive research. The study was carried out through questionnaire. Google form questionnaire was circulated through various social networking channels used by the targeted responses.

IV. DATA ANALYSIS AND CHARTS

Age- Group

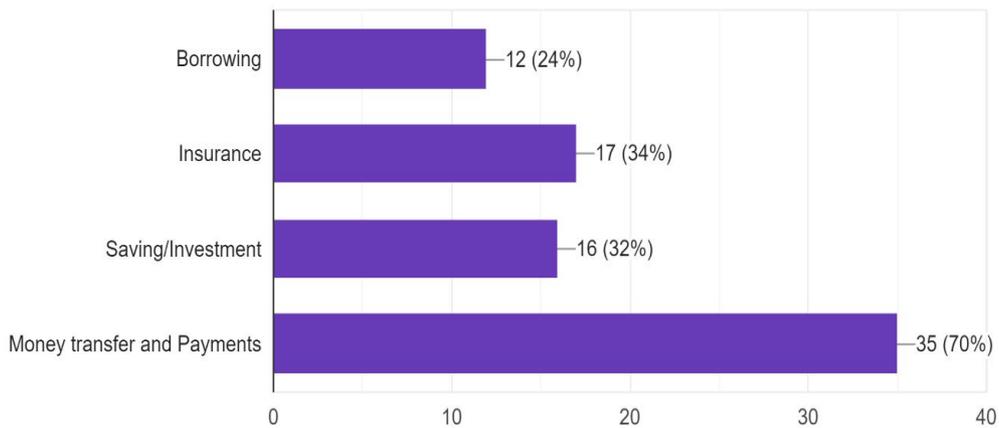
50 responses



The Fintech User profile is in bracket of 18-44 Age group.

FinTech use by Product Type

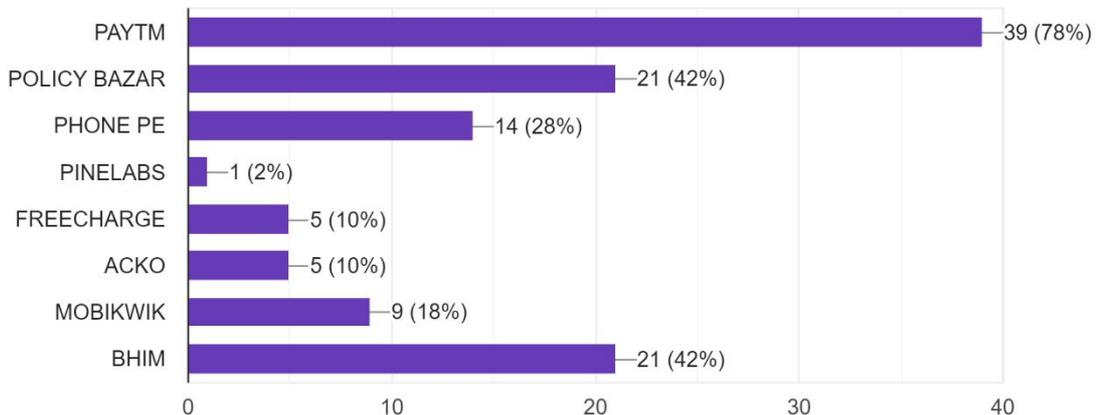
50 responses



Money transfer and Payment services are popular in FinTech Industry .

FinTech Service you use

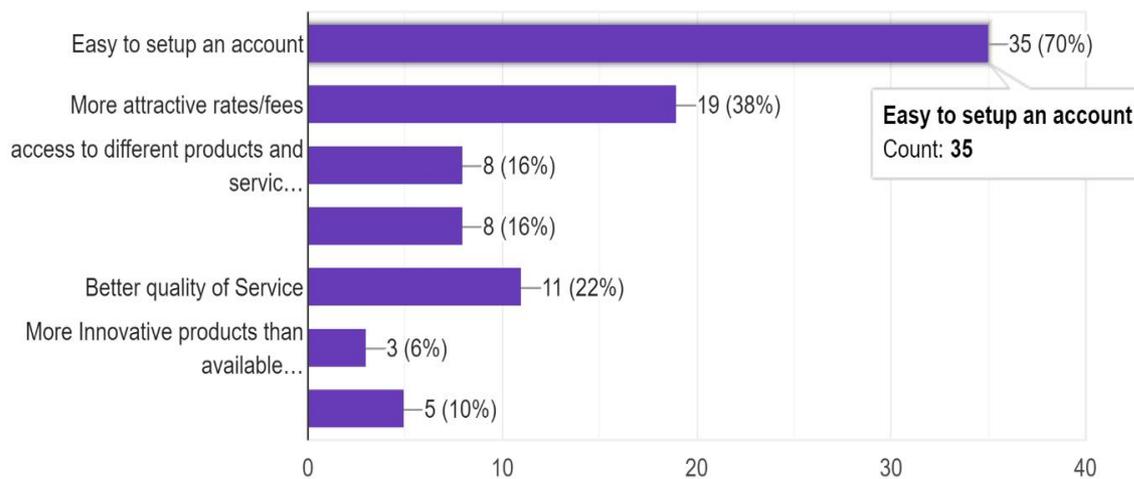
50 responses



Companies allow both private individuals and businesses to accept payments over the web and on mobile without needing merchant accounts- Most acceptable AAP – PAYTM

Reasons for using Fintech Services

50 responses



V. CONCLUSION

In this period of digitisation, fintech has developed quickly over the most recent couple of years. As indicated by an examination directed by PwC, Asia has now turned into the worldwide pioneer in R&D over all businesses and in fintech its rank is second, alongside the US as far as financial specialists' advantage. This is because of the way that Asian nations when all is said in done and India in explicit have some relative preferences as far as ability combined with lower costs. As the future development of the monetary part will basically rely on financially savvy creative advances, India is probably going to remain solid in what has turned into its characteristic center competency, because of the rich shoddy ability. In this specific circumstance, it is the perfect time both for banks and fintech firms to cooperate by using India's prepared ability. This will likewise help the general Indian money related area to develop at a quick rate soon. In the meantime, banks should create powerful hazard the board devices and systems.

The advanced and mechanical unrest changed business tasks over all ventures, and the money related and banking part is no special case. Is encouraging that the Indian government and administrative organizations have essentially advanced a pioneering as opposed to obstructive atmosphere for fintech in India. In any case, arrangements and administration should coordinate the speed of advancement in this division, especially to guarantee secure and straightforward development

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A STUDY ON BEHAVIOR OF PEOPLE TOWARDS PAYTM IN BANDRA AREA

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ABSTRACT

The economy of India is following traditionally structure of spending are based on cash. The users in India will exceed 300 million smartphone, topping the US as the world's second largest smartphone market by the end of 2019 due to growing sharp of reasonable smart phone devices in the country. Smartphones have taken out a vast revolution in the lives of people. There are rapid growth of digital wallets and become mainstream mode of online payment and mobile users can nowadays use their smartphones to make money transaction or mode of payment by using mobile applications installed in the smartphone. In India Paytm is the first financial services provider that deals payments, banking, lending and insurance to consumers and merchants through its mobile app. The app of Paytm has both advantage and disadvantage between common respondents. One group of consumers opined that the Paytm app is both easy to use and wallet free. The objective of this study is to explore the usage of Paytm by users in Bandra area (Mumbai city). The purpose is also to analysis the flexible facilities offered by Paytm to promote the Cashless economy and also supporting the Digital India.

Keywords: Paytm, Smartphone, E-Commerce

INTRODUCTION

In Era where technology is playing very important role, smartphone has become vital part of day to day life of every individual. India will exceed 300 million (appx) users of smartphone, topping the US as the world's second largest smartphone market by the end of 2019 due to growing stabbing of reasonable smart phone devices in the country. Thus, over a period of time, it has become both a mode of payment as well as the marketplace of selling all types of goods and services. This strategy not only enables PayTm to serve several needs of the customers, giving them a holistic experience by saving their time and efforts but is also expected to be helpful in crossselling and up-selling and thus increasing the overall profitability of the organization. The mode of online Payments are accepted and the option for payment comes with no maintenance charge but there is a commission cut on each transaction. Initially Paytm had only Recharge services and mindset of the people been that Paytm was only for Recharge, but now things have changed using Paytm we can even pay educational fees and bills. There are rapid growth of digital wallets and become mainstream mode of online payment and mobile users can nowadays use their smartphones to make money transaction or mode of payment by using mobile applications installed in the smartphone. In India Paytm is the first financial services provider that deals payments, banking, lending and insurance to consumers and merchants through its mobile app. Paytm made its way into the e-commerce market in the year 2014. PayTm now offers many rangr of products from basic mobile recharges to buying clothes or electronics allowing customers to get everything at one place. Thus, over a period of time, it has become both a payment platform as well as the marketplace. It has also obtained the license from Reserve Bank of India to run a Payments Bank

OBJECTIVES

- To study the flexible services offer by Paytm.
- To study the usage of paytm.
- To study the behavior of people towards Paytm.
- To examine the importance of Paytm in day to day life

REVIEW OF LITERATURE

- Abhijit M. Tadse, Harmeet Singh Nannade in the paper "A Study on Usage of Paytm" that the smartphone play an important role in day to day life. Due to change technology, Digital wallets are rapidly becoming mainstream method of online payment and mobile users can nowadays use their smartphones to make money deal or payment by using applications installed in the phone. One such application is PayTm. The study tries to analysis the usage of PayTm by Smartphone users. Apart from this, the study also attempt to find out the various problems faced by PayTm users.
- Rajesh Krishna Balan, Narayan Ramasubbu, Giri Kumar Tayi studied in their paper "Digital Wallet: Requirements and Challenges" (2006) that the requirements and challenges of deploying a nationwide digital wallet solution in Singapore. Further they discussed why Singapore is ready for a digital wallet and identify the key challenges in building and deploying a digital wallet. Advance, they observed why

Singapore is organized for a computerized wallet and to know the key problems in structure and sending a computerized wallet and at that point the exchange was on the difficulties confronted when utilized with International Journal of Pure and Applied Mathematics Special Issue 265 Digital Wallet framework in real money exchange and more detail and end the paper with their proposed arrangement.

- S. NazimSha , Dr. M. Rajeswari studied in their paper “A Study On Paytm Services In Promoting Cashless Economy After Demonetization In India an Outline On Its Support Towards Making India Digita” they study the strategy structure which was offered by Indian Government are towards revolution of Make in India, Start-up India and Skill India. According their study Paytm was one among such innovation which came as an alternative to the cash transactions. Demonetization has given Paytm and raise in the India's money exchange economy and controlled individuals, and specifically the little vendors to look for alternatives. The study also do research the flexibility in services offered by Paytm to promoting the Cashless economy and also supporting the Digital India.

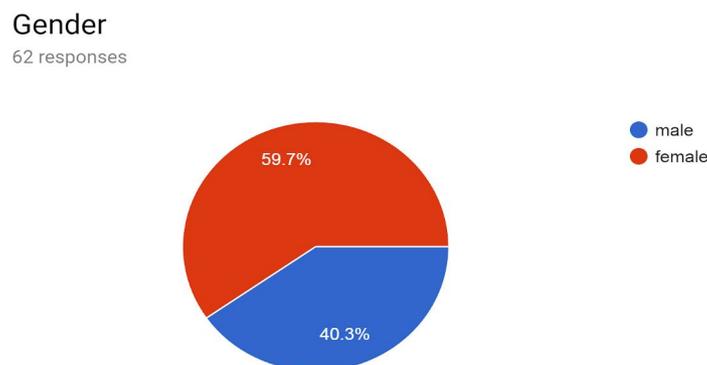
METHODOLOGY

- The main objective of this study is to analyze the usage of PayTm by users.Data Collection are done through both methodology ie. Primary data and secondary data. Primary data collection is used in this study through survey methods. A simple questionnaire has been asked to the respondents who are the usingPaytm and Secondary data collection through various web sites.
- **Sample design:** - A sample of 62 respondents have been taken across Bandra
- **Data Collection:** In view of this questionnaires were sent to 62 respondents and the inquiries were asked where their responses are noted. The statistical tool of Percentage alone is used in this research to identify the satisfaction level of Paytm users in Bandra.
- **Data Analysis Tool:** The collected data are analysed with the help of Excel

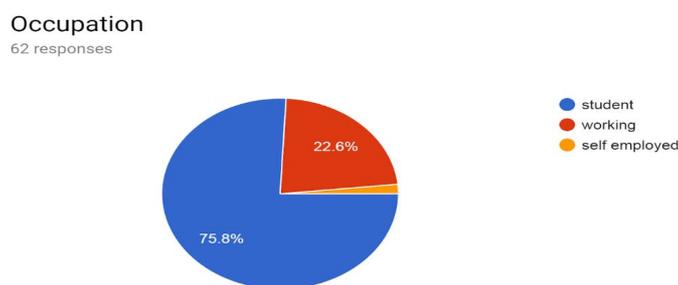
DATA ANALYSIS AND INTERPRETATION OF DATA

Gender	Frequency	Percentage
Female	38	59.7
Male	27	40.3
Total	62	100

Sources: Primary Data



The gender of the respondents is included to understand current scenario of the profiles in the present study. Since the gender profiles gives the information, knowledge and capacity to deliver Paytm services and also their usage of the Paytm services. Out of 60 respondents 38 are female and only 27 are male this indicate the female are more user of Paytm.



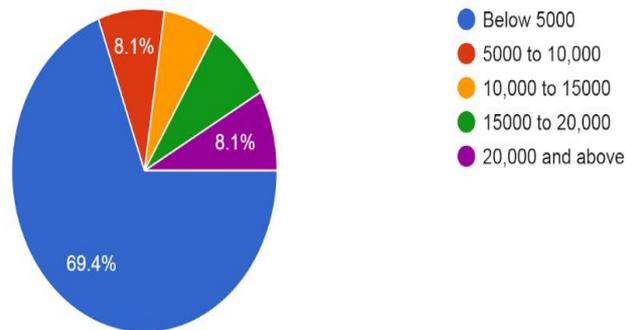
Sources: Primary Data

INTERPRETATION

- Paytm is used by most of the young people, like students and working people
- Majority of the people who use paytm are the students. i.e almost 75.8% of students use paytm for their payment use.
- Working people use as per their need and as per their emergencies.
- Very less number of people who are self-employed use Paytm for their use.

Income

62 responses

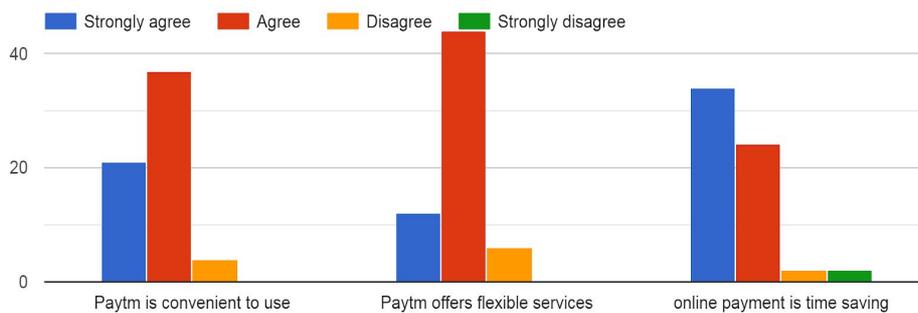


Sources: Primary Data

INTERPRETATION

- It is observed that majority of the people spend money on Paytm whose income is below 5000.
- Whose income is between 5000 to 10,000 they spend very less amount on Paytm transactions.
- As compare whose salary is above 20,000 they spend very less amount on Paytm transactions.

Your Suggestions on certain factors



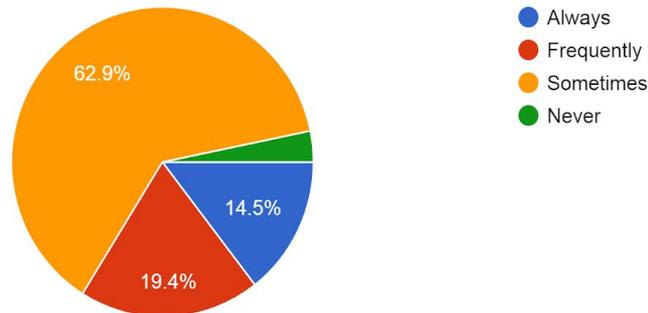
Sources: Primary Data

INTERPRETATION

- 1) Paytm is convenient to use.
 - 21 respondents are strongly agree, 37 respondents are agree 2 respondents are disagree with this.
- 2) Paytm offers flexible services.
 - 12 respondents are strongly agree, 47 respondents are agree, 6 respondents are disagree.
- 3) Online payment is time saving
 - 33 respondents are strongly agree, 25 respondents are agree, 2 respondents are disagree, 2 respondents are strongly disagree.
 - The above charts indicates that paytm is convenient to use, it also give flexibility in service offer by paytm. The respondents are believes that paytm save time

How often do you use paytm

62 responses



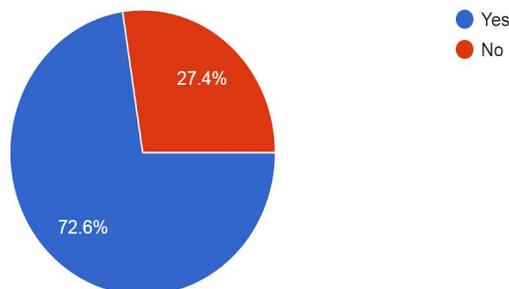
Sources: Primary Data

INTERPRETATION

- The above pie chart states that, how often do the respondents use Paytm, 62.9% respondents use paytm sometimes, 19.4% respondents use it frequently, 14.5% respondents use it always and 3.2% respondents never use paytm.
- The frequency of usage of Paytm is classified as always, frequently, sometimes and never. Its indicates the out 62 respondents only 3.2% are never used Paytm.

Do you purchase goods and services by paytm

62 responses



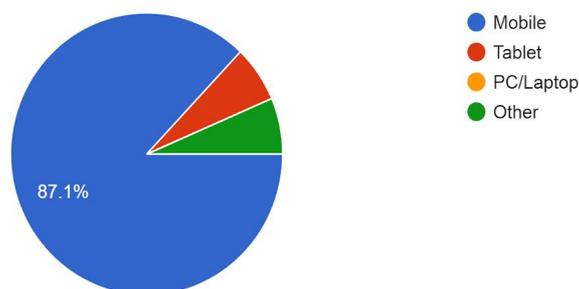
Sources: Primary Data

INTERPRETATION

- The above pie chart explains that, majority of the people purchase goods and services by paytm, i.e, almost 72.6% people use paytm while purchasing.
- Very less percent of people think that purchasing with cash is more effective than online payment.
- This indicates that 72.6% are purchase the goods and services through paytm and they believe it is easy and safe mode of transaction.

Device on which paytm is used

62 responses



Sources: Primary Data

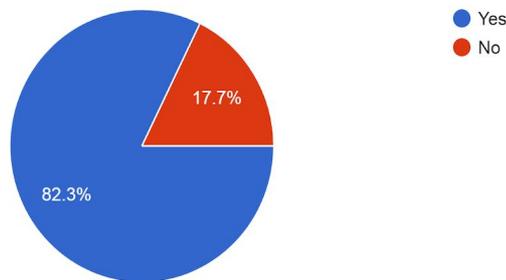
Device	Frequency	Percentage
Mobile	54	87.69
Tablet	4	6.15
Other	4	6.15
Total	62	100

INTERPRETATION

- The above table indicates that mobile user are 87.69% because everything can be done just using a click which will save their time and money maximum of the respondents are using PayTm mobile app.

Do you think paytm is one of the best technology innovation of 21st century.

62 responses



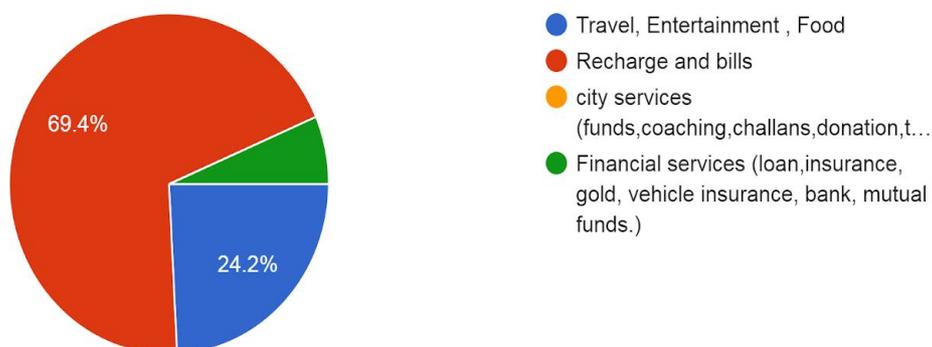
Sources: Primary Data

INTERPRETATION

- Majority of the respondents are agree that Paytm is the best technology of the 21st century which are very easy to assess and time saving.
- 83% people agreed to that Paytm is the best technology and 17% of people still think that cash payment is the best way of payment.

Which type of service do you prefer by Paytm

62 responses



INTERPRETATION

- Of the total respondents, majority of the people use Paytm for the recharges of their mobiles
- 24.2% of people who are using paytm for the entertainment purpose, travel and food.
- and rest of the people are using paytm for the financial services.
- 69.4% respondents are using PayTm for various purpose such as Recharge, Ticket booking and bills because they believes it is very easy to handle without going out of the house.

CONCLUSION

The current Research has revealed the views of Indian users about the mobile wallet app, PayTm is currently performing well in terms of security but it has to work upon discounts/offers, business deal time and bring about invention by increasing customer satisfaction. Paytm in the get up with termination of physical money to unravel the issues being sweet-faced by common public. Paytm app is a familiar app used for e-transactions. One group of customers opined that the use of Paytm app are very easy and made them cashless move from place to place without carrying a physical wallet. The other group felt Paytm app was not connected without internet facility. To overcome these cons and increase the pros of Paytm app, the Paytm app should be modified to work even in absence of internet connectivity. This will further increase the reach of the Paytm app to different sections of consumers in our country. This will pave way to march towards digital India. The customers face problems in ease of use, security issues and slow Paytm server in the usage of Paytm

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AWARENESS AND USAGE OF GREEN COMPUTING/GREEN IT IN HIGHER EDUCATION INSTITUTIONS IN MUMBAI**Nikita Palav and Pratiksha Rai**Nirmala Memorial Foundation College of Commerce & Science

ABSTRACT

Technology is **ubiquitous and the** inception of technology has contributed positively as well as negatively into the life of individuals as well as in the development of mankind. IT is one field that has transformed human beings both in the way we reflect and perform in our institutions. It has brought many changes such as helping individuals to get their work done faster in an efficient manner. This research work "**Awareness and Usage of Green Computing in Higher Education Institutions in Mumbai**" will be highlighting on how green computing can help institutions to save energy consumption, with the help IT. Green Computing is the emerging computing technology. It is mainly used to save and protect environment as well as optimize energy consumption and try to keep green environment. The consumption of energy is the primary concern and Green Computing will lead to fall in energy consumption and e-waste. This research paper will analyze the factors related to awareness of Green Computing among students and teachers of higher education institutions. It will also analyze the initiatives taken by the colleges and university of higher education. This paper will help the institutions to have a clear understanding of Green Computing and benefits of using Green Computing. Research includes a survey questionnaire which takes all the major factors into consideration.

I. INTRODUCTION

Computer has become a fundamental part of our lives. Everyone is using computer for their daily works. Due to internet, usage of IT applications is increasing immensely in daily life. Due to tremendous usage of computers, the impact made on the environment is also significantly large. The aim of this research is to structure and integrate Green Computing/Green IT in our educational institutes and to explore Green Computing in particular to cloud computing and virtualization in the institutions.

What is Green Computing?

Green Computing is the term used to signify efficient use of resources. If we use all these resources efficiently it will reduce pollution and all environment problems. Green

computing refers to environmentally sustainable computing. Primary issues are energy efficiency in computing and endorsing environment friendly computer technologies. Green computing is the study and practice of using computing resources proficiently. Green computing is required to protect environment and save energy.

The Objectives of this research is to critically evaluate Green Computing, its awareness and usage in education institutions. This research will highlight how IT can help in different ways to improve our environmental sustainability and outlines a Green IT strategy for education institutions.

Green Computing practices such as Cloud computing can help in virtualization. Virtualization is defined as a foundational technology for installing cloud based transportation which allows a single physical server to run multiple application or operating system concurrently. Virtualization reduces the total physical server footprint, which has integral green computing benefits. From the efficiency perception, less equipment will be needed to run workload, which proactively minimizes data centre space and with less physical equipment plugged in the data centre in the institution will consume less electricity. Server virtualization is the most broadly incorporated green computing project, implemented globally since 2011.

DIFFERENT WAYS TO ACHIEVE GREEN COMPUTING IN EDUCATION INSTITUTIONS**A. VIRTUALIZATION**

Virtualization results in more efficient use of resources, including energy. Virtualization can be defined as to make a single piece of hardware function as multiple parts. Different user interfaces segregate different parts of the hardware, thereby making each one behave and function as an individual, separate entity.

Benefits

1. For college or universities virtualization is an efficient way to deliver data and applications to students anytime, anywhere without exceeding current staffing and financial resources.
2. From the economic perspective, it would have been nice to control/reduce the power consumption of computer laboratories.

3. Reduce cost by eliminating the need to maintain the physical laboratory and upgrade equipment.
4. Energy efficiency and the reduction of a company's carbon footprint is a significant selling point for virtualization software.
5. One of the best benefits of adding green technology to your network is saving money. For example, installing a print server will save you ink, a fax server will save paper, and virtualizing your server units will dramatically reduce your electricity bill.

B. INVOLVING POWER UTILITIES COMPANY

Institutions should also try to involve utility company in efforts to reduce power costs. They can offer power-savings tips as well as other services that can save money.

1. **Monitoring**-One way, you can monitor how much power you use is simply by contacting your utility company.
2. **Sellback Opportunities**- Electrical lines running into institutions send power both ways. That is, if your institute generate more power than using, it can sell the power back to the power company, this practice is called net metering. If the organization depends on the sun for its power and possibly sell back power to the utility company, few things will be required such as photovoltaic panels, an inverter and a meter.

C. Going Paperless

Paperless refers to less paper. It is possible to scan all documents on the computer. It reduces the amount of paper generated every year.

D. Recycling or Reusing of Electronic waste

1. The equipment is donated to N.G.O or might be used in the future.
2. The possibility that the equipment can be sold to another organization.

II. REVIEW OF LITERATURE

- 1] Intended Belief and Actual Behavior in green computing in Hong Kong, Wing S. Chow Yang Chen This paper has observed IT users' perception of their intended belief and actual green computing behavior. By relating the Theory of Reasoned Action and Theory of Planned Behavior, we verify that attitude subjective norm, and perceived behavioral control over green computing all have a direct effect on intention. This paper determines the most critical factors that contribute to the belief and behavior of green computing. These findings enable green computing researchers and practitioners to firstly concentrate the most important event so that higher priority of understand IT users' belief and behavior about green computing can be enhanced.
- 2] Combinatorial Optimization Problems and Informatics an International Journal, Vol. 2, No. 3, Sep-Dec 2011, pp. 39-51, ISSN: 2007-1558. Appasami.G and Suresh Joseph.K Optimization of Operating Systems towards Green Computing, It is mainly used to protect environment, optimize energy consumption and keeps green environment. Green computing also refers to environmentally sustainable computing. Operating System (OS) Optimization is very vital for Green computing, because it is bridge for both hardware components and Application Software's. The important Steps for green computing user and energy efficient usage are also conferred in this paper. If public and private sectors takes more interest in green computing, definitely we can save our environment and maintain green environment. Now a day's advanced operating system developers are very much interested towards green computing to attract customer as well as to protect environment by saving power energy.
- 3] Journal of Information Systems and Communication, BATLEGANG B. Green Computing: Students, Campus Computing and the Environment- a Case for Botswana This paper was motivated by the rising cost of energy in Botswana, depletion of natural resources, increasing distress for the environment by the Botho College population. The main purpose of this paper was to measure awareness levels of students and staff at Botho College with regards to Green Computing. The awareness levels were established by this research which are low hence most users are oblivious to energy saving techniques. The research also recognized that they are no explicit green computing and sustainability policies at the institution.
- 4] Current Trends in Management Sciences Vol. VI. No. 1 ISSN 0976 – 1845 April 2013 Page 94 Sangita Phunde, Supriya Sapa, Madhuri Godbole. Awareness & Usage of Green Computing amongst Post Graduate Students Green Computing is the emerging computing technology. It is mainly used to save and protect

environment as well as optimize energy consumption and try to keep green environment. In all management students most of them are not aware about green computing. But if we check stream wise then students of IT background education are more aware about green computing. Students gender and usage of online applications are independent, but in stream wise the students of non IT background education make more use of online applications. More awareness about green computing is required to increase among students. The students are aware but does not practically implement at the time of work.

III. OBJECTIVES OF THE STUDY

1. To check the awareness of Green Computing among students and teachers.
2. To check the usage of Green computing among students and teachers
3. To study the initiatives taken by the institutions towards Green Computing

IV. HYPOTHESES OF THE STUDY

1] To test awareness about Green Computing

H01: Awareness about green computing is independent of User role

H11: Awareness about green computing is dependent of User role

2] To check the usage of Green computing

H02: Usage of Green Computing is independent of Userrole.

H12: Usage of Green Computing is dependent of User role.

3] To study the initiatives by institutions towards Green Computing

H03: Institutions have taken positive measures to implement Green Computing

H13: Institutions have not taken any measures to implement Green Computing

V. METHODOLOGY OF THE STUDY

(a) Sources of data collection

In order to conduct research inquiry, primary and secondary data shall be required. This data will be collected by using both primary and secondary sources. The sources to be used are explained below:

I Primary Sources

- Information from Higher education Institutions in Mumbai.
- Responses from Teachers and Students of various Institutions with special reference to Nirmala Memorial Foundation College.

II Secondary Sources

1. Books on Green Computing
2. Review of literature on Green Computing.
3. Internet Sources.

(b) Techniques of data collection

For the purpose of present research, questionnaires will be prepared to collect primary data. Questionnaire will be prepared to collect data from Students as well as Teachers of Education Institutions including Nirmala Memorial Foundation College

(c) Data Analysis

The data collected for the purpose of the study shall be evaluated qualitatively and quantitatively.

(d) Sample Size

Sample for this study is as follows:

Table 1

Sr. No.	Type of Sample	Total
1	Students	80
2	Teachers	40
Total : 120		

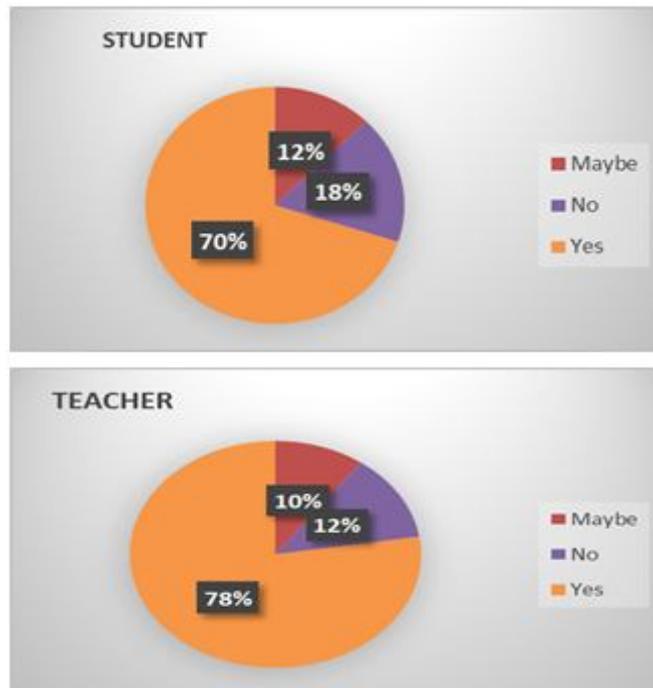
The above sample is divided among Students and Teachers across various Colleges.

VI. LIMITATIONS OF THE STUDY

- (1) Time is the major constraint, but efforts will be made and delivered to get all the relevant information required for this study.
- (2) The research work was confined to limited resources from the institutions which will not be sufficient for future conduct of the research.

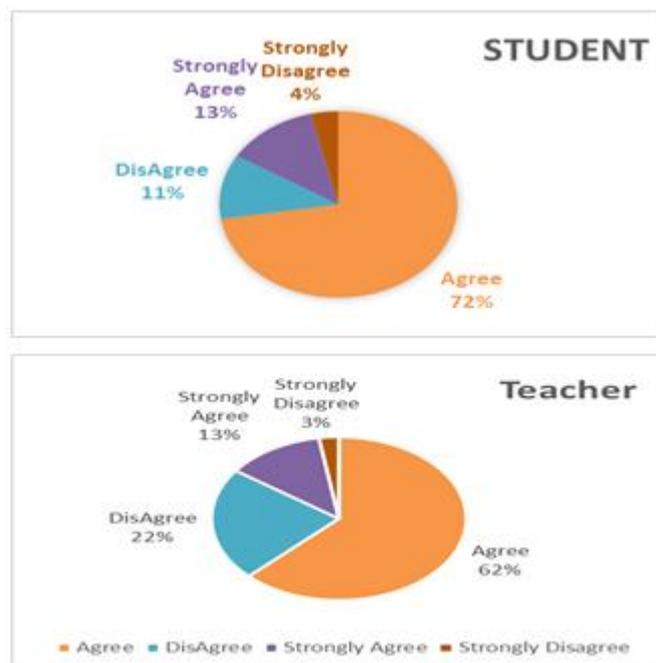
VII. DATA ANALYSIS

1. Are you familiar with the term green computing/green IT?



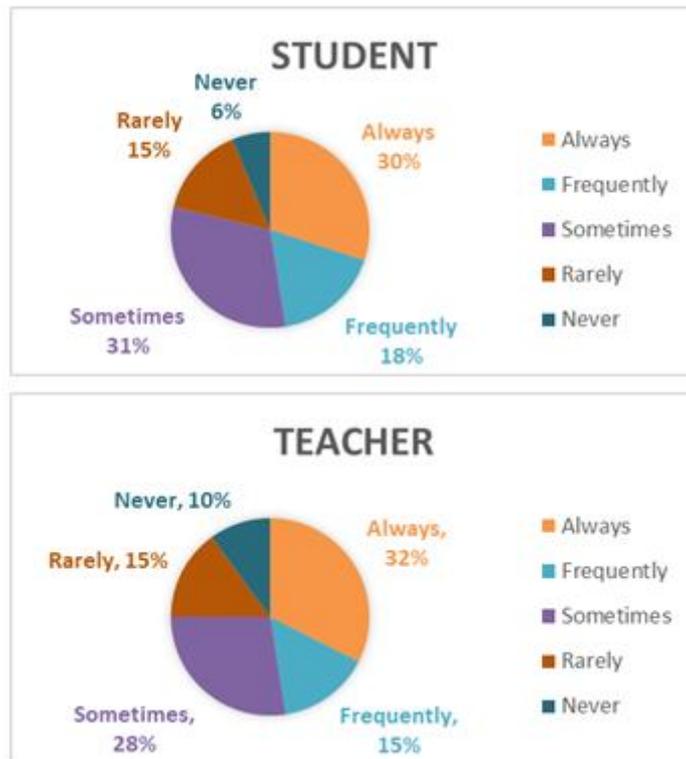
Thus we can say that awareness about green computing is independent of User role as students and teachers are equally aware about green computing.

2. Screen Saver conserves energy when your computer is idle.



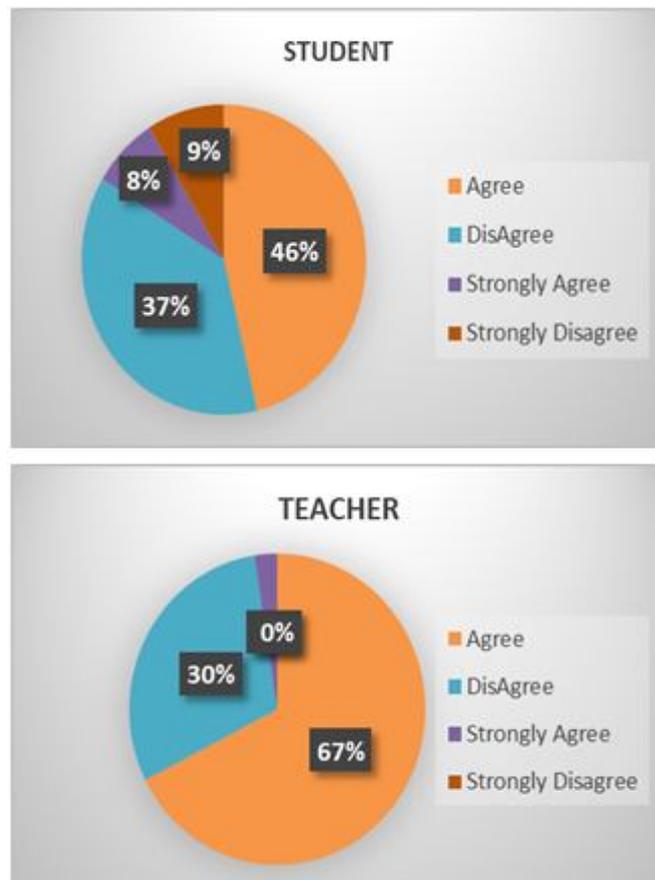
As you can see from the above pie chart, maximum users use screen saver to save energy when computer is idle.

3. Do you switch off monitor when you are not using it for short time span? (less than 10 minutes)



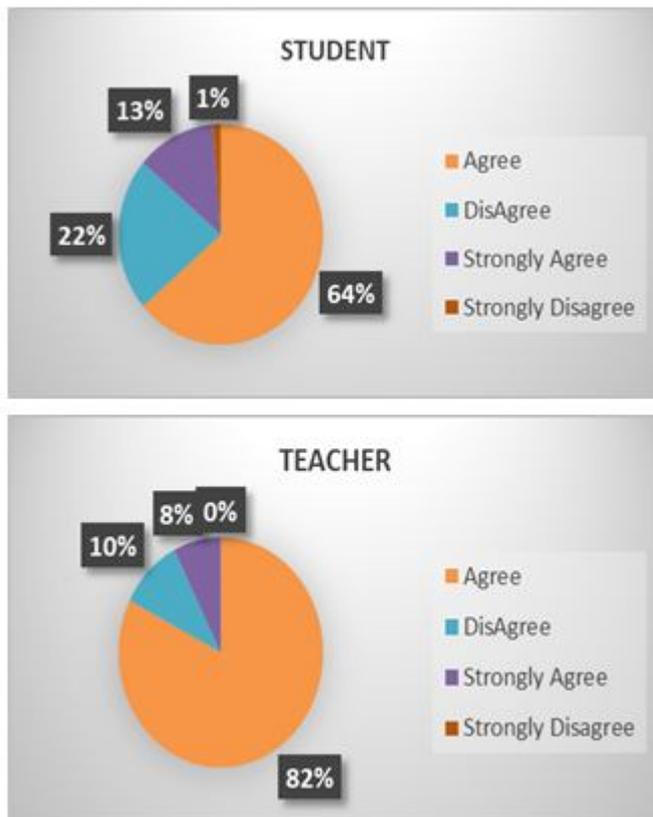
The above pie chart shows that most of the users switch off their monitor when they are not using it.

4. Do you think constantly shutting down and restarting your computer during the day would consume more energy than just leaving it running?



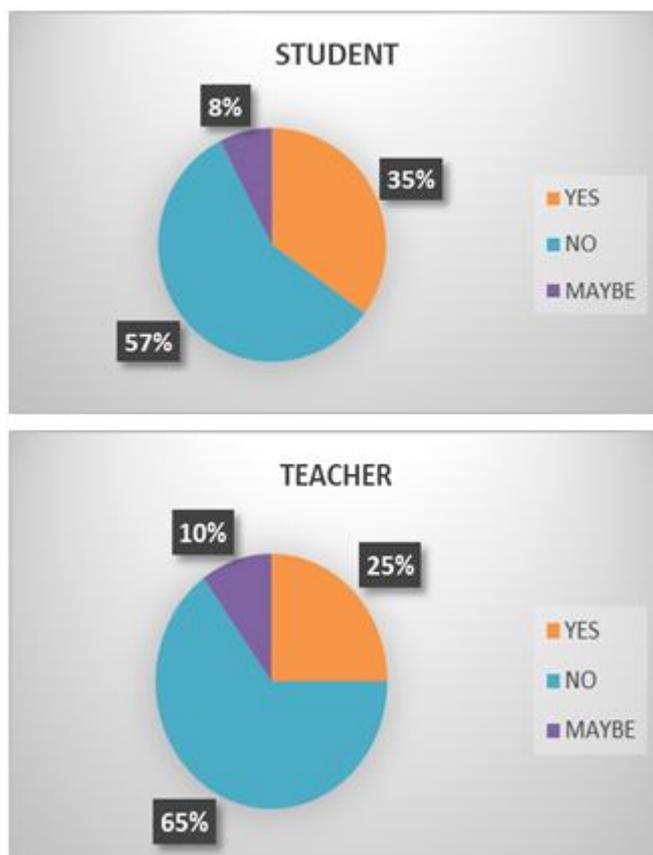
Most of the users think constant shutting down and restarting of computers consumes more energy as compared to keeping it running.

5. Reusing a computer is environmentally friendlier than recycling.



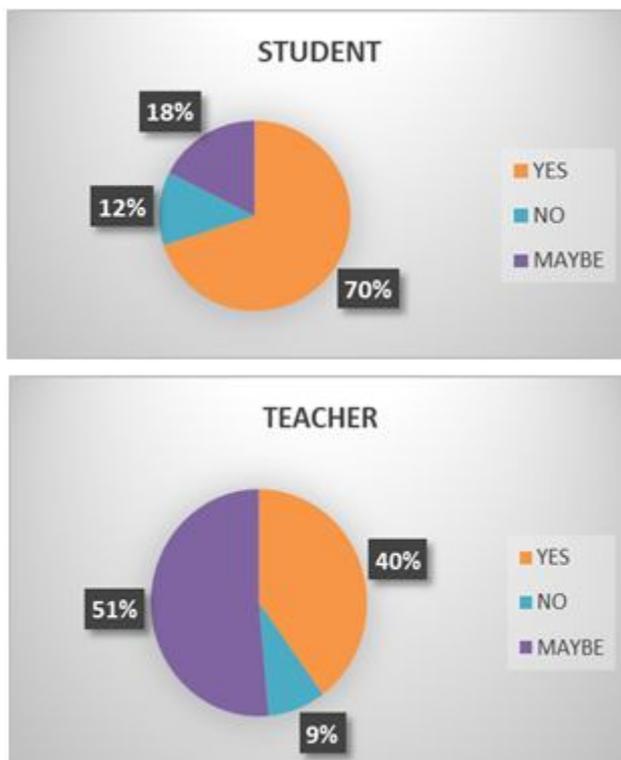
As you can see from the above pie chart, maximum users prefer reusing than recycling to safe environment.

6. Are you aware of Electronic Product Environmental Assessment Tool (EPEAT)?



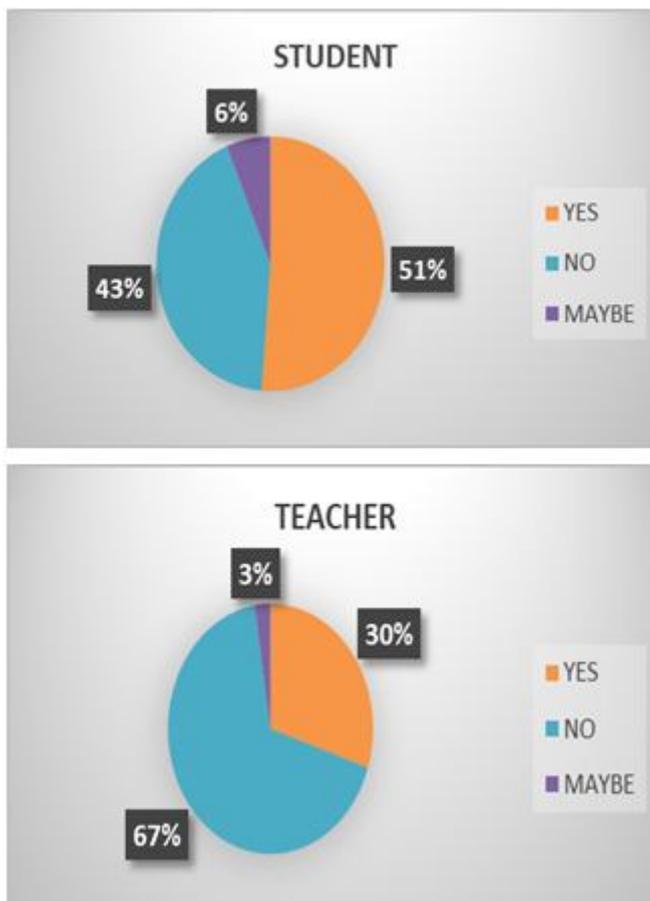
Most of the users are unaware about EPEAT

7. Are you willing to pay more for Green IT products?



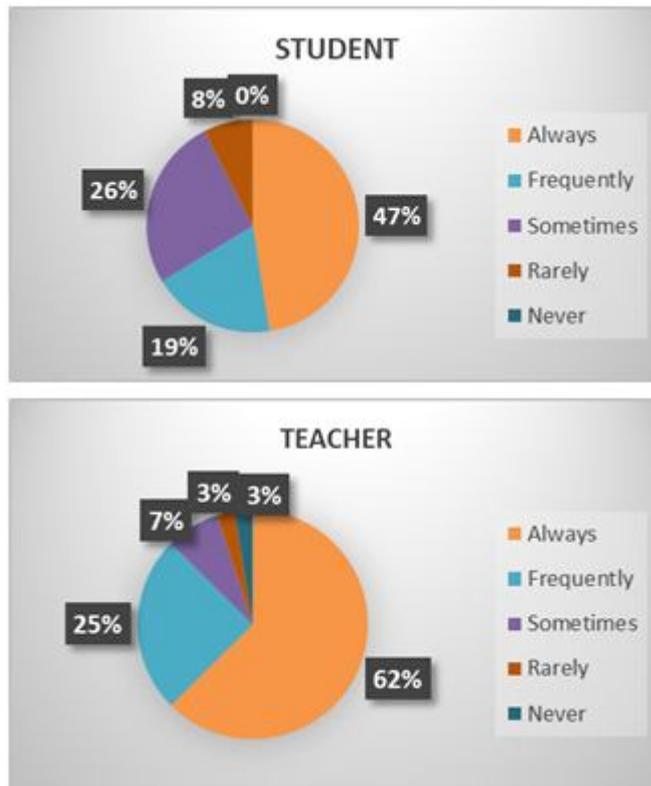
Students are more willing to pay for green IT products as compared to teachers for a greener and safer environment

8. Are you aware about the Energy star program?



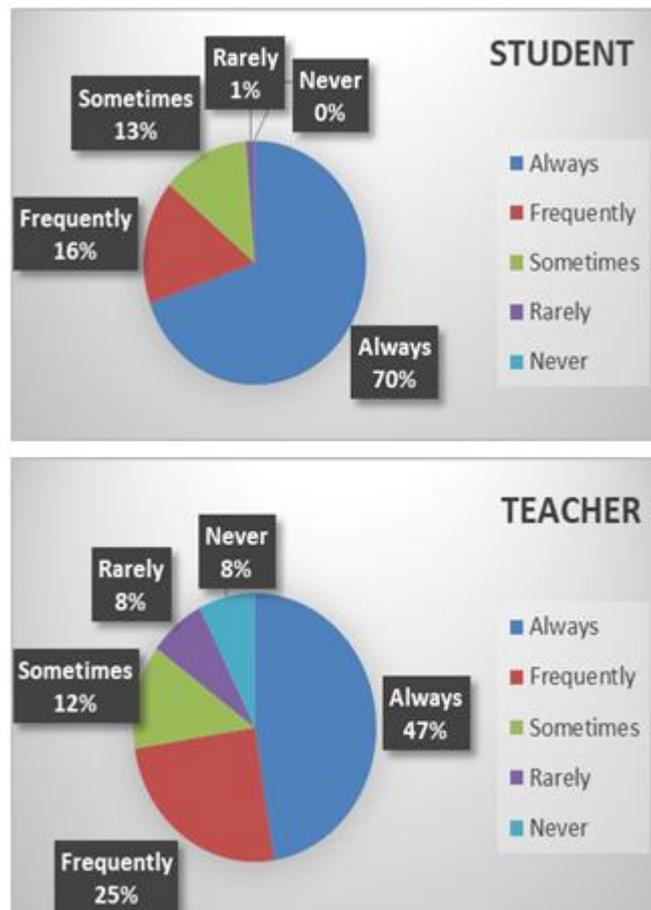
Students are more aware about Energy star program as compared to Teachers.

9. Do you use online facilities like Net banking, shopping, ticket booking, etc. wherever possible?



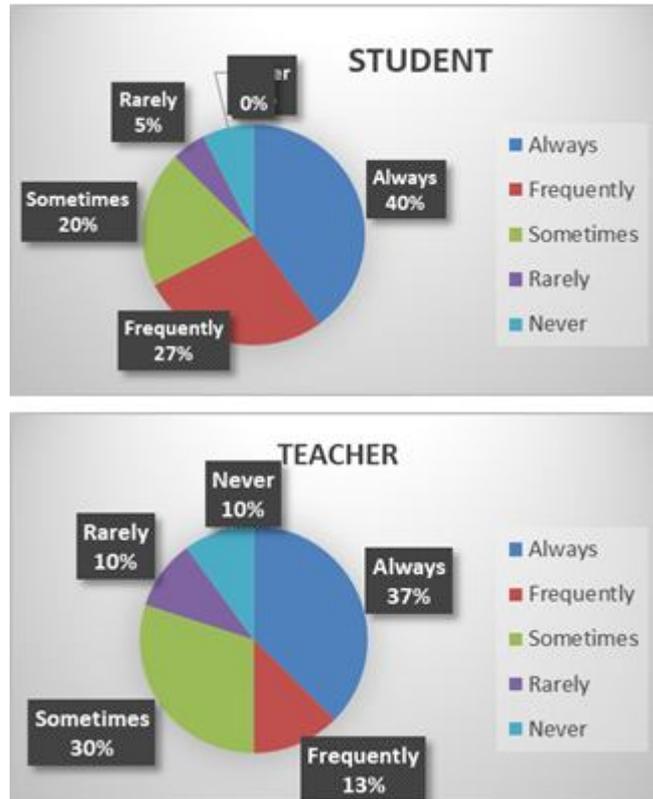
From the above pie chart, maximum users use online facilities.

10. Do you use cloud storage like Dropbox, Google Drive, OneDrive, Amazon Drive etc.?



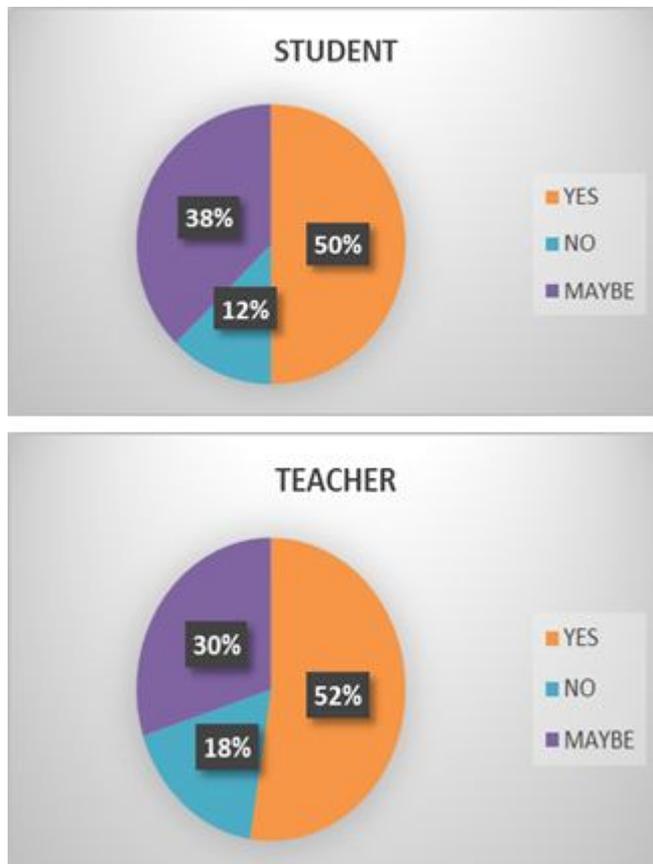
From the above chart, maximum users use online storage facilities.

11. Do you use the power management options of your computing device to reduce energy consumption?



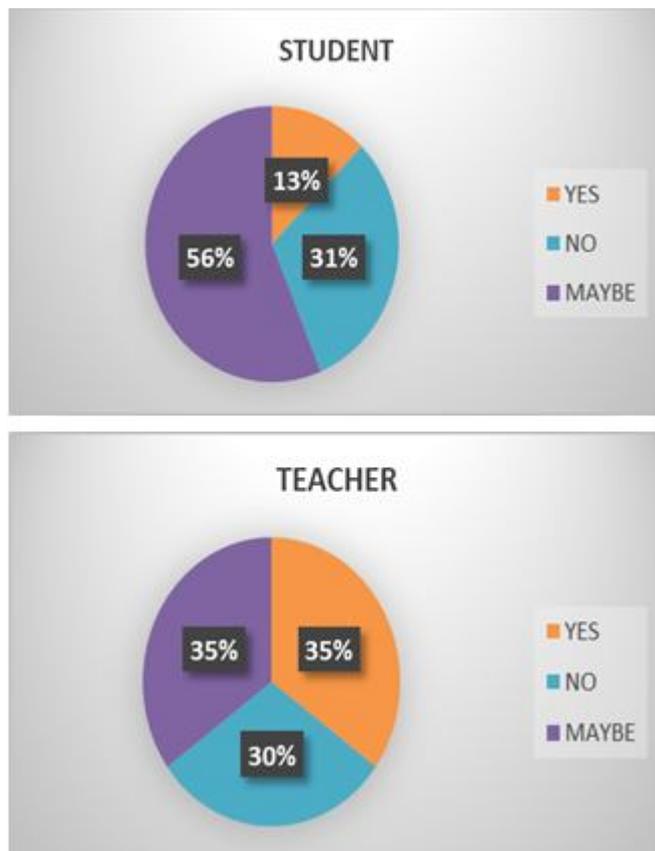
Most of the Students use power management options to reduce energy consumption as compared to Teachers.

12. Does your Institute use Virtualization technique/ has Network Infrastructure?



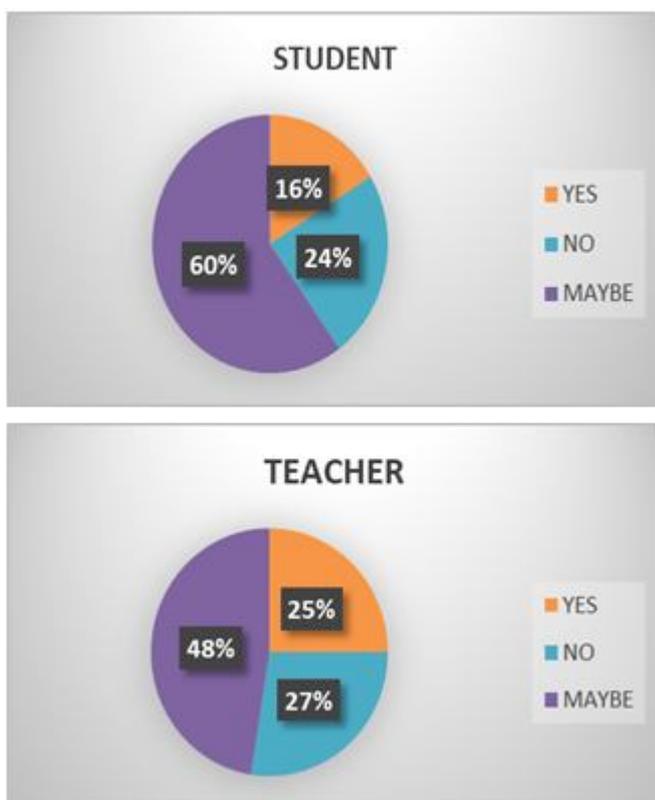
Most users agree upon having energy conservation technique like virtualization in their institutions.

13. Does your Institute has taken steps to measure carbon footprints (carbon emissions) or conduct Green Audit?



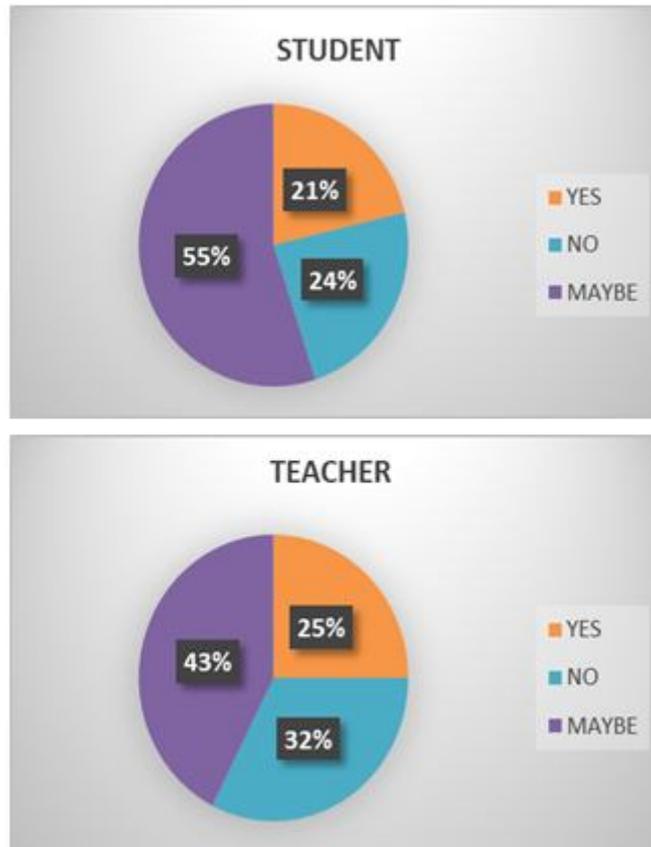
As you can see from the above chart most users are unaware about the conduct of green audit in their institutions.

14. Does your Institute has involved power Utilities Company?



As you can see from the above pie chart, most users are unaware about power utilities.

15. Does your Institute has computer recycling program?



As you can see from the above table most users are unaware about the having a recycling program in their institutions.

VIII. FINDINGS AND CONCLUSIONS

1. Students are more aware about Green Computing methods as compared to Teachers.
2. Users will need to be educated on the use of green computing and the importance of it as it can be seen only students are using green computing methods in their institutions.
3. Most users are not aware about the various Green computing policies adopted by their institutions.
4. Maximum users make usage of the online facilities for shopping and storage.
5. Users are not aware about the recycling programs in their institutions hence they prefer reusing the systems as compared to recycling.
6. Institutions are still following traditional methods for conservation of energy.
7. There are hardly any initiatives taken by the institutions to have green audit which measures the impact of business using IT on environment.

IX. SUGGESTIONS

1. It is advisable that institutions should embrace the idea of green computing and cloud computing in their various departments so as to reduce cost and save our environments and also try to inculcate this idea into the students and staffs since they are the key actors.
2. Institutions should make the staff and students aware about the green computing techniques adopted by them.
3. It is relatively easy for an organization to centralize its information technology (IT) system. Carbon footprints can be significantly reduced with server virtualization.
4. By using more powerful computer applications, your IT systems can better deal with inefficiencies. Further, faster software spares the servers from regularly operating at maximum capacity, thereby consuming lesser power. One can have a corresponding positive effect on the energy use and carbon emissions, if one can only increase the speed of the computer applications that is used.

5. Now that you have taken the steps to ensure that company uses green IT, you need to get everyone involved in the initiative on the subject of environment-friendly computing.
6. Institutions should always check the results of green IT initiatives. Compare this data with the benchmarks and metrics that is set for the company. A good example can be set by checking total power consumption for each month to check if it has significantly dropped, then one can say that we have effectively reduced your organization's carbon footprint.

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A STUDY ON DIGITAL TECHNOLOGY AND ITS IMPACT ON EDUCATION

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ABSTRACT

Earlier times education is focused on elements such as schools, colleges, faculties and books. The only way for the learners to approach the information is by entangled themselves with educational institutes, faculty members and educational libraries. Earlier when digitisation era was not much popular, people were not able to access the information easily, and even if they try to access, they were not able to get latest information as compared to today. The modern generation wants to get information as and when it happens, and the world is moving from an information society to a knowledge society. Thus education is given the maximum importance and intelligence quotient is becoming the most demanding asset of an institutes. Modernisation in digital technology has opened up many gateways of learning. Technology is now information accessible / transmitted from anywhere and by / to all. Education has reached almost every parts of the globe and ICT is an integral part of people's life. This paper tries to describe the process of generation, creation and acquisition of knowledge through the technology. Knowledge is highlighted through the use of ICT. This paper also shows how digitisation is used to access and apply such information. This paper is related to technologies used in education and its effect on the world.

INTRODUCTION**EDUCATION IN TRADITIONAL TIMES**

In Indian context, formal education was earlier focused on schools and colleges, while non-formal education was focused in libraries at most of the places in the form of newspapers, magazines, journals and books. Teachers delivered a lecture for the formal education either by consulting textbook or dictating notes by using books and their experiences and learning. The learners registered themselves and roam around the places that offered formal education. The libraries use to offer loads of supplementary reading material to enhance their learning as well as reference facilities.

A faculty is mandatory to be well learned, educated and knowledgeable to be able to give education to others. As well, they should have to acquire the skills of retaining student's attention and deliver the content in an effective manner. Thus teaching is a responsible profession and people respect the teachers as they guided and assist the learners to become responsible citizens of the country. In traditional times, lot of respect was earned by the teachers in the society and they were considered as one of the social service activities. Also teaching was more of bookish knowledge where past data and incidents were taught. With the help of digitisation and modern education, people have moved out of small towns to cities for various forms of employment. With the increasing population the demand for learning also goes up and thus the traditional schools or colleges could not cope up with the demand for education. Thus new and modern schools and colleges had to be created and existing schools and colleges were expanded and new and learned teachers were appointed to deliver the education. But the issue was, to match up the demand inexperienced, under qualified and under trained teachers were employed and thus this occupation has changed from a social service to a commercial business. Business is backed up by employee's remuneration and when it is less than the expectation, the people tends to seek other employment offering higher remunerations. Government wanted to make it as an education prone sector but the irony it turned out to be money earning sector.

ELECTRONICAL AND DIGITAL ERA

Electronic era is started with the usage of wireless communication over hundred years ago. Transmission of telegraph messages and the radio information into digital world are among the very important issues of this technology. The messages were transferred from the air, invisibly, on radio rays. Since then the technology has taken a giant step toward modernisation and moved from radio, to recordings, to movies, to television, to computers, to CDs, CD ROMs & the Internet, etc. This technology is very helpful to give instant messages and as well as to make people get aware of current national and international news. This has been an informal but quite effective form of education to provide knowledge, of almost each and everything.

LITERATURE REVIEW

- Terje Våljetaga and Sebastian H.D. Fiedler in 2002 mentioned in his research paper that "Digital textbooks are now a day's becoming an important culture in formal education. While higher education is the main idea of findings on e-textbooks so far, the topic is also gaining importance in other areas of traditional education.

This paper reports on an initial attempt to review on e-textbooks - mainly in the reference of K-12 education.”

- Prof. Nivedita Jha and Prof. Veena Shenoy in the research paper published in October (2016) explained “Education system shows a ray of hope and it should never target at creating just a hype. Over a certain period of time lot of changes have occurred in various sectors of economic world including the education system. Educational sector unlike any other sector has seen many stages in its evolution. From Gurukul system of organising the class in open area under the shed of trees to class room lectures, power point presentation form of lectures with the aid of LED touch-screen projector to online notes on websites and now instant What’sapp messages is the buzzword among the learners. India is comprised of diverse population belonging to various ethnic and cultural groups. Apart from these cultural differences, the most obvious varsity is that it makes a strong direct impression on the Indian education system. It also affects the purchasing power and affordability of the Indian people for new and modern digitised techniques to study.”
- Miller in the year (2007) is highlighting some of the issues that are crucial in building up the digital libraries and takes the initiative to think in the future scenario. This paper also risesup the issues of selecting and purchasing the digital material, from various websites and creating standard collection for managing different write ups and articles.”

OBJECTIVES

1. To study the transformation from traditional education to digitised education.
2. To analyse the new digital methods of education.
3. To investigate the impact of digital technology on education.
4. To enquire the various differences between traditional education and modern education.

RESEARCH METHODOLOGY

This research paper is purely based on secondary data collected from various published and unpublished articles, newspapers, magazines, books, recognised websites and some of the online links.

An attempt has been made to collect the relevant information through various secondary sources and conclude the authentic and rationale information on digitisation transformation from traditional to modern society, at the end. The awareness of digital techniques used by the modern learners and its benefits and drawbacks is also studied.

DATA ANALYSIS

SUPPORTING TECHNOLOGIES AND APPLICATIONS

There are a number of technical applications available to explore the knowledge management systems. Internet is always the backbones for these digital technologies.. They show transparent speedy transmission of knowledge among people and applications. Internet applications are used by using software and tools to collaborate the intelligent access to knowledge. Accurate authentication and access of layers, ensures the security aspects.

MEDIA FOR EXPLICIT KNOWLEDGE

Unlikely the traditional print media in the forms of textbooks information can be stored digitally and can be preserved without any destruction and they can be watched easily and quickly by many parts of the world.

- **Text:** Most of the data and the information are represented through this way. To convey a message effectively, the information should be accurate, defined, concrete and summarised. Learning is concerned with precise text and is useful to define the it points and detailed descriptions are for explanations and subsequent supplementary readings.
- **Animation:** Animation gives impression to a presentation. Not like text and graphics there are dynamic time based media industry. The picture impact of animation is to boost the learning procedure. Animations generally take the form of a movie moving across the screen, the user-controls the movement of an object. Certain tools are used to form such objects.
- **Sounds:** All types of oral communication uses sounds. Technology is been used to transform sounds to the whole universe. Teacher’s sound is the primary focus in giving knowledge. Voice could be shown by using computers, and digital audios are the two basic ideas used in multimedia systems. A multimedia system requires the use of vocals, music or specific sound effects. When used for knowledge, speech should be short, manageable and related with other media. It should be used as a joined partner to text.

- **Video:** Video occupies the maximum space when used over the network. So, video can be joined with other media options only through use of edited segmented video clips each conveying a specific message.

ACCESSING EXPLICIT KNOWLEDGE

RDBMS and EDMS organises the explicit information. They are examined using various techniques such as Internet, Intranet, Search Engines and workflow tools. The explicit knowledge which was examined should be used efficiently. For this it is necessary to check that the knowledge collected is presented in a productive manner. Methods like Decision Support Systems (DSS), data warehousing and data mining are available for such ideas. These methods are just used by most of the people and education sector is not an exception.

SHARING INFORMATION

Information sharing is possible through a network of people. Communication could be done by postal mail, fax and telephone. But these technologies are less effective across union territories. Digitisation provides more productive ideas through the use of e-mail, video conferencing, virtual meeting, and document collaboration. Overall use of information sharing technology will allow reaching it beyond union territories boundaries and performing the activities more efficiently.

- **E-mail:** It allows sharing knowledge in unlimited manner. An individual could share knowledge with a community by sending a message to a group of people. Creating groups, faculties and students to share information that is practised to some extent in India as well.
- **Video Conference:** Calling on landline telephone was allowed oral communication among distant employees. This has evolved a new technology which has not only allowed viewing a person on live video but also we can connect too many numbers of people. It saves travel time for the people. Most of the universities use this technique for giving lectures as well. Learners may ask questions by posting them to the faculties by using the technology.
- **Virtual Meeting:** Virtual meetings allow pupils from various geographical locations to connect and conduct meetings and share information as if everybody were in the same room. Programmes like power point presentation, excel sheets and word can be shared in real time.

CHANGES TO BE TAKEN PLACED (Suggestions)

A large amount of information is available on the various websites which has provided access to all types of teaching and learning material. The faculty's lecture notes are not only the primary focus of a learning process, but the faculty's role and the learner's learning process is also a main focus.

- **Paradigm Shift:** If education is concerned, paradigm shift is related to create Knowledge that is accessible virtually with the focus on the student. Virtual access is achieved through Internet or Intranets. Technologies like e-mail, websites notices, discussion committees and video calls allow the learners to view the information without going physically for the delivery. The intellectual e-learning system has these characteristics and tries to demonstrate the paradigm shift.
- **Classroom Level:** The technology in the classroom level is not possible until the teachers lectures were aided with new technology. Originally lecture delivery was through oral communication and then through the introduction of notes and talk and chalk such as blackboards. Later through projectors faculties were able to provide slides and project them directly.
- **Teacher's Role:** In the modern environment teacher's role have been shift from "providing information" to "Medium of learning" as he has only to give guidance to the learners who are actively using the e-learning components. Classrooms are fully equipped with multimedia projectors and LEDs and the e-learning system is checked through the Intranet. Teachers shouldn't control the learning process as well as they should allow students to perform work in collaboration and make some decisions on their own.
- **Student's Role:** Classrooms are well equipped with computers and given access to all learners. Due to which students intellectually participate in the learning process. Now the learners' focus is totally on the learning process rather than on photo copying note as the learning material which can be referred at a future time. Faculties should make sure that knowledge and skills are not given to learners directly, but are made by them in response to information and learning tasks. Faculties need to know how these learning could be motivating to learners who are representing this type of mental efficiency.
- **Assessments:** With the transformation in the learning procedure, the assessment methods should also be moulded. In spite of calculating learners on real knowledge and various extracurricular skills. Assessment

should be focused on application of information. This will allow measuring of a problem in solving skills of learners. Learners should also be given activities to demonstrate understanding and creativity.

- **Infrastructure Facilities:** Each learner must have computer accessibility to should implement the above ideas. Therefore, learners and computer proportion must increase. It is suggested that all education institutions should have compulsorily computers with a minimum ratio to be maintained is 1:5 with those teaching computing with a minimum ratio of 1:3. All faculties should be provided with unlimited computer access so that they could prepare their educational notes and presentations.

CONCLUSION

Since last past five years computing has been initiated to most of the educational institutes, student's faculty ratio is very high. By making the educationists aware of the most available technology and some taking involvement to implement them, some forms of reforms may take place. Indians would have been the people who have developed their skills and efficiency to the level of finding problem-solving and finding the information and interpreting and applying them in best manner.

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**AN EMPIRICAL STUDY ON AWARENESS AND PERCEPTION OF YOUTH FOR E-WALLETS
WITH REFERENCE TO MUMBAI CITY**

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ABSTRACT

The digital transformation phase that India is entering helps in bringing multiple alternatives to card/cash payment methods. The current study focuses on studying on the awareness and perception of youth for e-wallets . A sample size of 100 respondents of Mumbai city was taken for the study. The findings of the study show that youth are not fully aware about the mechanism of e-wallet mode of payment , it depicted that people in Mumbai city faces problems such as security concerns, rules, regulation and management while using e-wallet mode of payment.

Keywords : E-Wallets, reasons and challenges in use of e-wallet.

INTRODUCTION

The digital transformation phase that India is entering helps in bringing multiple alternatives to card/cash payment methods. Mobile payments have been suggested as a solution to facilitate micropayments in electronic and mobile commerce transactions and to encourage reduced use of cash at point-of-sales terminals (SHARMA, 2011). An electronic wallet, sometimes called a “digital wallet” or “e-wallet,” is an electronic version of a payment card which is authorized to conduct transactions on your behalf. These wallets are usually on a mobile device, such as a smartphone, though desktops and laptops can hold an electronic as well. . E-wallet in general is an electronic platform that enables commercial transactions and can be considered similar to debit cards which have pre-loaded cash for facilitating the transaction. The digital India drive of the Narendra Modi government has been given a boost with the manifestation of these e-wallets. These wallets have been made the part of Prepaid Instruments of India.

REVIEW OF LITERATURE

Sanghita Roy, Dr. IndrajitSinha (2014) stated that E- payment system in India, has shown tremendous growth, but still there has lot to be done to increase its usage. Still 90% of the transactions are cash based. Technology Acceptance Model used for the purpose of study. They found Innovation, incentive, customer convenience and legal framework are the four factors which contribute to strengthen the E- payment system. payment systems are important mechanisms used by individual and organizations as a secured and convenient way of making payments over the internet and at the same time a gateway to technological advancement in the field of world economy (Slozko & Pello, 2015).

Nitsure (2014) in his paper observed that the problem being faced by developing countries like India in the adoption of E-banking initiatives due to low dissemination of Information Technology. The paper highlighted the problems such as security concerns, rules, regulation and management. In India there is a major risk of the emergence of a digital split as the poor are excluded from the internet Balazs Vinnai, general manager, Digital Channels, Misys (April 25, 2016), says that It is critical for banks to consider new digital channels as part of an integrated strategy and evolve from first to second generation digital banking: switching digital from a supporting role, to the primary sales and communication channel for banks, says Vinnai. Reengineering processes around the customer is not easy, but banks must embrace digital banking to remain competitive and relevant.

Tahem Krunal, Sharma Rahul, Goswami Saurabh (2016), conducted a descriptive study to examine the factors driving use of digital wallets in state of Punjab. The study was conducted during the fourth quarter of 2015 by collecting primary data from 386 (Selected using snowball sampling) users of digital wallets in state of Punjab. The results of this study indicated that People in Punjab have been found using digital wallets due to the motives of controllability & security, societal influence & usefulness and need for performance enhancement. This study indicates that people of Punjab use any type of digital wallet due to one or all of these identified motives.

Kalyani Pawan(2016) in his paper studied the awareness and usage of paperless E-Currency transaction like E-Wallet using ICT in the youth of India. The paper elaborately explains features of various E-wallets in India. Researcher found that the most preferred modes of payment among the selected respondents are Cash on Deliver (COD) and credit card and debit card. It was found that respondents have good amount of information about the e-payment and e-wallet services available in India, but they know very little about the same types of

services available outside India. Researcher concluded that awareness and practical usability of the E-wallet is low, that should be increased by adding more value added services to it.

OBJECTIVES OF THE STUDY

- To understand the awareness level of e-wallets amongst the working youth in Mumbai
- To understand the usage patterns of e-wallets by working youth in Mumbai.
- To determine the factors that have led to e-wallet usage among working youth.

HYPOTHESIS

- H_0 Youths are not aware towards using e-wallets.
- H_1 Youths are aware towards using e-wallets

RESEARCH METHODOLOGY

Sources of data.

The present study is based on secondary and primary data which is collected using questionnaire method.

Sample Unit

Out of the universe of youth, youth with the age group 18 to 30 years are the sample unit of the study.

Sample Size

Using convenient sampling technique, a sample size of 100 youth is taken into consideration.

LIMITATIONS OF THE STUDY

The research was carried based on primary data. Though Mumbai is one of the most densely populated cities of the country and a commercial hub of India, with only 100 samples selected from the city cannot be considered as a complete representation of the population of the country. However, the objective of the survey was to verify the perceptions on e-wallets. Thus, this may not create obstruction in achieving the desired objective. Yet the findings of the study cannot be generalized.

DATA ANALYSIS

Table-1: Awareness about E-Wallet

Particular	No. of responses	Percentage
Fully aware	44	44
Partially aware	53	53
Not aware	3	3
Total	100	100

The above statistics reveals that the respondents are aware about e- wallet and it operations however the study projects that this segment of the market are not fully aware about its functioning.

Table-2: Occupation of the respondents

Particulars	No. of responses	Percentage
Private service	34	34
Government service	11	11
Entrepreneur	9	9
Others	46	46
Total	100	100

In the current study, out of 100 respondents, 34 respondents are working in private sector,11 are working in government sector, 9 are entrepreneur and 46 are others.

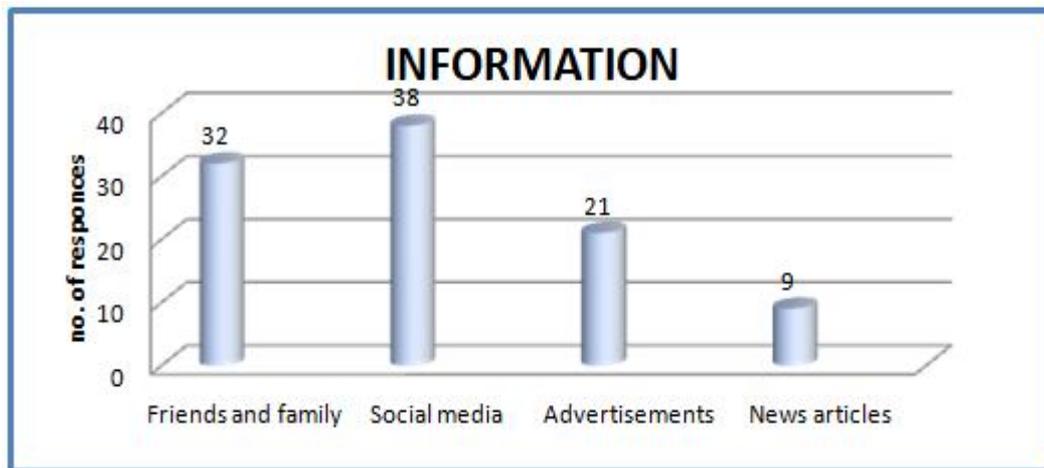
Table-3: Education

Particulars	No. of responses	Percentage
10 th pass	5	5
12 th pass	20	20
Graduate	61	61
Post graduate	14	14

The above table talks that maximum of the respondents are educated and graduates.

Table-4: Source of information about E-wallets

Particulars	No of responses	Percentage
Friends and family	32	32
Social media	38	38
Advertisements	21	21
News articles	9	9



In the current study, out of 100 respondents, 38 % of the respondents got to know about e-wallet through social media, 32 respondents got to know about e-wallets through friends and family, remaining 21% got to know through advertisements and 9% of respondents got to know via news article.

Table-5: Preferred e-wallet

Particulars	No of responses	Mean score
Paytm	72	9.0
CITRUS	4	0.5
Freecharge	22	2.75
Mobikwik	18	2.25
payUmoney	11	1.375
PhonePe	38	4.75
Googlewallet	41	5.12
others	22	2.75

The above statistics reveals the mean scores of the most preferred e-wallet. With the highest mean score of 9.0 the data reveals that paytm is the most preferred method of using e-wallet. Followed by is googlewallet with the mean score of 5.12 and phonepe with 4.75 as the mean score.

Table-6: Purpose of using e-wallets.

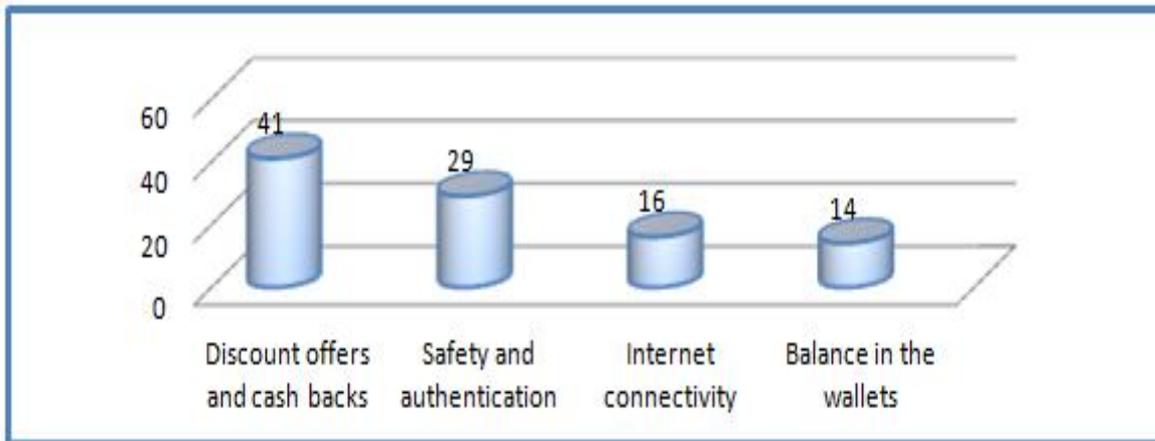
Particulars	No. of responses	Mean score
Money Transfer	61	10.16
Recharge	70	11.66
Bill payments	71	11.83
Booking ticket	46	7.66
DTH	24	4.00
Shopping	43	7.16

In the current study the majority of the respondents use e-wallet for bill payment as shown in the mean score 11.83 and the second most purpose is for recharge with a minor difference in mean which is 11.66.

Table-7: What do you keep in mind when you use e-wallets?

Particulars	No. of responses	Percentage
Discount offers and cash backs	41	41
Safety and authentication	29	29

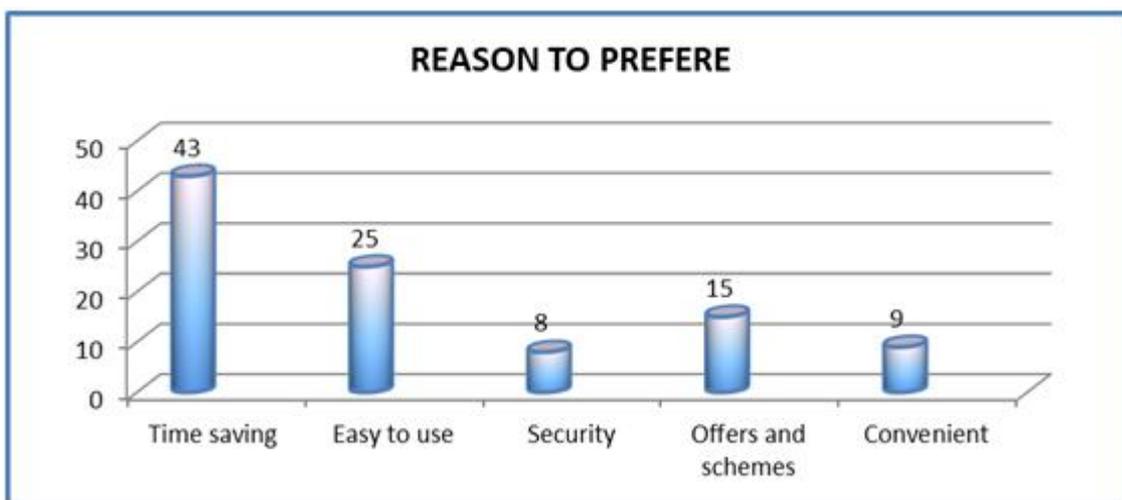
Internet connectivity	16	16
Balance in the wallets	14	14
Total	100	100



The above diagram depicts that majority of respondents use e-wallets to enjoy the benefits of discount offers and cash backs. This is indicated with statistics of 41 percent. Wherein 29 percent says they use e-wallet for safety and authentication.

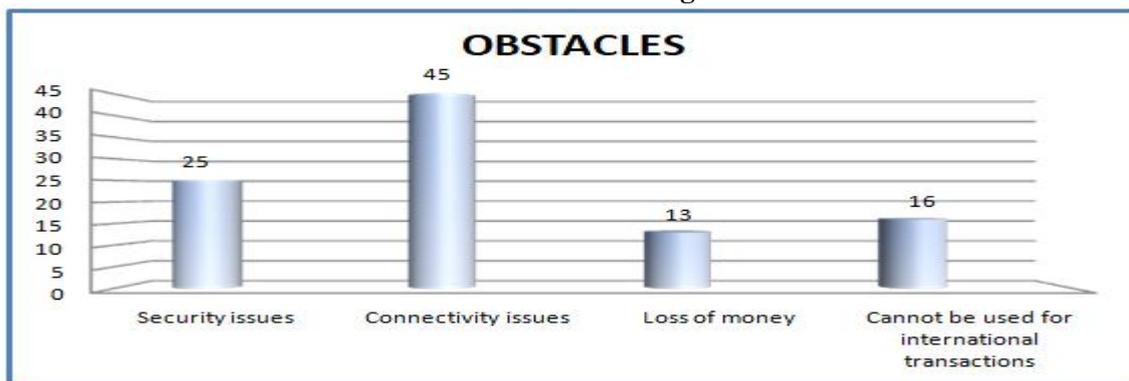
Table-9: Reason to prefer e-wallets over other modes of payments

Particulars	No of respondents	Percentage
Time saving	43	43
Easy to use	25	25
Security	8	8
Offers and schemes	15	15
Convenient	9	9
Total	100	100



As the respondents were asked the reasons to prefer e-wallets, 43 percent answered because it is time saving, and 25 percent responded saying it is easy to use. Only 9 percent said it is easy to use. This reflects that the people need to be educate on the use of e-wallets.

Particulars	No of responses	%
Security issues	25	25%
Connectivity issues	45	45%
Loss of money	13	13%
Cannot be used for international transactions	16	16%

Table10: Obstacles faced while using e-wallets.

In the current study the major problem faced by the e-wallet was connectivity issue and the second was the e-wallet cannot be used for international transaction.

FINDINGS

Large part of the population is still not aware of e-wallets like use of credit or debit cards, making transactions using mobile phones, and using the internet to pay bills they are not in a position to reduce its dependence on cash.

Second, about 90% of the workforce, which produces nearly half of the output in the country, works in rural sector. It will not be easy for this sector to become cashless. There is a general preference for cash transactions in India.

Although cashless transactions have gone up in recent times, a meaningful transition will depend on a number of things such as awareness, technological developments and government intervention. For instance, mobile wallets have seen notable traction, and it is possible that a large number of Indians will move straight from cash to mobile wallets.

The availability and quality of telecom network will play an important role. People face difficulties in making electronic payments even in metro cities because of poor network.

A large part of the population is still outside the banking net and not in a position to reduce its dependence on cash. According to a 2015 report by PricewaterhouseCoopers, India's unbanked population was at 233 million. Even for people with access to banking, the ability to use their debit or credit card is limited because there are only about 1.46 million points of sale which accept payments through cards. The absence of the additional layer of security will expose thousands of risk of identity theft. Another weak link is the inadequate redressed mechanism. There is no stringent legal process to deal with this kind or scale of fraud.

Service providers will have to constantly invest in technology in order to improve security and ease of transaction. People will only shift when it's easier, certain and safe to make cashless transactions. The government will also need to play its part. It will have to find ways to incentivize cashless transactions and discourage cash payments. Difficulties in changing attitudes and perception of people towards moving digital payments. India is dominated by small retailers. They don't have enough resources to invest in electronic payment infrastructure.

Nearly 90% of the respondents feel that India will move towards a successful digital economy.

CONCLUSION AND SUGGESTIONS

The study examines the effect of adopting e-wallet impact on working youth of India. The result put together gives us an important policy direction towards what can enable the country to increase cashless payments.

The results indicate that the deployment of technology for digital payments have improved the performance of banking sector and able to achieve the motive cash less country.

The study gives emphasis to the percentage of awareness on maximum utilization of technology. Banks should take effective measures in creating awareness towards the effective usage of technology and security. E-wallets was found to be known by all of the respondents and its growth rate is increasing and will keep on increasing.

Many respondents felt that it would be really necessary to educate over the areas related to cashless payments.

Awareness is all well and good, but some people will still need help to understand how to install and use digital payment systems. Although it would be impossible for any country to become a cashless economy in the short amount of time since, it is definitely something the country can look forward to.

The transformation of the current payment method to a total cashless one may not be possible in the near future, but continuous innovation in technologically aided payment system will certainly expand the society's accessibility to cashless payment.

Although the adoption of one type of cashless payment will affect another type of cashless payment in the short run, the consequences of adopting cashless payment on economic growth can only be significantly observed in the long run.

Hence, any policy that promotes cashless payment will not affect the economy immediately. People suggests the futuristic card should evolve to use biometric ID (finger prints, eye scan etc), it can be extremely difficult to copy, making it a very safe option.

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A STUDY OF AWARENESS AND USE OF CASHLESS TRANSACTIONS AMONG SENIOR CITIZENS OF BANDRA, MUMBAI

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ABSTRACTS

Growth of technology and initiative of present government has resulted in moving youths towards cashless transactions. Senior citizens form major contributors to Indian economy. They have conservative attitude towards technology. This paper aims to find out attitude towards cashless transactions and their constraints while undertaking cashless transaction. For the study purpose 59 senior citizens of Bandra area are taken as sample. It was found that their awareness level and use of cashless transaction is increasing. But still some more efforts will be required to build their trust towards digital banking.

Keywords: Senior Citizens, Cashless Transactions, Digital India, Digital Banking

1. INTRODUCTION

Demonetization has opened many avenues in the digital payment system in India. People are now becoming less worried of technology and are becoming comfortable with the digital world with every passing day. According to Census 2011 India, there are nearly 104 million elderly persons (aged 60 years or above) in the country, including 53 million females and 51 million males. Old age brings experiences of life, at the same time it poses difficulties in the areas such as financial management. Managing savings and investments is a big challenge for the elderly. They are highly dependent on children and others in family for their banking transactions. This is because they are not digitally savvy or finding it difficult to operate. While banks do offer products for senior citizens, no one seems to have developed a comprehensive program to fully address the older adults' unique financial concerns. (www.edgeverve.com).

Cashless transaction refers to using internet and mobile phones for making their banking transactions and stopping the use of money through hands. It offers variety of benefits such as no need of handling cash, easy to use, no need to visit bank branches resulting in saving of time and energy. This paper is an attempt to know the awareness and habit of cashless transactions among senior citizens who forms a very huge and important part of economy. The objective of paper is to find out the modes used by them, various problems they faced and frequency of using cashless transaction by senior citizens of Bandra area of Mumbai.

2. REVIEW OF LITERATURE

A study titled "**A study on attitudes of senior citizens using cash services towards online banking**" focuses on identifying the reasons why cash service customers are not using online banking and the future prospects in their use of online bank. Findings of study state that many of them do not use online banking because they do not have computer. Non-users find online banking very challenging. (Piiparinen, 2014)

The paper titled "**Digital Inclusion and the Elderly: The Case of Online Banking**" studied the challenges that are faced by the older generation in the digital world. Researcher surveyed a group of elderly users and identified issues that prevent them from engaging with digital technology. The findings of study state that factors affecting usability is less experience with use of online banking was the most significant factor. (Georgieva)

The paper titled "**seniors' experiences with online banking**" presents an evaluation of the user experience of two online web-banking sites from an older user's point of view. Researcher therefore conducted a usability testing employing 12 seniors, in order to analyze the needs and issues faced by this user group when performing real-world tasks. The study involved six tasks which users were required to complete within a specific time. Most of the participants were interested in learning to use online banking. The study results show that older persons do not find web-banking sites easy or user-friendly. (Chrysoula, Anastasios, & Dimitrios, 2017)

The paper titled "**Understanding the Behavior of the Elderly towards Internet Banking in the UK**" presents an investigation into the behavior of elderly people (age segment 55-65) towards Internet banking in the UK. The research constructs were developed based on the 'Decomposed Theory of Planned Behavior' towards providing an understanding of the level of motivations, social influence, perceived usefulness and ease of use for the defined age segment in the UK. The findings of study state that 'Resistance of change' has negative relation with all variables who are composing 'attitude'. In the behavior towards IB, Social norms in the form

of 'peer influence' shows less influencing variable as compare to the impact of 'attitude' in defining behavior towards IB in the elderly people in the UK. (Fahad & Tanko, 2012)

3. OBJECTIVES OF THE STUDY

- 1) To find out mode of cashless transactions used by senior citizens in Bandra.
- 2) To find out various problems faced by senior citizens for cashless transactions.
- 3) To find out frequency of using cashless transactions of senior citizens.

4. HYPOTHESIS STATEMENTS

- 1) H_0 = There is no difference between gender and problem faced in cashless transactions of senior citizens of Bandra.
- 2) H_0 = There is no significant difference between education and frequency of making cashless transaction by senior citizens of Bandra

5. RESEARCH METHODOLOGY

5.1 Type of Research

In order to the objectives, descriptive research design is used here focus is on survey and fact finding enquiries through structured questionnaire. The study makes use of quantitative research approach as it allows the researcher to examine relationships among variable.

5.2 Type and Source of Data

The present study is based on primary data and secondary data. The primary data was collected by structured questionnaire. Open and close ended questions were asked in the questionnaire to get the answers of those questions, which were related to the objectives laid down in the study. Secondary data is collected from various websites and research papers.

5.3 Target Population and Sample size

59 senior citizens were taken as a sample for research by visiting various parks where senior citizens sit at evening time and also by taking references of other senior citizens from them.

5.4 Sampling method

The sampling technique followed was convenience sampling method.

5.5 Area of study

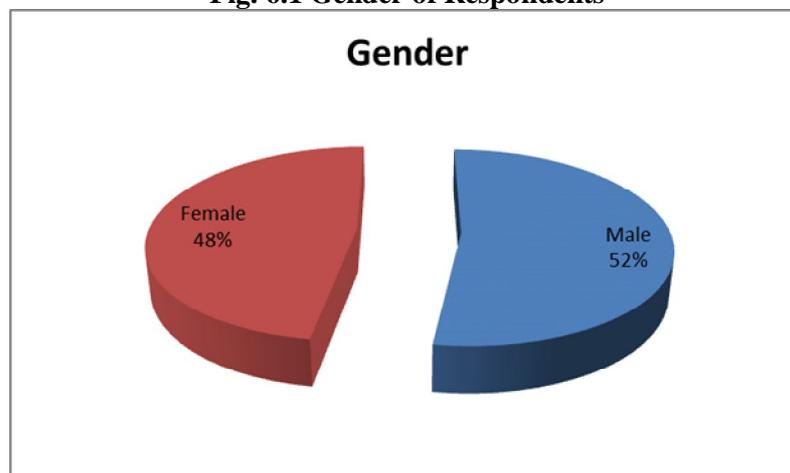
The research was conducted in Bandra area of Mumbai suburban

5.6 Statistical Tools Use

Graphs are used to analysis and interpretation of data. Mann-Whitney U test and Chi-square is used for testing hypothesis.

6. DATA ANALYSIS AND FINDINGS OF THE STUDY

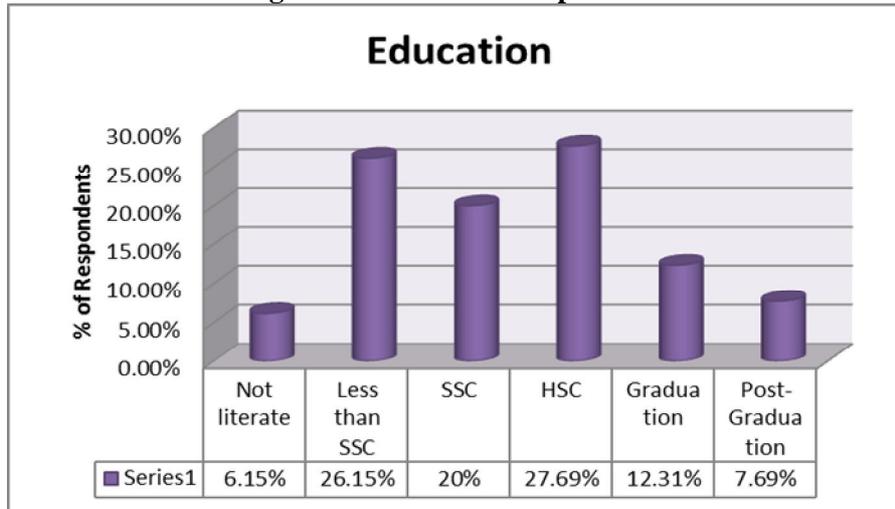
Fig. 6.1 Gender of Respondents



Source: Primary Data

The above graph shows gender of respondents. 48% respondents were Females and 52% respondents were Male senior citizens.

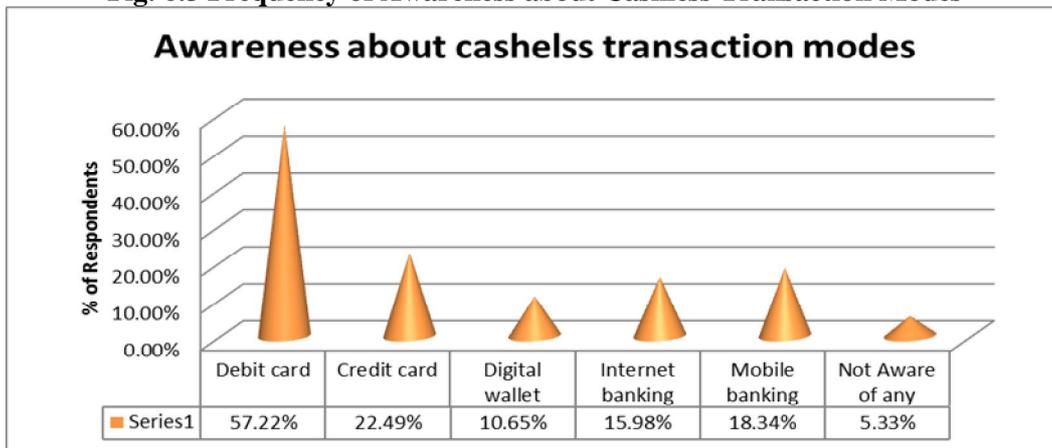
Fig. 6.2 Education of Respondents



Source: Primary Data

The above graphs represent the Education of respondents. 6.15% respondents were not literate, 26.15% were studied till less than SSC, 20% were studied up to SSC, 27.69% were studied up to HSC, 12.31% were graduates and 7.69% were Post-Graduate.

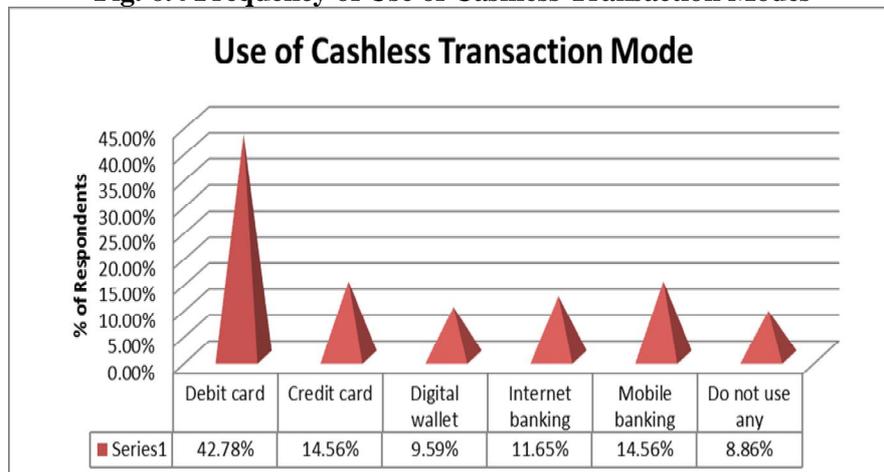
Fig. 6.3 Frequency of Awareness about Cashless Transaction Modes



Source: Primary Data

The above graph states that 52.22% respondents said they are aware of debit cards, 22.49% said credit cards, 10.65% said digital wallets, 15.98% said internet banking, 18.34% said mobile banking and 5.33% said they are not aware of any mode of cashless transaction.

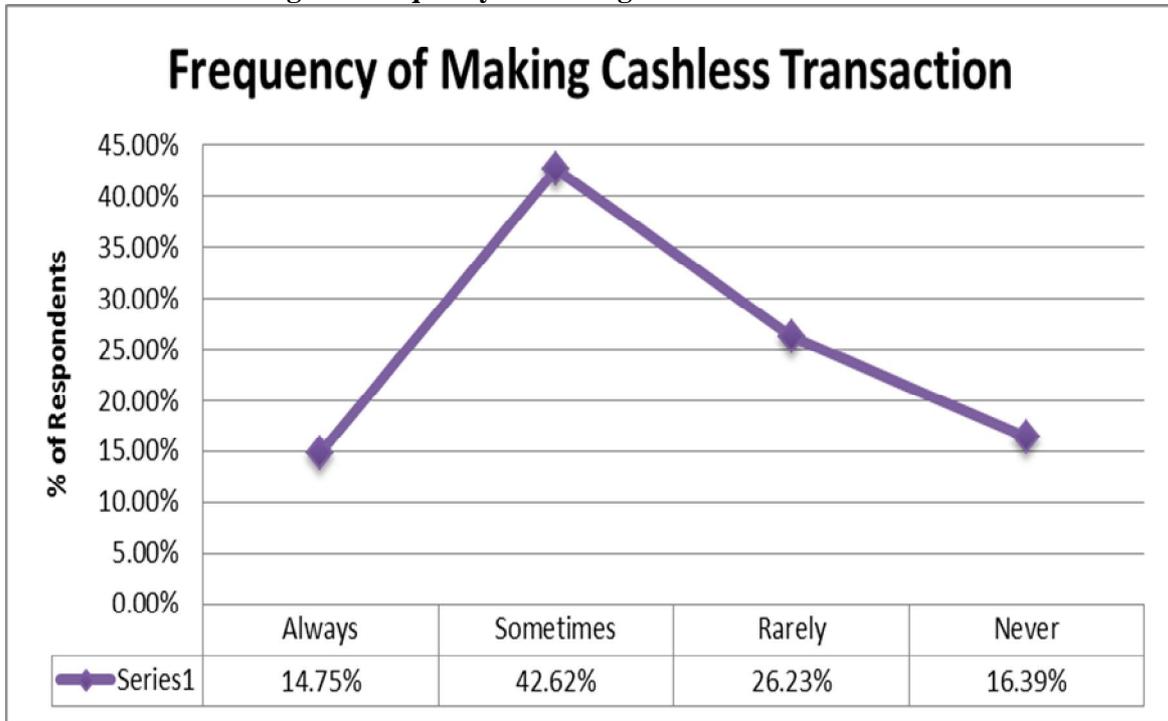
Fig. 6.4 Frequency of Use of Cashless Transaction Modes



Source: Primary Data

The above graph states that 42.78% respondents said they use of debit cards, 14.56%.49% said credit cards, 09.59% said digital wallets, 11.65% said internet banking, 14.56% said mobile banking and 8.86.33% said they are don't use any of any mode of cashless transaction

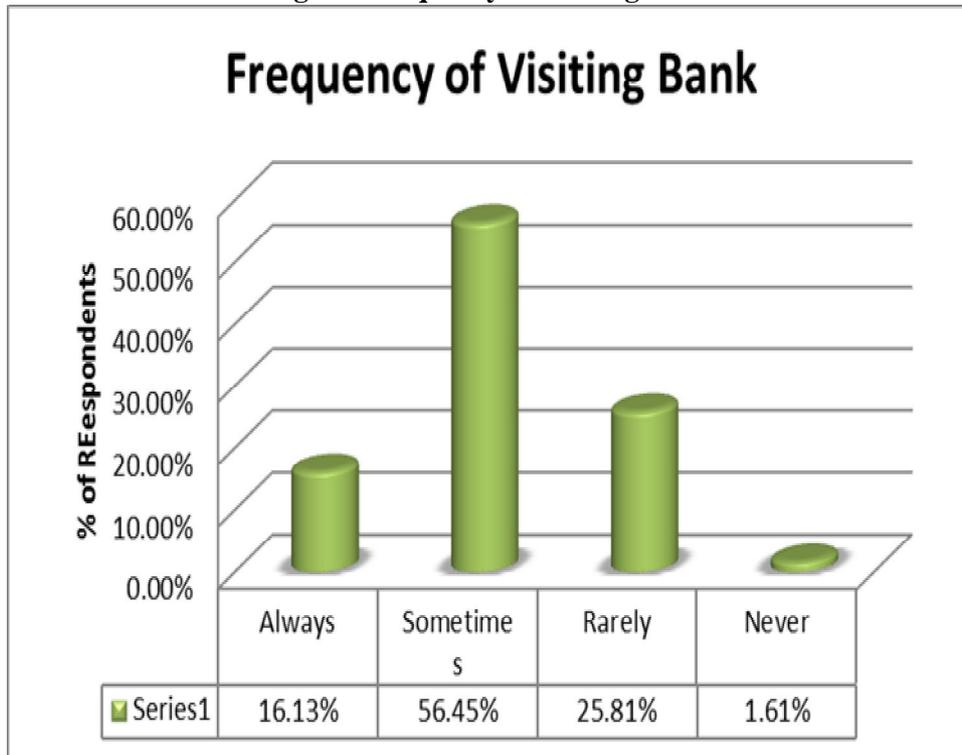
Fig. 6.5 Frequency of Making Cashless Transactions



Source: Primary Data

Above graph states that 14.75% respondents make cashless transaction always, 42.62% said sometimes, 26.23% said rarely and 16.39% said never make cashless transactions.

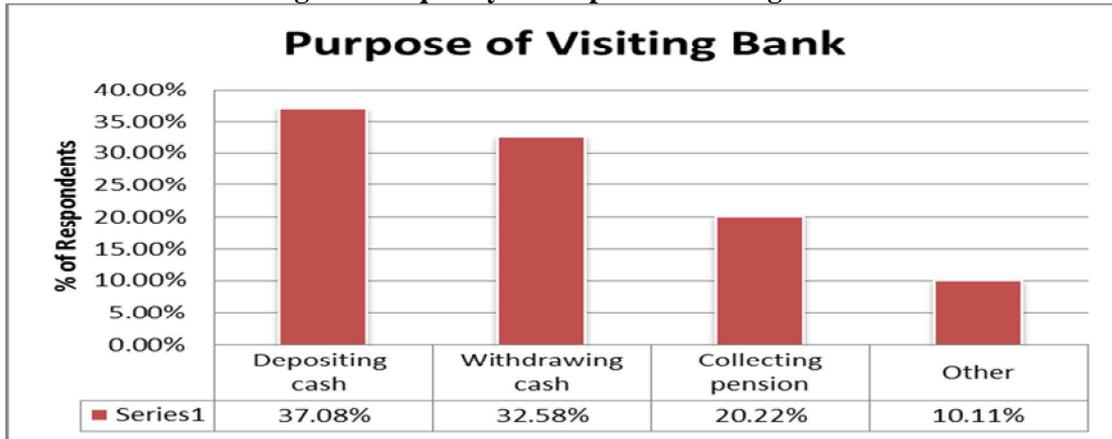
Fig. 6.6 Frequency of Visiting Bank



Source: Primary Data

Above graph makes it clear that, 16.13% respondents said they visit bank always, 56.45% said sometimes, 25.81% said rarely and 1.61% said they never visit bank.

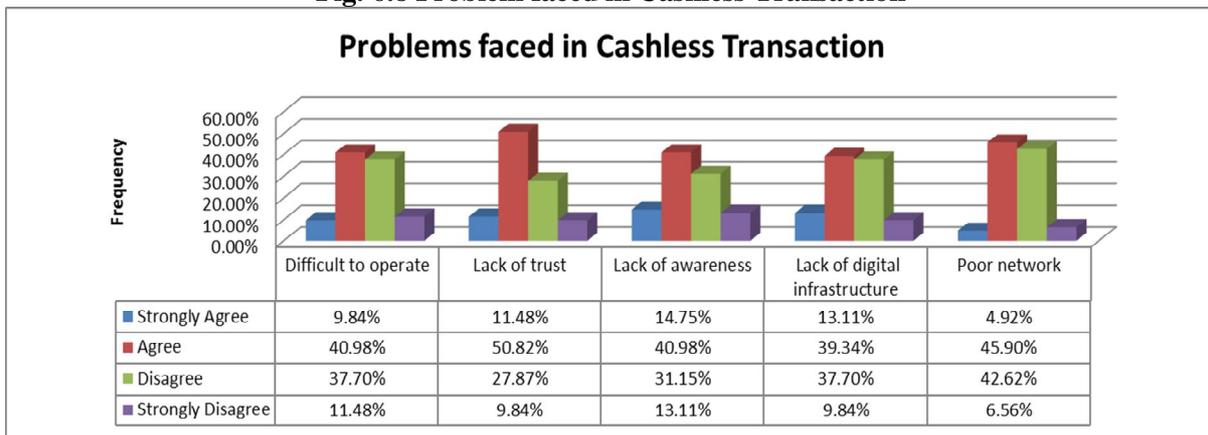
Fig. 6.7 Frequency of Purpose of Visiting Bank



Source: Primary Data

Above graph makes it clear that, 37.08% said they visit bank for depositing cash, 32.58% said withdrawing cash, 20.22% said collecting pension and 10.11 said they vising bank for other purpose.

Fig. 6.8 Problem faced in Cashless Transaction



Source: Primary Data

Above graph states that there is mixed reaction of respondents about problems faced by senior citizens in cashless transactions. Almost equal number of respondents are agree and disagree about the various problems faced in cashless transaction.

6. HYPOTHESIS TESTING

H₀ = There is no difference between gender and problem faced in cashless transactions of senior citizens of Bandra.

Mann-Whitney U Test					
	Difficult to operate	Lack of trust	Lack of awareness	Lack of digital infrastructure	Poor network
Mann-Whitney U	261.000	311.500	268.500	305.500	451.500
Wilcoxon W	789.000	839.500	796.500	833.500	886.500
Z	-3.134	-2.396	-2.983	-2.437	-.199
Asymp. Sig. (2-tailed)	.002	.017	.003	.015	.843

a. Grouping Variable: Gender

Conclusion

Since, here p-value > 0.05 for all factors considered under the problems faced in cashless transaction (except poor network), H₀ is rejected. Hence, it is concluded that There is difference between gender and problem faced in cashless transactions of senior citizens of Bandra.

In other words, we can say that problems faced in cashless transactions by male and female are different (except poor network).

H_0 = There is no significant difference between education and frequency of making cashless transaction by senior citizens of Bandra

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.617 ^a	15	.000
Likelihood Ratio	40.115	15	.000
Linear-by-Linear Association	16.209	1	.000
N of Valid Cases	61		
a. 22 cells (91.7%) have expected count less than 5. The minimum expected count is .59.			

CONCLUSION

Since, here p-value (Asymp. Sig.) = 0.000 < 0.05, H_0 is rejected, it is concluded that there is an association (significant relation) between the education and frequency of making cashless transactions by senior citizens of Bandra.

In other words, we conclude that education affects the frequency of making cashless transaction by senior citizens.

7. LIMITATIONS

- 1) Sample size of 59 is a limitation; the findings may differ with higher sample size.
- 2) Sample unit and the area can be a limitation as the purpose and frequency may differ in other areas.
- 3) Responses given by respondents may be biased.

8. CONCLUSION AND RECOMMENDATIONS

It can be concluded from data that awareness level of cashless transactions and use of cashless transaction is increasing among senior citizens. More efforts would be required on the part of government and banking sector to increase awareness level of senior citizens about various cashless transaction modes. It is recommended that with the growing number of senior citizens as well as keeping their physical and mental condition in mind, it is necessary to design digital devices that suitable for senior citizen. Family members can play important role increasing their awareness of cashless transactions. This will reduce their risk of carrying cash and also build trust for digital banking.

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IMPACT OF DIGITAL MARKETING ON CONSUMER BUYING DECISION
(With special reference to Mumbai)**Yadav Pramila and Hirve Varsha**K. V. Pendharkar College of Arts, Science and Commerce and DTSS College, Malad (E)

ABSTRACT

The technological progress lift off the internet and development of web has increased the interconnectivity of consumers. So, the consumer buying behavior has been changed and organizations required to comprehend the impact of digital marketing on the consumer buying decision process.

The purpose of this research is to analyze the impact of digital marketing on consumer purchase decision and to identify that the customers are aware of digital marketing and how digital channels dominates in their purchase decision. The study is accomplished through survey from 100 respondents. The findings of the survey are analyzed using correlation method. The results of the study released that consumers are informed of digital marketing and they favor to buy electronic and FMCG goods through digital channels in their buying behavior. The study is conducted in a Central Mumbai region and this may be reasoned as a limitation to judge the buying decisions of all customers at various regions. As the world heading towards digital era, the digital channels plays crucial role in increase in turnover of sales of any firm's products. So, this research made an attempt to reveal the impact of digital marketing on consumer buying decision.

INTRODUCTION

Marketing refers to the venture of a company connected with buying and selling a product or service. It incorporates promoting, commercialism and delivering merchandise to people. People who perform duties in companies' promoting departments seek to get the attention of targeted customers by using slogans, design of packaging, celebrity endorsements and general media exposure.

The ultimate aim of marketing is to match a company's products and services to the customer who need and want them to ensure profitability.

DIGITAL MARKETING

Digital marketing encircles all marketing efforts that use an electronic device or the internet. Businesses leverage digital channels such as, social media, search engines, email, and their websites to connect with current and prospective customers. Marketing has continuously been connecting with the audience in the right place and at the proper time. Today, that means we need to meet them where they are already spending time: on the internet.

The challenge of meeting the modern customer's expectation of a continuous, cross-channel, and personal experience is met with new ad technology and innovations that continue to advance at break-neck speeds. New ad technology platforms, methods of tracking, type of ads, zestful ad content, and advances such as the Internet of Things now provide countless opportunities for marketers and promoters to occupy their customers personally and across channels.

Here's a quick analysis of some of the most common digital marketing strategies and the channels involved in each one.

- Search Engine Optimization (SEO)
- Content Marketing
- Social Media Marketing
- Pay-Per-Click (PPC)
- Affiliate Marketing
- Native Advertising
- Marketing Automation
- Email Marketing
- Online PR
- Inbound Marketing

REVIEW OF LITERATURE

- 1) **Elisabeta loanals (2014)** studied the impact of social media on consumer behaviour with 116 respondents through structured questionnaire. Her findings revealed that social media has an impact on behaviour changes of consumers.
- 2) **Antoine camarre (2012)** discussed in his Article about the future direction of mobile marketing in various areas. He discussed that mobile marketing can increase value for consumers and also retailers.
- 3) **Basheer (2010)** analysed the impact of SMS advertising on consumer attitude and purchase intentions. His findings discovered that there exist a positive relationship between perceived quality of advertising and buy intention
- 4) **Sadia Afzalet (2015)** discussed in his paper the impact of online and conventional advertisement on consumer buying behaviour of branded garments results revealed that quality, design, content of advertisement, loyalty of customer towards brand and former shopping experience of customers are significant factors which influence consumer buying behaviour.
- 5) **Mrs. K.R. Mahalaxmi (2016)** study shows that the influence of the digital channels not supporting in change of opinion of customer towards purchasing a product, but in near future the digital channels influence the customer purchase opinion as there is a consideration for digital channels among customers are evident.
- 6) **Sathish and A. Rajamohan (2012)** found that “Consumer behaviour is still a young discipline and most of the research now available has been generalised only during the past fifteen years or so.

NEED OF THE STUDY

The need of this research study is to find out how the digital marketing communication impact on the consumers buying decision. Digital marketing has got amazing changes in the way the marketer promotes products and services and customers are purchasing the same. The study is conducted to define the term digital marketing, consumer buying behavior, and to do a primary research with the help of questionnaires and personal interviews of people. After study the interpretations will be recommended to the respective groups for whom this is useful.

OBJECTIVES OF THE SYUDY

- 1) To research the awareness of digital marketing on customers of Central Mumbai.
- 2) To survey the impact of digital marketing on buying decision of customers.
- 3) To know about the buying behavior of customer using digital channels for shopping.

HYPOTHESIS OF THE STUDY

- I. H0: Gender does not have a significant impact on Online buying behavior.
H1: Gender has a significant impact on Online buying behavior.
- II. H0: Digital marketing influences buying decision of the customers.
H2: Digital marketing does not influences buying decision of the customers.
- III. H0: Occupation does not matter for purchasing product.
H3: Occupation matters for purchasing product.
- IV. H0: Income does not encourage customers propensity to consume product.
H4: Income encourage customers propensity to purchase product.

RESEARCH METHODOLOGY

The present research study is based on survey method; the questionnaire in Google form was distributed among people to gather the required data for research.

- 1) **Method of Sample Selection:** Data has been collected through structured questionnaire from central region of Mumbai customers. Non probability (convenient sampling) has been adopted.
- 2) **Sample Size:** Sample size for the study was selected 100 respondents from central Mumbai region.
- 3) **Data Collection:** For the study of research primary as well as secondary data is collected.

Primary Data: Primary data collected by way of structured questionnaire, made into Google forms was sent to respondents via email & social media.

Secondary Data: Secondary data is collected through books, periodical, journals, magazines etc.

Data Collection & Analysis

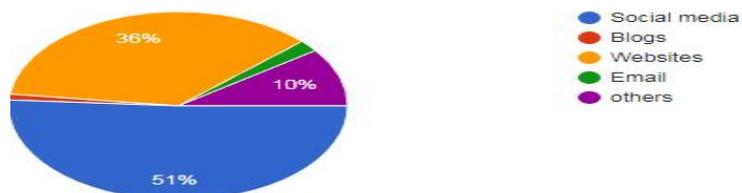
1. Demographic Profile of the respondents

	Category	No. of Respondents	Percentage of Respondents (%)
Gender	Male	30	30.00
	Female	70	70.00
Age	Below 20yrs	11	11.00
	20-30yrs	44	44.00
	30-40yrs	28	28.00
	40-50yrs	11	11.00
	Above50yrs	6	6.00
Occupation	Homemaker	05	05.00
	Students	25	25.00
	Business	4	4.00
	Service	64	64.00
Monthly Income	Below20,000	42	42.00
	20,000-40,000	22	22.00
	Above 40,000	36	36.00

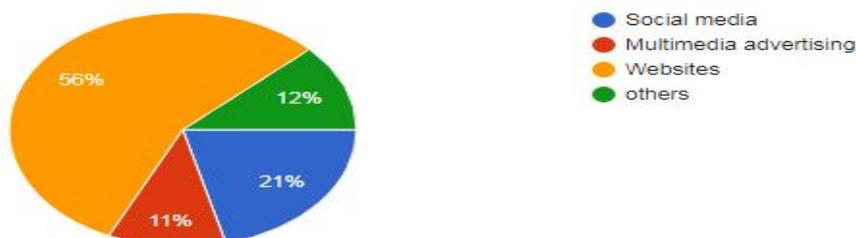
2. Awareness of Digital Marketing.

	Category	No. of Respondents	Percentage of Respondents (%)
Do you watch advertisements?	Yes	82	82.00
	No	18	18.00
Digital channels are you aware of?	Email	66	66.00
	Website	69	69.00
	Social Media	88	88.00
	Text	53	53.00

3. Digital advertising influences more to buy product.



4. Digital channel use more to buy product.



5. Kind of product you buy after watching digital advertisement.

Category	No. of Respondents	Percentage of Respondents (%)
Grocery	5	5.00
Durable	13	13.00
Clothing	51	51.00
Furniture	Nil	Nil
Electronic Appliances	27	27.00
Food Items	4	4.00

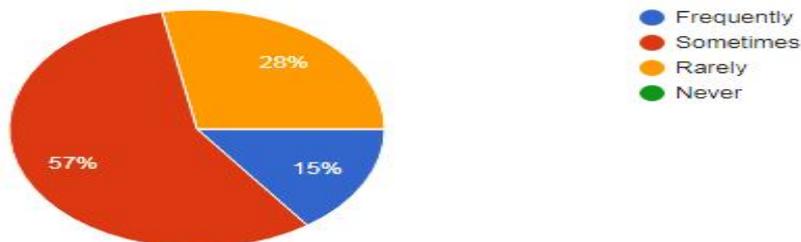
6. Digital Channel changes opinion towards buying decision.

Category	No. of Respondents	Percentage of Respondents (%)
Yes	45	45.00
No	14	14.00
Maybe	41	41.00

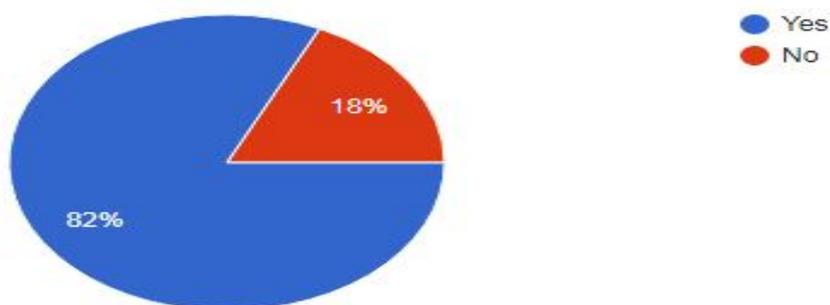
7. Purchases product online & offline after watching advertisement Online.

	Percentage of Respondents (%)	
	Yes	No
Purchase product Online	68	32
Purchase product Offline	64	36

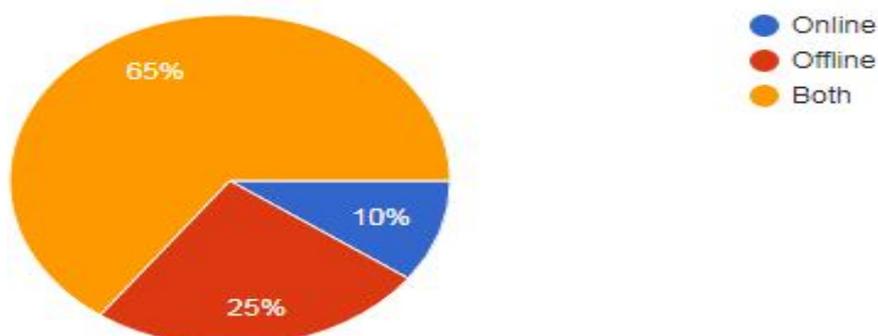
8. Frequency of buying product Online:



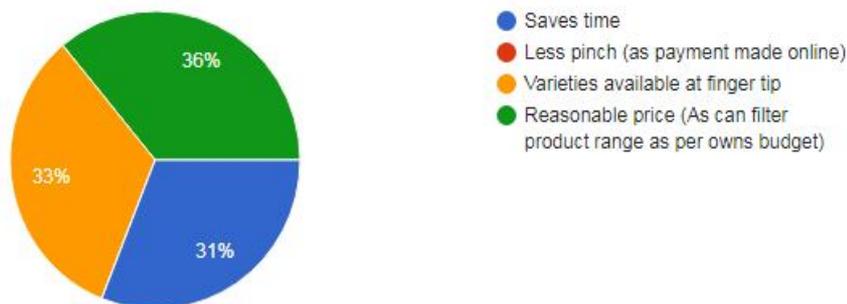
9. Customer's satisfaction with the product bought using digital channel:



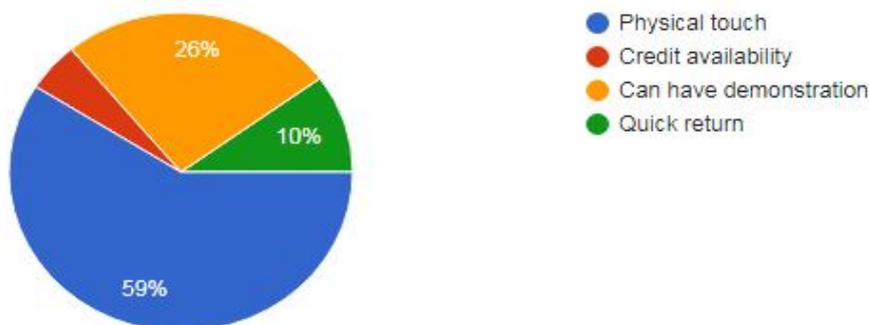
10. Mode of transaction which satisfies you more :



11. Reason for purchasing product online:



12. Reason for Offline shopping:



HYPOTHESIS TESTING

1) Out of 100 respondents 70% are female against 30% of male, as numerically female are more than male. But it is found that male are more interested to do online shopping than female irrespective of their income level, education & occupation. Among female 45(64%) does online shopping in front of 22(73%) male respondents. It meant still female gives much more preference to offline shopping.

Hence, H0: Gender does not have a significant impact on Online buying behavior, is being rejected.

2) As 45 respondents says digital marketing changes their buying behavior, whereas 41 says that it may have power to change preference towards purchasing against 14 respondents who don't agree with change. As analysis shows except 33% respondents altogether 67% people buys product online.

Digital channel affects buying behavior	Do you purchase product online	
	Yes	No
Yes(45)	38	07
No (14)	08	06
Maybe(41)	23	18

Thus, H2: Digital marketing does not influence buying decision of the customers, is being accepted.

3) Online shopping is preferred by most of the service class (44) people followed by students (22) and homemaker, business class & others. From the analysis it is seen that occupation & buying behavior has strong correlation as $r=0.994257277$.

So, H3: Occupation matters for purchasing product is accepted.

4) As far as income is considered for remarking the behavior of respondents towards online shopping among customers. The results found that there is no much variation in online shopping as per their income.

Income of the Respondents	No. of Respondents	Percentage of respondents, purchase product online
Below 20,000	44	68%
20,000-40,000	22	68%
Above 40,000	37	70%

Thus, H0: Income does not encourage customers propensity to purchase product is accepted.

FINDINGS& INTERPRETATION

1. Though numerically female are more online users but actually male are doing online shopping more than them.
2. People are much aware with social media (88%), website (69%) followed by E-mail (66%) and text (53%) mode of advertising.
3. Social media has more influential power to change buying decision of product then also people choose websites to do shopping.
4. Digital channel affects buying opinion of individuals, as only 45%are agree with it but truly 67% have bought product online.
5. Still people buy product offline after watching advertisement online. The reason for such could be physical touch & demonstration effect of the product.
6. 82% folks are satisfied with commodity bought using respective digital channel but very less response is found for online mode of transaction i.e.10% as compared to both (online &offline) mode of transaction.
7. The salient majority buys product online and prefers Cash on Delivery mode of payment, because of transaction insecurity.

CONCLUSION OF THE STUDY

1. Digital marketing has great future in present market.
2. Middle age group people (20-30yrs) falls under the highest user of online shopping.
3. Respondents serving in service sector prefer online transaction than rest of others.
4. Income does not show any significant impact on buying behavior of consumer.
5. 82% keep watching online advertisement.
6. After watching ad people prefer more to buy clothing than electronic appliances and least rank is given to grocery & food items.
7. More than 50% customer takes help of website to buy product online
8. None of the customers are interested to buy furniture online, despite of giving several offers on it.
9. Just 15% people buys product frequently in front of 57% who does transaction sometime.
10. The reason behind online shopping are reasonable price, availability of variety of product at finger tip which saves a lot of time also creates more options to select product.

SUGGESTIONS OF THE STUDY

1. Companies should collect feedback& suggestions from the users and accordingly implement it.
2. Provide transparent and good services to customers post delivery of order.
3. Complete description should be given to online shoppers.
4. Avail discount & offers on online payment.

LIMITATION OF THE STUDY

1. The survey is conducted within Central Mumbai region.
2. Only few dimensions of Digital marketing are considered.
3. The data is collected within short span of time, where the changing behavior of respondents couldn't identify.

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IMPORTANCE OF EARLY RETIREMENT PLANNING

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ABSTRACT

Everyone in today’s world is busy working 24x7 but there comes a time when our body may not support the amount of dedication that we need to continue the job and at that time people usually take retirement. This stage is of life requires less manual work but to maintain the standard of living for that people have to continue earning and so at that time retirement planning comes into picture. In simple words we count our current expenses and plan the amount needed in future to maintain the same standard of living. And this paper focuses on the study of importance of early retirement planning.

Keywords : living expenses, early retirement planning, importance.

I]INTRODUCTION

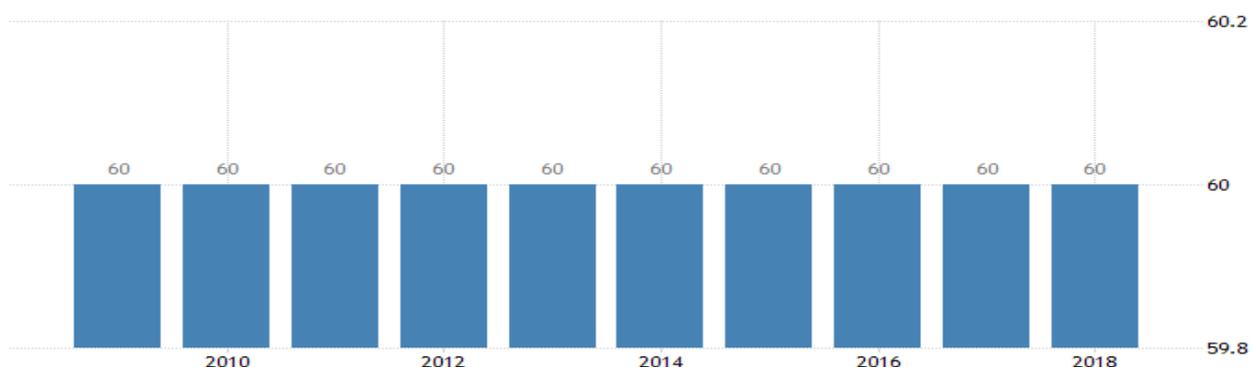
Retirement is nothing but ones withdrawal from their own job. Individuals take retirement with the basic idea to reduce mental stress an physical burden as well. At times officials have to compulsorily remove individuals from job because their body doesn’t support excessive pressure. Corporate s set a particular age group and it differs from corporate, usually corporate s have retirement age set at 58 or 60 years. After that till survival a continuous stream of income is needed by the individual in order to maintain the same standard of living even after the retirement. This stream of income requires a proper planning. And hence retirement planning is needed.

The process of retirement planning itself is a process

Here current expenses of of the individual need to be calculated and understand how much individual might need in order to cover up monthly and yearly expenses and then corpus has to be set and investments have to be made in order to create the corpus.

Earlier the retirement planning higher the corpus can be accumulated.

Retirement age over years has been 60 over years.



SOURCE: TRADINGECONOMICS.COM | MINISTRY OF FINANCE, GOVERNMENT OF INDIA

II] REVIEW OF LITERATURE

Dittrich, Busch and Micheel (2008)

conducted a study on “Working beyond retirement age in Germany: The employee’s perspective”. The focus of this study is to understand whether old individuals are willing to continue working once reached the legal age. The sample survey was conducted by the Infratest in Germany with 1,500 employees (blue collar workers, white collar workers and civil servants) they were between 55-60 years. The variables of the research had job status, gender, job reward, job demand and various other factors. The conclusion was that they avoid retirement because they want income or family income for survival. Lesser the income higher the demand for working . (http://economicscience.net/files/Working%20beyond-retirement-age-in-Germany_20-10-10.pdf)

Ling and Fernandez (2006)

Studied about elderly people participating in labour force in Penang. The paper focused on the study was to examine demographic and social-economic profile of the elderly and the factors that influenced the labour force participation of senior citizens i.e. the option to be either “in” or “out”. The sample of the study comprised of 328 respondents of the age falling between 55 and 89 years. The sample selected for this study consisted of 142 respondents who participated in the labour force, whereas the remaining 186 respondents did not form a part of labour force. The sample consisted of individuals of different races in the state of Penang. So the questionnaire was prepared in two languages i.e. English as well as in mandarin, a language spoken pre-dominantly by the Chinese population in Penang

Brown et al., (2010)

Studied one of the most common aspect of life that is retirement and also studied and focused on working post retirement. The main aim was to define what it means to be working in retirement and how employers might best meet the needs of elderly, to the advantage of workers and of the employers themselves. The sample of the study involved 1,382 participants aged 50 and older. The data collected by the FWI'S nationally representative study of the U.S was used for the study. The major findings of the study revealed that 75 percent of workers who aged 50 years above expected to get post retirement jobs in future. Further it was observed that people worked after retirement for variety of reasons, which included one to avail opportunity to earn more money with which they could have more comfortable life in retirement and because they would be bored if they were not working. Those working 5 Studies from India 20 Studies from Abroad 25 Studies 4 in retirement were highly satisfied .They could keep them engaged in their work. They even rated their workplace more positively than those who were not yet retired. A significant number of such employees showed preference for transition to self employment as retirement jobs. While those worked in retirement worked for a fewer hours, on an average than those who were not yet retired. Majority of elders working in retirement have reported working full time and they wanted to work for the same or even more hours. Finally the study suggested that these working retirees represented a new paradigm for thinking about work throughout an individual's lifespan in terms of flexible careers. Flexible careers is supposed to recognize that people's values, needs and aspirations with respect to work change as individuals move through different life stages .It may allow multiple exit and re-entry points. (<http://familiesandwork.org/site/research/reports/workinginretirement.pdf>)

III] OBJECTIVES OF RESEARCH

This paper focuses on various aspects of retirement and the objective of the study is :-

1. To understand the importance of retirement planning.
2. To analyse various instruments available for retirement.
3. To know the importance of early retirement planning.
4. To understand various instruments available for creating the corpus.
5. To study factors affecting the retirement planning.

IV] RESEARCH METHODOLOGY :-

The research is descriptive. The scope of the research paper is wide as it based on secondary data and collects information from various sources. It focuses on study of importance of retirement planning that to early one.

Various sources have been used for this purpose.

V] DISCUSSION AND ANALYSIS

V.1] EARLY AGE RETIREMENT PLANNING

It is believed that age 21-35 is the age where individuals start earning and at this age their expenses are pretty less. In India children live with their parents so when they start earning it is considered ideal to start investing. Because their expenses are more or less handled by their parents and naturally they have excess money. And the ones living along have comparatively less expenses anyways so their cost of living can be covered easily plus they have excess money in this phase of life as there are less financial dependents. And so the adulthood age of between 21-35 is ideal for retirement planning phase.

V.2] FINANCIAL PLANS

Financial plans are nothing but plans made for financial purposes and in this case for the purpose of retirement. This plan considers a systematic study for retirement , the money needed , corpus amount, regular investment etc. These plans help individual to have a clear sight about the investments and withdrawal of money post retirement . individuals can visit a Certified Financial Planner [CFP] who understands and studies the current

expenses predict the future value of these expenses and plan the corpus and as per this corpus they decide the investment that needs to be made and this investment can monthly, quarterly, yearly and semi annually.

A certified financial planner deals with tax planning, investment planning, risk analysis and insurance and retirement planning. A certified financial planner clearly suggests to plan one's retirement in early stage. This is because it is very true that our expenses are low and income is high and hence the individual has ample amount of money to be invested in various instruments. One can approach a certified financial planner and plan their retirement.

V.3] IMPORTANCE OF INFLATION

One of the major aspect that the financial planner has to consider is inflation. The rate of inflation affects the expenses. As inflation reduces the power of money it is important that the retiree has ample amount of money to maintain the same standard of living. And so the only factor affecting expenses and hence while calculating the future value of expenses inflation is considered.

V.4] INSTRUMENTS

A retiree can invest in various instruments depending on his ability to invest and his opinion towards risk. That is whether the investor is aggressive investor or normal investor. It is recommended that the investor must invest in debt instruments as it grows at fixed rate with no risk attached. Also there are mutual funds available which are mixture of both debt and equity or debt or equity as well. Also there is option of provident fund which has a lock in period of 15 yrs and can be extended to 5 year at 3 parts. Also one can invest in NPS scheme tier 1 which is meant for retirement only and hence invested money can be withdrawn at retirement only.

V.5] AT RETIREMENT

At retirement the corpus accumulated can be invested in various annuity products. Annuity is nothing but when the amount is invested we can get monthly or yearly income along with interest in order to cope up with our monthly expenses. This is inflation adjusted. One can receive this amount at the end or beginning of the month.

This annuity can be purchased till the life expectancy of the retiree. An individual can also go ahead with reverse mortgage. Reverse mortgage is nothing but when a person takes certain amount in lump sum or installments against their house. That is they can keep their house as mortgage and this can again be a source of income for their retirement.

Also retiree receives various defined benefits, it is nothing but at time of the job the employer of retiree invests certain amount in either EPF or EPS schemes. And this amount once accumulated at retirement is given to employee at time of retirement various other retirement the employer also provides gratuity. This also has to be considered at time of calculation of corpus to be accumulated and its investment.

VI] RESULTS

Following are the observations from the study:-

1. early retirement planning helps in increasing the retirement planning
2. Investing in annuity provides a regular income
3. Mutual funds, equity, debt market and various other instruments are available for retirement planning

VII] CONCLUSION AND RECOMMENDATION

From this research on "Importance of early retirement planning" it has been concluded that retirement planning is very important as it focuses on saving a part of their present income and using it as their income after retirement. It has been concluded from this research that sooner retirement is planned better it is. Because when we are in our initial stage of earning say 26 our retirement age of retirement is 60 which gives ample amount to individual to build corpus. Whereas if individual starts retirement planning by age of 40 the corpus generated will be pretty low.

Hence, it is recommended that individuals must start planning their retirement at an early stage so that they can enjoy the same standard of living even post retirement. It is recommended that if the investor wants to avoid risk they can start investing in debt market, government bond, provident fund, NPS Tier 1, FD's, and various other instruments. Whereas if investor happens to be an aggressive investor they can invest in equity market and build corpus. Once corpus is built they can either withdraw entire amount or it is recommended to invest entire corpus in an annuity product to get regular income.

VIII] LIMITATIONS

Limitation of this study is that it Isn't based on recent times as it focused on the data received by secondary means. Personal opinion of the individuals has been ignored in this research. Capacity and willingness side of investor has been ignored in this study.

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A STUDY ON THE EFFECTIVENESS OF CUSTOMER BEHAVIOUR PREDICTION STRATEGY WITH RESPONSE TO ONLINE RETAIL BUSINESS

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ABSTRACT

Purpose: The purpose of the paper is to understand the effectiveness of Customer Behaviour Prediction strategy with response to Online Retail Business.

Research Implications: This paper provides a preliminary understanding of the strategies used by Online Retail Business for Customer Behaviour Prediction and its effectiveness. Future research should use alternative methods and conducts a survey on the topic.

Findings: Identifying segments of customers and their behavioural patterns over different time intervals, is an important function for businesses, especially in case of the last tier of the online retail chain which is concerned with "electronic Business-to-Customer relationship" (B2C). This is particularly significant in ever-changing and dynamic markets, where customers are driven by ever-changing demands and market competition. This could lead to the prediction of 'churn', or which customers are leaving the company's loyalty. Also, the provision of customized service to the customers is important for a company to establish pleasant and long-lasting relationship with customers. It has also been observed that retaining old customers generates more profit than attracting new customers. So, customer retention is a huge factor too. So, there is always a trade-off between customer benefits and transaction costs, which has to be optimized by the managers. The purpose of this research paper is to study, analyse various Data-mining techniques and tools.

Keywords: Online Retail, Dynamic markets, relationship, retention, Data-Mining

INTRODUCTION

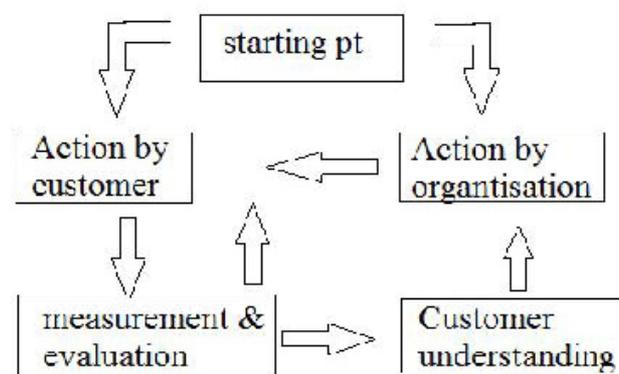
The rise of the business-to-customer (B2C) markets has resulted in different studies on improving and developing profit enhancement and customer retention. This is mainly due to the retail business becoming increasingly competitive with costs being driven down by existing and new competitors. In general, consumer markets have several characteristics such as large number of customers, repeat buying over the relevant time interval, and a wealth of information detailing past customer purchases. In those markets, the goal of CRM is to identify a customer, predict and understand the customer-buying pattern, identify an appropriate offer, and deliver it in a personalized format directly to the customer. An online retail shop which sells various products through internet and performs transaction directly with customers through the internet is one typical example of the CRM model corresponds to the case. A person who has already bought products or performed a transaction with the shop is defined as a customer by an online retail business. The exponential growth of the Internet has led to market data to the market managers and a hoard of customer. The availability of individual consumer data has increased and presents the possibility of direct targeting of individual customers. That is, the abundance availability and of customer information makes marketers to take advantage of individual-level purchase models for targeting decisions and direct marketing. But, such an enormous amount of data can be a huge disarrangement, and it can become unmanageable to draw meaningful conclusions from such raw data. This is where the feature of customer behaviour prediction using Data mining tools and techniques comes in. The major customer characteristics or values that are used to measure purchase behaviour of customers include Recency, Frequency, and Monetary values (RFM). RFM measures and provide information on what customers do. How long it has been since each customer made the last purchase is told by Recency. How many times each customer has purchased an item during certain intervals of time is told by Frequency. Monetary tells how much each customer has spent in total and it also measures the total expenditure of the customer for a number of transactions over a span of time. These characteristics may be the most crucial in determining the likely profitability of an individual customer or a particular product, so they are used to segregate the list of customers into groups and segments having different characteristics based on the RFM values.

DATA-MINING

The processes designed to find out and interpret data for the purpose of deducing and understanding the actionable patterns, trends and designing strategies based on those trends and patterns are called Data Mining techniques. Data mining techniques extract the raw data, and then that data is converted to get the transformed data, and then logical patterns are drawn among the transformed data. As businesses evaluate their investments on marketing activities, they tend to focus on their data mining capability and techniques. How to learn more

about customers and their liking towards selective products, use that information to make appropriate choices to customers, and understand which marketing strategies can succeed in long term customer retention and satisfaction. Managers can understand their customers by evaluating customer segregation, customer behaviour, customer profiles, loyalty (how long have they been with the company) and profitability (which products can be targeted to the particular customer so as to gain maximum profits). Data Mining helps managers to find valuable patterns contained in raw data and their relations so as to help the major decisions. The basic structure of CRM model lifecycle. The model can have two initiating points. Firstly, the customer does some buying/purchase and then the data is measured and then it is evaluated. Afterwards, the company mines the evaluated data and then they can have an understanding of the patterns and trends that the customer shows while purchasing. With the help of that data, the organization can formulate its steps optimize or maximize its business plans. Secondly, the organization takes some action for improving the customer's satisfaction and retention by making a good informative offer, and then studies the actions taken by the customer. Then the actions of the customer are again evaluated from the actions of the customers and an understanding of the customer is achieved.

THE CRM CYCLE



RESEARCH OBJECTIVES

- To study the effectiveness of Customer Behaviour Prediction with respect Online Retail Business.
- To understand the role of Data Mining in Customer Behaviour Prediction.
- To suggest the measures to enhance the effectiveness of Customer Behaviour Prediction.

RESEARCH METHODOLOGY

Only secondary data will be used to collect the required information for the present study.

Secondary data: - The secondary data would be collected from sources like books, journals, and research projects, web, newspaper articles, internet, etc. In addition, past survey data would be used for construction of questionnaire for our primary data.

REVIEW OF LITERATURE

1. **Aniruddha Mazumdar (2010)** in Predicting customer purchase in an online retail business, a Data Mining approach deals with the need for Customer Behaviour prediction and Data-Mining and relevance of Data mining towards CRM.
2. **Joshi, R., Gupte, R. and Saravanan, P. (2018)** in A Random Forest Approach for Predicting Online Buying Behaviour of Customers deals with retention of customers.

SIGNIFICANCE

One might have heard that it's easier and less expensive to retain customers than to acquire them. Recent statistics show that it's true. For one thing, one spends five times less money on customer retention. Additionally, at best, selling to an existing customer is better than converting someone who has never bought from one before as one probability is least 40 percent more likely. Compared to new leads, existing customers spend 31 percent more, and when one releases a new product, and loyal customers are 50 percent more likely to give it a shot. Those statistics prove sufficient to compel one to build and test out a customer retention strategy.

When it comes to CRM, the secret lies in that one word – relationship. CRM is about knowing one's customers – who they are, how they've been marketed to and how they responded. If all goes well, one keeps selling to them, and that's when the fruitful relationship really starts between a customer and a business. And if CRM

software does not manage customer retention by itself, it will provide one with the tools and techniques to help you manage the activities around customer engagement that includes retention too. The question is what do one really need to do to influence customer retention? Once you start thinking and start putting your efforts into customer retention, it is essential to consider the factors and reasons that enhance repeat purchases of one's product or service. If we see customer retention strategies are not done on paper – you need to have a wide range of information and data about one's customers to be able to measure and analyse customers' behaviour.

ADVANTAGES

Improved CLV- Customers who stay longer period spend more than the new ones.

Data- If you are retaining customers, then one have data on purchase history and behaviour to create future strategy.

Reviews and ratings- Loyal customers are more likely to leave positive reviews of your services and products.

Recommendations- Happy customers are more likely to recommend one to their families and friends.

CUSTOMER RETENTION FORMULA

The customer retention formula isn't difficult, but it's powerful. It's an illustration of how well you're building relationships and drawing existing customers back for subsequent purchases. One will need to do a little math, but if you have a calculator, it won't be a struggle. The customer retention formula looks like this:

$$\frac{\text{Number of customers at end of period} - \text{Number of customers acquired during period}}{\text{Number of customers at start of period}} \times 100$$

Start by subtracting the number of customers acquired turning the calculation period from your total customer base at the end of the period. Divide that number by the number of customers you had at the start of the period and divide by 100.

TECHNIQUES

In many ways, improving retention and increasing sales comes down to maintaining and creating a bulletproof customer experience that focuses on customer communities and the social proof shared within them. Some techniques are: -

- Create peaks in customer experience
- Continually test email strategies
- Create a VIP program for none's customers
- Be where your customers are
- Be engaged and passionate
- Offer time-limited promotions
- Don't over-promise
- One should be transparent and honest with customers
- One should create a customer community around its brand
- Incentivize social shares

LIMITATIONS

This study is only a literary work as it is based on secondary sources of data such as books, journal, etc. It is not based on practical research due to time and money constraints.

CONCLUSION

Even though gaining new customers is an indication of business growth, losing customers is simply too costly and expensive, as the average global value of a customer lost by a business is \$243. Existing customers give one

a great chance to increase one's profits, as they are more likely to buy from them, than prospects. And in order to make it happen, one need a tool to keep your relationships alive that is CRM. With the help of a CRM software, you can manage and gather information on your customers and also manage activities around customer engagement i.e. retaining of them. Use the data that the CRM software provides to not only retain customers, but also to grow profits and keep them happy– all without the additional expense of acquiring new customers.

Customer retention doesn't improve overnight. However, if one has a few solid strategies up your sleeve, one can coax your existing customers back for more. First, know your customers. Figure out what their need and want and where their pain points lie. Next, find ways to delight, surprise and motivate them. Get in touch. Ask for feedback and testimonials. Help them realize you appreciate their patronage. Using CRM tools and techniques, one can test every strategy and try and continuously refine the approach. The more one test, the stronger one's customer retention program becomes.

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A STUDY ON SELECTION CRITERIA OF COMPANIES IN CAMPUS RECRUITMENT DRIVE

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ABSTRACT

There is an increasing emphasis on recruiting student from different Management Institutes and colleges by recruiters for positions in sales, Accounting, Finance, Personnel and production. These students are recruited as management trainees and then placed in special company training programmes. They are not recruited for particular positions but for development as future supervisors and executives. Indeed, this source provides a constant flow of new personnel with leadership potentialities. However, recruitment of these candidates must be based on realistic and differential standards established through research reducing turnover and enhancing productivity.

With reference to this context, the research paper is prepared to put light on selection criteria in campus drives. The main objective is to identify general practices that organisations use to recruit students as employee. Data analysis has been done with statistical tools like tables, graphs, Both the primary Data as well as secondary data method is used during this research.

Keywords: Recruitment, Selection, References, Interview, qualification, Philosophy, Application pool.

INTRODUCTION

Organisations have to recruit people with required skills, qualification and experience, if they have to survive and flourish in a highly competitive environment. While doing so, they have to be sensitive to economic, social, political and legal factors within a country. To be effective, they need to tap all available sources both internal and external.

The human resource is the most important asset of an organization. And success and failure of the same is highly dependent on the quality of the workforce. This quality is picked up at the time of selection and if the selection process is as per the standard and after all scrutiny candidates are picked up then this should be the boon for the company but if their choice is not correct then it can cause higher staff turnover ratio or inefficiency in work.

Now coming to the topic, we already heard so many things regarding sources or recruitment. It is done from two sources.

a) Internal Source

b) External source

External source comprises of different sources out of which there is one source "Students from reputed colleges and university". Now the question arises why the study is needed on this field and the answer is very simple the students of colleges are very raw at the same time very anxious. And some time due to lack of guidance they may not get selected or sometimes selected for the wrong profile

RESEARCH OBJECTIVE

- Explain the constraints under which the recruitment process takes place.
- Discuss the influence of situational factors on recruitment.
- Outline the source and methods of recruitment.
- State the recruitment policies and procedure commonly followed in organisation.

RESEARCH METHODOLOGY**Data Collection**

Research in common parlance refers to a search for knowledge. This paper is based on Primary data as well as some secondary data. Data collection always depends upon experiences, observations, or experiment or a set of premises.

Data Source: There are two types of data source available:

1) Primary Data: The primary data is collected by using Questionnaire (Google form) and observation. It has been observed that Companies of good repute always target top class colleges like IIM, IIT's and they offer packages up to of Rs 1.5 Cr. Hundreds of students take part in such kind of interviews, few start preparation

from very beginning but when we talk about small colleges who are approached with limited openings and profile then students of those colleges are very confuse.

2) Secondary Data: It is collected from different reference books, journals, Recruitment records of colleges etc.

Result of data Collected

As discussed above Questionnaire was made which focus only on the selection criteria of the company for campus placement drives and it is studied that the company follows fair and objective recruitment policies and standards so the question is what is the standard for which students are need to be prepared. Placement drives are arranged mostly during the final year of graduation, for companies to visit for college hiring. It includes three important phase

- 1) The pre – campus placement drive
- 2) The placement drive
- 3) The post placement drive

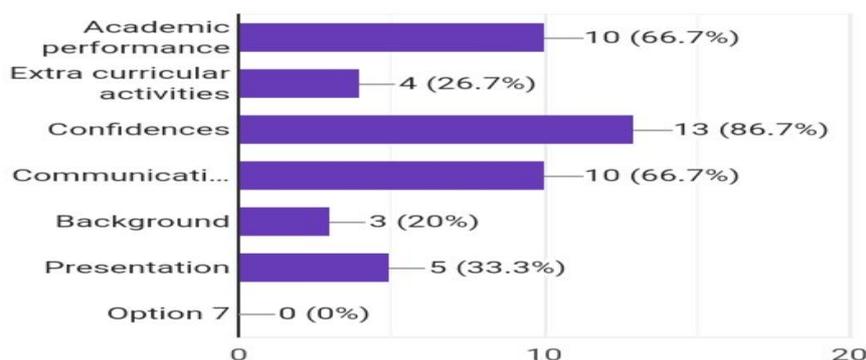
In all above stages companies focus on Intelligence test, aptitude test, personality test, achievement test, Simulation test. So students are always afraid of so many tests and result of the same. only the brightest student gets chance of selection. To give proper guidance to students Questionnaire was forwarded to 15 companies which is filled by the entrepreneur or the HR Manager of the company 7 options are given in the list and they have to select best 3 option which they use while selecting students from colleges it is properly explained with the help of graph below:

Table:(Three best option out of seven selected)

Particulars	No. of respondents
Academic performance	10
Extra -curricular Activities	4
Confidence	13
Communication skills	10
Background	3
Presentation	5
others	0

What are the three preferential criteria for selection of college students in your company?

15 responses



It is very clear from the study that company prefer confident candidate first, the one who has good communication skills and at last their academic performance is considered now here the roll of teacher comes into the picture they should work on the communication and confidence part at the very beginning of the enrolment of the students. Every year 8,00,000 students approx. graduates from Mumbai university it means the number of candidate per job is very high so the mentoring part of students is very important which make him suitable candidate for selection.

From the secondary source some practices are found are as follows:

- 1) Siemens India : it uses extensive psychometric instruments to short listed candidates.
- 2) LG Electronics India: It uses 3 psychometric tests to measure a persons ability as a team player.
- 3) Pepsico India: it uses competency based interviewing techniques(strategizing, lateral thinking, problem solving, managing, the environment.

CONCLUSION

The main thing that I want to conclude is that the companies are giving fair chance to all the candidates who appears for the interview its not necessary that the candidate must be good in academics if he works on his other skills then also he can stand in competition. Proper preparation from the students from the beginning will result into satisfying job of their choice and meanwhile companies should also set some standard while taking interviews so that the candidates are prepared for pre placement and placement drives.

Selection is usually a series of hurdles or steps. Each one must be successfully cleared before the applicant proceed to the next and it is only possible when proper mentoring is done from the teachers and the placement Cell of the colleges.

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A STUDY ON THE EFFECTIVENESS OF CUSTOMER RETENTION STRATEGIES WITH SPECIAL REFERENCE TO APPLE AND THE IMPACT ON MARKET SHARE

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ABSTRACT

In a world with constant innovation and cut-throat competition, only a few companies are capable of maintaining consistency in their operations and sales. The success of major companies lies in various practices and strategies adopted by them. This paper aims to shed light on the customer retention that Apple achieves and analyzes the loose bricks as well as the concrete success factors that have led this company to become one of the largest in the world with immense customer loyalty.

The paper also discusses the evolution of Apple products with respect to the market needs and their impact on sales.

Keywords: Apple, Customer Retention, Brand Loyalty, CRM.

RESEARCH OBJECTIVES

1. To study the CRM Strategies for Customer Retention and Brand Loyalty towards Apple.
2. To analyze the impact of Apple's CRM Strategies on its market-share.
3. To study the evolution of its products and its impact on revenue and sales.

RESEARCH METHODOLOGY

The research methodology adopted by the researcher is qualitative as well as quantitative to the extent of figures and statistics to show the sales made by Apple. The researcher has also relied on certain empirical data in the form of a short survey to prove the hypothesis and understand the real scenario in the market. Overall, an analytical method of research has been carried out to fructify the data into an analysis of the working of this market dominator.

RESEARCH QUESTIONS

1. How has Apple managed to become the world's first trillion-dollar company?
2. What are Apple's key Customer Relationship Strategies?
3. Has the introduction of new products and pricing strategies hampered Apple's revenues?

HYPOTHESIS

"Apple's strategies of Customer Retention and Brand Loyalty are effective but the launch of new products hint at stagnant growth and lack of innovation, hampering its sales."

INTRODUCTION

Apple is one of the most well-known retailers of innovative technology, from personal computers to handheld devices such as tablets and mobiles. It is the third largest maker of PCs in the US, and since 2001 has had a much higher focus upon retail and customers than its competitors.

The customer relationship is now an essential part of Apple's growth strategy, and is almost as much of a brand feature as the iPad or iPhone.

The company has been using Customer Relationship Management (CRM) in its customer service departments for nearly a decade, and this has ranged from sending a series of emails to customers who've used their in-store services, to focus upon assessing the feelings of the customers when they are talking to Apple staff. Within their retail departments, Apple will generally focus upon ensuring that customers have an experience, rather than simply making a purchase.

The purpose of using CRM in their retail base is to encourage a long-term relationship between Apple and its clients. Part of retaining that relationship involves enhancing the customer experience so that it is a unique memory of buying a phone. Rather than concentrating upon making customers buy a phone, they instead focus upon teaching customers to love and appreciate the benefits of having an iPhone or iPad. This is a central point of the Apple strategy.

There are several different strands of using CRM within the Apple infrastructure. The primary purpose of CRM is data collection. This occurs whenever a customer makes a purchase, whether it is an iPhone, use of software

such as iTunes, or registering their product using their Apple ID. All of this information is used to help define advertising so that it is more directly targeted at potential customers.

ANALYSIS

APPLE'S CURRENT PRACTICES AND POSITION

➤ How does Apple Use CRM?

By far the most important focus of CRM is improving the customer service experience for new and existing customers. The Apple Genius process is part of the Tech support, which focuses upon allowing customers to meet face-to-face with technicians and discuss problems and solutions in depth.

CRM helps to manage the effect of this face-to-face contact, and also helps to enhance brand awareness when focusing upon CRM-based advertising and targeted emails in the future. By using CRM so extensively in its retail structure, Apple has effectively produced a lifestyle experience rather than simply a purchase.

Apple is a multinational company, which has had success in a number of different fields and needs a CRM system which can help them to reach customers on a face-to-face level. Small businesses can also benefit from this type of interpersonal CRM.

Customers are more likely to remember and purchase products and services that make them feel good.

1. Unboxing

Unboxing is when consumers record the actual process of unwrapping their newly purchased Apple products. Why? Because the products make them feel good.

Unboxing videos offer an unvarnished and honest peek at products, while positioning the 'unboxer' in a central position within a brand's community. No one tells Apple to create these videos, but it facilitates a user experience that expands way past the purchase stage, which is why when you search for unboxing videos on YouTube, you can find an array of hits with a somewhat staggering view count.

The momentous following of the Apple brand does, of course, present the organization with a formidable reputation to live up to. All technology-leading products which Apple delivers are not only designed to match the brand promise, but are fundamental in keeping Apple so profitable.

2. 'Shot on iPhone'

Apple incorporates customer experience into branding by putting the customer at the heart of everything they do. The 'Shot on iPhone' initiative not only does it showcase the sheer versatility of the iPhone camera, but it features charming videos shot by real people.

Offering their customers the opportunity to be part of something huge—the first instalment of the campaign was viewed at least 6.5 billion different times—Shot on iPhone successfully coupled human emotion with real product benefits. Showing how their products fit into people's lives, the campaign reinforces the brand pillars of Apple and further solidifies an emotional connection with the audience.

3. Understanding the importance of emotion in brand loyalty

No matter how entertaining or creative your brand campaigns are, if there's no emotional connection with your audience, your marketing strategy is likely to miss its mark.

It is that emotional connection which has cultivated such brand loyalty among Apple fans, and enabled them to get away with pricing their products so much higher than competitors. The key to brand loyalty is promoting a brand personality that your audience can relate to.

Emotional connect with your audience is the crux of brand loyalty. This has been mastered by Apple, which is why people often go in for repeat-purchases and stick to the brand as a family.

Their consumers don't think: "I want this because it's a Dual-SIM, 64GB, 12-megapixel hexa-core processing smartphone." They think: "I want this because it's an Apple iPhone." The air of premium exclusivity that Apple employs when promoting new product releases, and the meticulous attention to the aesthetics of its products, has enabled the Apple brand to be associated with luxury in the eyes of its followers. And that is what many of its consumers are paying a premium for a symbol of status that is driven by emotion, not practicality.

4. Customer Loyalty Programs

Apple has made some changes to its Customer Loyalty Program, adding new items and increasing the discount offered on existing ones.

The discounts are on offer to people who spend upwards of \$5,000 on Apple products in a 12-month period, making this a loyalty program targeted predominately at companies and education customers.

- According to Apple’s approach, the real key to brand loyalty is to carry out some movement marketing. You have to stop telling people about what your company makes, and instead think about what you believe in. And what you believe in has to touch a nerve with your target market.

THE IMPACT OF NEW PRODUCT LAUNCHES

The launch of the iterative iPhone XS, XS Max, and XR confirms Cook is not going to change the strategy of trying to squeeze as much money out of every user.

iPhone revenue is up by 20 percent year-on-year with unit growth of just 1 percent. A quarter earlier, the X effect was noticed as the ASP (Average Selling Price) rose from \$628 to \$728.

Apple commands the lion’s share of profit in the high-end flagship, but iOS is losing ground to Android in the market place every single day.

Apple said that it had sold 52.2 million iPhones overall and turned in a record profit for this time of year and beat expectations by reporting \$61.1 billion (roughly Rs. 4.07 lakh crores) in revenue.

Amidst market sentiment that accused Apple of lack of innovation and stagnation, in addition to the extracting a lot of money from its customers, the new products did sell and are continuing to sell, but not at the rate as was expected by Apple initially. The camera quality and other specs have improved, however, the market has also rapidly adapted to Apple’s features and pose a grave threat to Apple products.

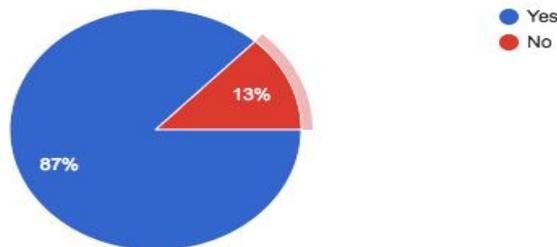
A bright spot for Apple was its services business, which includes Apple Music, iTunes, and the App Store. It is one of the company's fastest-growing units. Apple reported that its services business grew 31 percent from the same time last year. Sales of "other products" - generally considered to be the Apple Watch, headphones and now the new HomePod- grew 38 percent to \$3.9 billion (roughly Rs. 26,000 crores).

SURVEY

The researcher undertook a survey to understand the current market conditions from a variety of respondents ranging from students to business professionals.

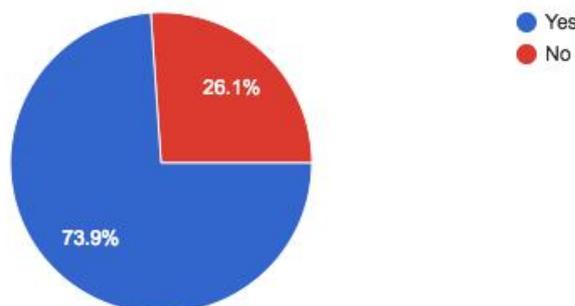
Have you used an Apple product?

23 responses



Do you still continue to use Apple products?

23 responses



Reasons for continuing/ discontinuing the use of that product (Please specify every product if there are more than one)

23 responses

iPhone - 1st buy still working

Continuing to use the iPhone, iPad, iPod and MacBook because they've managed to create a personalised environment for all my technological needs. Also, the cloud sharing system makes the entire process a delight. However I will discontinue using the iPod because the iPhone fulfills its purpose.

I had an iPad, stopped using due to excess common sense and lack of money

Extremely user friendly, great camera, aesthetically pleasing - MacBook Air, iPhone 8plus, iPad mini, AirPods (not to brag)

Cell phone- user friendly, safe and secure, easy to navigate

I find them easy to use, and I am a Computer Science major, so I have gotten used to coding on macs and using its terminal.

iPhone - family uses it and pays for it

It's easy

I prefer androids

I have to use it. I will not get a phone for 5 years since iPhone is very expensive.

Any feedback with respect to Apple Products?

23 responses

Great phone but battery issues

It'd be great if they were actually cheaper in India rather than offering "cheap" EMI plans.

They are actually quite good, love the camera.

Obnoxious pricing! (Not friendly to student budget, unless affluent background similar to mine - written on an iPhone)

Can be more cost effective and better priced. Way too expensive compared to other similar products

Great, but overpriced

user friendly

Could be cheaper

They break and crack too easily

It's unnecessarily expensive

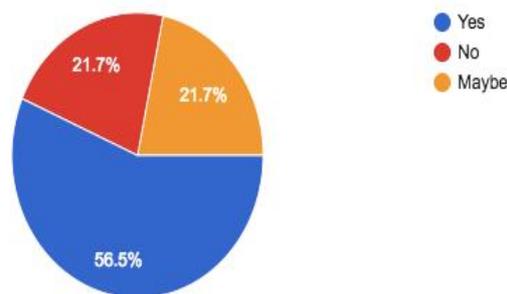
Too pricey

Distribution Channels can be more svstematized.

The products are very good and durable, but the cost of the product is on the higher side for Indian market
prices should be dropped for the product you're offering cause other android phones have more or less the same features
Expensive
they're very intuitive
The battery starts depreciating after three to four years
The good part is they don't break easily I drop my iPhone all the time and it doesn't break or get scratches easily I sometimes wet my iPhone 6 however it doesn't hang or gets spoilt in anyway because of that
Increase durability
Make it more user friendly
Each product goes on for long
I hate Apple products because they create a certain bubble amongst the different sections of the society.
They are good

Do you still prefer purchasing Apple Products?

23 responses



LIMITATIONS OF STUDY

The Primary Research was undertaken by a random sampling of an array of people and the study can not be conclusively generalized. Further, the study includes students with zero income who may not give conclusive results as income and price are important factors for such a study. Time and resource constraints are other limitations.

CONCLUSION

It can be seen through the abovementioned responses that Apple’s Customer Retention is very strong. Apple has managed to create a way of life by offering products for almost every need of the modern consumer, from iPhones to MacBooks, from Apple TV to iPods and many more. Apple has managed to carve out the cream of the market to which it successfully sells products which not only look good but also provide unparalleled convenience. Its marketing strategies, which are backed by solid products have managed to make people take 2 years worth of EMIs to purchase not just a phone, but a lifestyle. The brand has now reached a level where it is every person’s desire to own an Apple product. It has developed into a status symbol.

The survey conducted by the researcher pointed at certain concerns of the respondents, which were widely similar. The major concerns raised revolved around the pricing that Apple adopts as a company for the sale of its products. With the influx of technology and competition in the market, it can be understood that pricing has become a major matter of concern for every buyer.

A few of the respondents were originally Apple users but shifted to android stating that the excessive prices of Apple deterred them from repeat-purchase. However, a majority of the respondents have stated that they are very loyal to the brand and continue to use its products and services. It is essential to note that the quality of Apple services is unprecedented and easily one of the best in the world. The popular reasons why customers indulge in buying Apple products range from quality, status, brand value, durability and the basic pride they feel in using those products, owing to the reputation that the brand has developed over the years.

The Customer Retention Strategies of Apple, as explained above, have a serious impact on their sales and customer sentiment as well as brand loyalty. The following that it has gathered over the years speaks volumes about its services and customer-centric approach. Despite the apparent backlash it faced on the launch of its new products last year, it has maintained its standards and the slight impact on its roaring numbers has not caused a very big impact on its overall performance. It is laudable according to several tech reviewers and analysts. The hypothesis is thus proved by the researcher.

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RESOURCE OPTIMIZATION IN UBIQUITOUS SYSTEM

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ABSTRACT

Mobile Computing defines that a device which permits the flow of transmission data from one computer to another by never been connected to the Physical link layers.

Due to the wide usage of the mobile devices and variety of the applications,

mobile cloud computing becomes a needed part for mobile system or devices, due to reliable and portable processing of data and storage take place outside of the mobile device.

It is useful in manners to save battery as well as computation power of the mobile devices which is a critical issue in high power mobile devices.

Mobile cloud computing provides mobile clients, a service where they can use cloud services on their mobile devices and perform computations.

As mobile cloud computing is still in previous stage of the development and it is useful to building up thorough understanding about existing models as well as future trends.

The main purpose of this survey is to analyse and point out the main challenges and risks involved in the mobile cloud computing as well as occur new trends in this field area.

Keywords: Mobile cloud computing; virtualization; personal cloud.

1. INTRODUCTION

Now a days, it is easy to access information from anywhere at any time by this rapidly changing technology.

In the near future, millions of people carry a portable palmtop or laptop computer.

Distributed information infrastructure can also be easily accessible from virtually any place and time, the term known as "information superhighway."

A wide variety of information servers (both proprietary and public) are accessible to mobile computers.

We had already seen the beginnings of this with the rapidly growing popularity of Internet across a computer users.

As the mobile infrastructure develops, it will become what is referred to as the "first wireless mile" or "wireless on-ramp" for the information superhighway.

In some applications, mobile computers themselves may contain data, or data may be stored on smart cards (flash-memory).

Communication issues include communication properties, protocols, data formats and concrete technologies as well as ad hoc networks and infrastructure networks. Hardware includes mobile devices or device components.

2. MOBILE CLOUD COMPUTING ARCHITECTURE AND OFFLOADING

Mobile Cloud Computing (MCC) is known as a system where both data processing and storage happens outside the mobile device.

Mobile Cloud Applications transfer the data storage and computing power away from the mobile devices and into one centralized and powerful computing platform located in clouds, which are then obtained from the wireless connection based on a thin native client.

Mobile devices deal with many problems or challenges during regular use of devices like battery life, storage and bandwidth.

Mobile Cloud Computing gives advantages to users as to use infrastructure, platforms and software by cloud providers elastically, in on-demand and at low cost. Mobile cloud computing provides mobile users with data storage and processing services in the cloud, eliminating the need to have a powerful device configuration (e.g. memory capacity, CPU speed, etc.), as all resource-exhaustive computing can be performed within the cloud.

MCC consists of mainly four types of the cloud computing resources:

- Cloud of Distant mobile
- Cloud of Distant immobile
- Proximate entities of mobile computing
- Proximate immobile entities of mobile computing
- Fusion

The following diagram showing the framework of mobile cloud computing & its architecture:

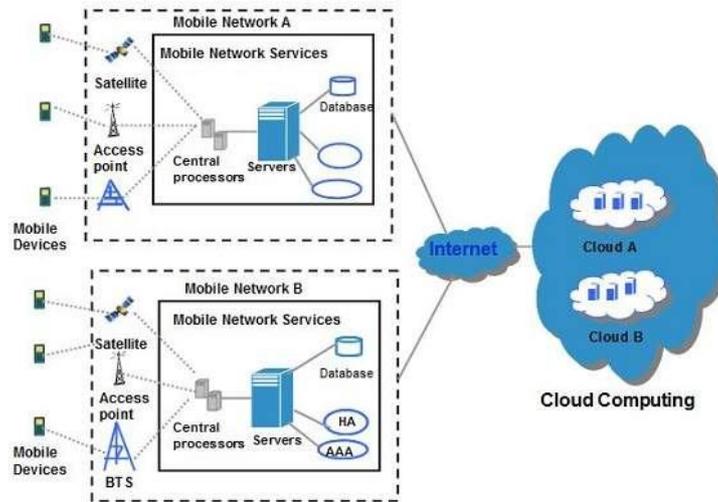


Fig-2: Mobile computing Architecture

- Mobile applications increase a ratio of remote processing and extending battery lifetime.
- MCC give mobile users to store and access large data on the cloud. Mobile applications aren't constrained by the storage capacity of the device.

MOBILE CLOUD COMPUTING FEATURES

Mobile computing is a term that, generally refers to a different devices that allow people to access data and information from anywhere.

Sometimes known as "human-computer interaction," mobile computing transfer data, voice, and video over a network via a mobile device.



Fig-4: Features

- Connectivity: You can access all sources at any times.

- Social Engagement: You can contact with a variety of users through the Internet.
- Personalization: You can use your mobile computing for your individual needs.

➤ **Why use mobile computing**

Mobile data communications has become a vehemently debated issue. The feeling of wanting to know or learn about something makes paging, circuit-switched and packet-switched networks has become one of the issue for debate and the development of newer technology networks is adding fuel to the fire.

For Estate Agents

Estate agents work at home and also out in the field. With mobile computers they can be more productive. Therefore, mobile computers allow them to allot more time to clients.

- **In courts**

In courts there is use of the mobile computing which is for the defence guidance it uses or taking mobile computer.

- **In companies**

Managers can use mobile computers in, say, and different and difficult presentations to major customers. They can use the latest market share information from mobile computer.

GENERATIONS OF MOBILE COMPUTING

➤ **First Generation**

First generation is based on Personal mobile cloud. Some of the Advantages/features are that all the services are maintained and which is Deployed in datacentre of the MCC.

Scalability is also one of the very big benefit and feature of this system. Contents of mobile and application data are work at a time so this feature is related to synchronization.

Mobility feature is also strong point of this system. Following figure explains the first generation of the personal mobile cloud.

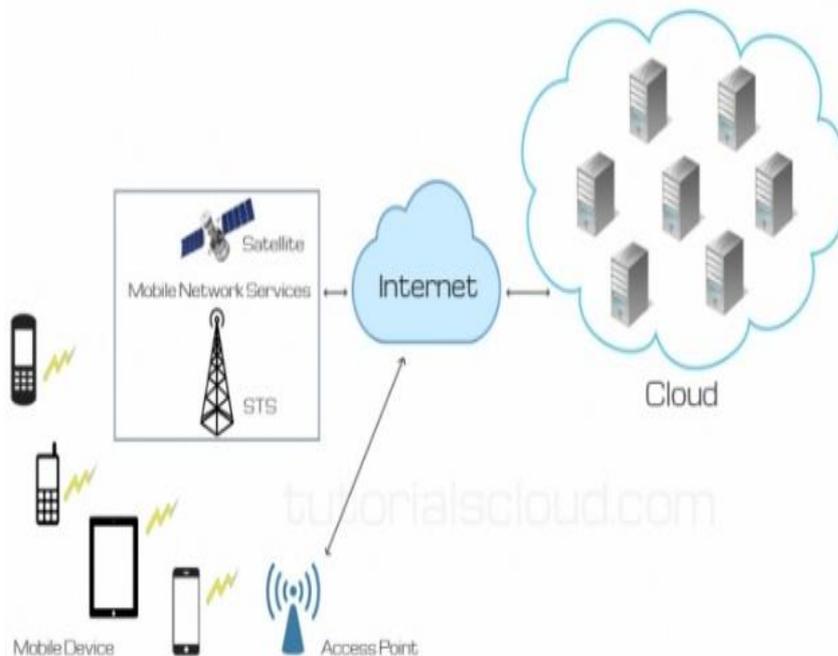


Fig-4: First generation

➤ **Second Generation**

Second generation is based on Cloud- Mobile Cloud Infrastructures. In this system, all the services are maintained and deployed in the datacentre of the MCC. One of the new and satisfactory features of the second generation is that the On-demand service. This feature showing us that the services, contents and data are providing to the mobile cloud on demand. Second generation system also provides scalability. The complete architecture of second generation is shown in below fig-5



Fig-5: Second generation

➤ **Third Generation**

As per the survey of the Virgin Media Business CEO, the progress in the mobile data use has been led to increase shifts. Third generation consist of four layers.

- Computing cloud layer.
- Network layer.
- Mobilecloud layer
- Mobile Layer



Fig-6: Third generation

ISSUES AND CHALLENGES IN MOBILE CLOUD COMPUTING (MCC)

➤ **Security issues**

Mobile computing is fair share of its security concept as any other technology. Due to its errant nature, it is difficult to monitor the proper usage.

Users might have various intentions on how to use this privilege. The copying and unethical functions like hacking, industrial surveillance, pirated, E-Commerce fraud and virus destruction are some but the few problems faced during uses of mobile computing.



Another big trouble in mobile computing is credential verification. As another end user share username and passwords, it causes as a major threat to security. This being a very critical problem, most clients are very resistant to implement mobile computing to the dangers of misrepresentation.

The issue of identity theft is very difficult to survive or eradicate. Problem with unauthorized access to information and data by theft or hacker, is also a massive problem.

Outsiders or other people gain access to get vital data from companies, which is a major block in rolling out mobile computing services.

No company wants to lay open their secrets to hackers and other intruders, who will in turn sell the valuable information to their competitors. It's also important to take the necessary provision to decrease these threats from taking place. Measuredly they includes following,

- Engaging the professional personnel.
- Protected hardware and software installation.
- Analysing and developing the sound, is very effective policies to the mobile computing.
- Executing proper access rights and authorities.



Fig-7: Challenges

These are just some ways to help from preventing threads. Since information is very much important, all possible measures should be assessed and implemented for safeguard purposes. In the absence of such solution, it is possible to find out unknown threats which are causing irrefutable harm. These may be in terms of personal status or economic penalties. In such cases, it is very easy to be different use in different unethical practices.

If these factors aren't correctly worked on, it might be an avenue for constant threat. Various threats still remain in implementing this kind of technology.

TRENDS IN MOBILE CLOUD COMPUTING

Mobile cloud computing, web and social networking have given more and more attention in recent years. There are still meaningful security challenges in and during the development of cloud infrastructure, web and mobile terminal devices.

This special issue will focus on state-of-the-art research paradigms on security or vulnerability aspects in social networking, Web and cloud computing, particularly on advances in mobile computing technologies and associated areas. Moreover, this issue will highlight on the research challenges and issues in the mobile cloud computing security

MODELS

1] Performance Enhancement Model

Main intention of this model is to improve performance by using the cloud resources. Applications are offloaded on high performance cloud where counting takes less time. Here are some useful models

Clone Cloud

Clone Cloud enhances mobile applications by off-loading part of the server from mobile devices on to clone’s devices. It is designed to provide a service platform for mobile devices.

The process paying the cost and may be worth it for sending the execution code from the mobile to the cloud and vice versa. The computation is required to find the performance metric

2] Energy enhancement model

These type of models mainly focus on decrease the energyconsumption of smartphones by using cloud resource efficiently.

Counting that takes time are performed using cloud by reducing overhead of applications.

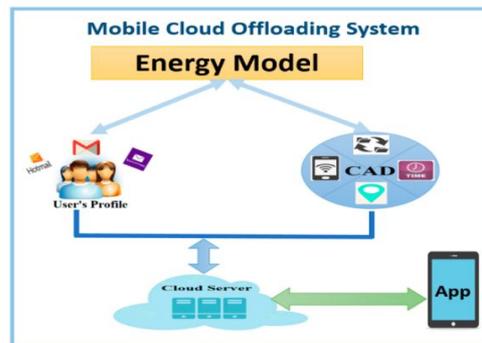


Fig-8: energy model

3] Hybrid Application Models

Hybrid models are prepared to achieve multiple objectives such as performance and energy efficiency. Multiple objectives are achieved using one model because these types of models are more suitable.

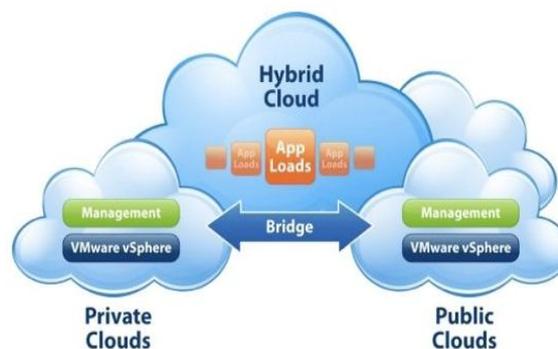


Fig-9: Hybrid model

CONCLUSION

This research presents a survey on MCC and shows the trends and challenges are in MCC. Mobile applications are evolving day by day with the increasing manner which is use of the mobile phones.

Mobile usage has been highly increased so users want to do all the functionalities on the mobile device.

With the help of the cloud computing the new opportunities are displays or emerging or in this system in researching area. Computations are grow up day by day in fields like commerce, science as well as technology.

In the recent days MCC is focusing on enhancement of mobile limitations and make it more powerful using virtualization techniques.

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A STUDY OF HEALTH INSURANCE AWARENESS OF SALARIED EMPLOYEES IN URBAN AREA WITH SPECIAL REFERENCE TO SEMI GOVERNMENT EMPLOYEES RESIDING IN KALYAN- DOMBIVALI MUNICIPAL CORPORATION AREA IN MAHARASHTRA**Sanjay Rane (Research Scholar) and Dr. D. B. Bharati**Mulund College of Commerce and Director, Rajgad Institute of Management, Research & Development, Pune

ABSTRACT

Today a man's life has become stressful, over exhaustive and insecure due to his busy schedule especially in the urban areas. To maintain health, one needs to do regular checkups and take timely healthcare treatment. In the present situations, medical treatments and healthcare expenses are proving very costly and going beyond the capacity of a common man. The government health schemes are at subsidized rates but they are inadequate & inefficient. The Non-Government Organizations (NGOs) are helping the government to conduct healthcare programmes for the poor & vulnerable section of the society. But their efforts are proving inadequate to meet demands of medical treatments required for various diseases and health problems of ever rising population. As a result, the people have to pay healthcare expenses privately / out of pocket which further lead to them in indebtedness/poverty. In these situations, the health insurance is the best cushion for the common man to secure & enjoy stress free life. However, poverty, ignorance, unawareness, high cost of premiums, opaque procedures in deciding reimbursement etc. are the hurdles of the development of health insurance business in India. But now days, emergence of private insurers, Foreign Direct Investments (FDIs), growing awareness & literacy, rise in income level etc. are providing wide scope for health insurance business in India. The present paper analyses the awareness towards health insurance among 75 respondents of KalyanDombivali Municipal Corporation area. It has highlighted the need of Health insurance/Mediclaim policy and increased scope of business for insurance companies.

Keywords: Health Insurance, Mediclaim/Medical Insurance, Government Initiated Schemes/ Programmes, NGO, Insured.

INTRODUCTION

A health Insurance cover is necessary to a man to protect him and his family against possible & unforeseen losses/ risks due to health problems. It is available for the both- individual as well as family. It is always said that 'Health Is Wealth' because healthy people are the asset of any nation as they are able to contribute to the development of a nation. Moreover, health has been declared as a fundamental right of a human being. In India, the government run health schemes and healthcare facilities are inadequate. The central as well as state governments are trying at their best to implement healthcare schemes for the people but their efforts are proving inadequate to meet growing requirements of healthcare and good sanitation to the people due to ever rising population of this country. Moreover, the present government health facilities are not only inadequate but also inefficient.

In addition to the government, the NGOs are also trying to contribute to the healthcare services to the poor but they are not large enough to cover the huge population of India. So, mostly the people have to depend on the private players for their healthcare services. The private players' healthcare treatment cost is too high and beyond the capacity of a common man. In such situation, health insurance proves a very vital mean to the common person to protect him from the risks and uncertainties for his health in future. It provides the most secured and stress-free life to the insured. Unfortunately, in India health insurance business is in pathetic condition. As per the NSSO Report released in the year 2016, about the survey carried in the year 2014, it was found that more than 80% of the Indians are not covered by any health insurance.

Although, health insurance business has yet not developed to its fullest potential, now the people are gradually recognizing its importance due to rising health consciousness and ever shooting healthcare expenses. Now with the private & public sector insurance companies, the state & central government initiated health insurance schemes are also proving effective & beneficial to the poor for their healthcare e.g. Mahatma Phule Jan Arogya Yojana (MPJAY) Maharashtra, Rashtriya Swasthya Bima Yojana (RSBY), Ayushman Bharat Health Insurance Scheme etc. As regards, Ayushman Bharat Scheme, the Finance Minister Arun Jaitley said that yet 6.85 lakh poor patients have been provided free hospital treatment and an average 5000 claims are being settled every day since its launching on 25th September, 2018. (PTI- January 2, 2019). The above scenario shows wider scope for growth of health insurance business in India.

STATEMENT OF PROBLEM

In the world, India is the second most populous country after China and the 6th largest fast developing economy. Despite India remained backward in regard to healthcare facilities and health insurance business. The condition of health insurance business is very poor in India as just 10% people on an average are covered by it under different types of policies. (OJHAS, April-June, 2018).

In India, urban areas are over populated and dense due to employment opportunities & they are grown up in unplanned manner with slum areas. The civic and sanitary facilities cannot meet the requirements of the ever growing inhabitants of the city areas. Moreover, pollution, poor working conditions, lack of quality food, over exertion, stressful life and other personal problems result in poor health & reduction in efficiency of the urban people. The people in those areas call for satisfactory and timely healthcare treatment and services to maintain their health. However, it is observed that on an average the people in India cannot afford money for their health maintenance due to high cost of medical expenditure. As a result, people in those areas face problems of good health and quality life.

NEED/ IMPORTANCE & RELEVANCE OF THE STUDY:

As we have seen in the foregoing explanation as the India is the most populated country having large number of poor and especially in urban areas. These urban areas are mostly unplanned, highly dense & have inadequate and unsatisfactory civic services. As per, the 2011 census, 31.16% of the Indian population was living in urban areas but in reality it is more because much of the population presently resides in the semi urban areas also i.e. slightly away/ adjacent to the city areas. These problems lead to communicable & non communicable diseases. Moreover, healthcare expenses are becoming unaffordable to a common man. In this situation, the health insurance plays a vital role to secure a person from the risks of unexpected heavy healthcare expenses in future. Despite that, in India, the status of health insurance business is very poor.

This study will help people to know the importance of health insurance and motivate them to purchase it for their secured, happy & quality life against unforeseen and possible health related risks/ problems. In fact, health insurance is a necessity of the people in this era. This will also help the insurance companies and the people associated to it like agents to explore the area for their business & different types of products required to be offered to the people as per their financial capacities and other relevant aspects.

REVIEW OF LITERATURE

This is an attempt made to understand individuals' perceptions towards health insurance cover and its necessity in the present situations to a common man. The following authors' research papers & other related literature provided insights and knowledge about the research area.

1) Gumber & Kulkarni (2000) - They have explored that in India over 92% people are uninsured for their health and they have no awareness about existing insurance schemes.

2) Rajiv Ahuja (2004) has highlighted that the poor of India needs the community based and the government backed health insurance schemes.

3) Anil Gumber & Guljit. K. Aarora (2006) have pointed out that in India, the large number of employees are in an unorganized sector having poverty and under miserable living conditions. Some of them are covered by ESIS other medical programmes but these covers are inadequate. They need a good, comprehensive & affordable covers. They have further expected that the government, NGOs & corporate sector should do combined efforts for the healthcare of the poor residing in urban & rural areas.

4) Mahesh Kumar Chodhar etc. (2013) has pointed out in his study that in India the position of health insurance is poor. So there is a need to make aware people about insurance through campaigns with effective communication & education.

5) Subba Laxmi Tirukoti. (2015) - has mentioned in her paper that in East Godavari District (Karnataka), fear of high medical expenses and surety of getting into hospital are the pivotal reasons of buying the health insurance policy. The determinants analysis further highlighted that the health cover purchase decision has been determined by the annual health expenditure, annual income, gender, household size rather than education, marital status, alcohol & smoking habits and environmental rating.

6) Narware P. C. (2017) - has concluded in his research paper that in Gwalior District of Madhya Pradesh, the people are getting aware of health insurance but this awareness is not yet reached to the actual purchasing to the health policy. i.e. only 24.6% have been covered by it. & the large section of people is still paying for health from their pocket.

7) Antony Jacob (2018) – has mentioned in his article in Health World, Economic Times that How to make popular health insurance in India is one of the biggest challenge. He stated that the health insurance is not in the priority list of the young people in India.

8) Mampi Bose (2018)- has stated in his case study about effectiveness of RashtriyaSwasthyaBimaYojana (RSBY) in Rural West Bengal, that the scheme is not found so efficient in terms of targeting beneficiaries, achieving equity, reduction in healthcare cost & improvement in institutional deliveries. He recommended increase in public expenditure on health by the government to develop infrastructural facilities to target masses for universal coverage.

OBJECTIVES OF THE STUDY

- 1) To know and examine the awareness level of the individuals residing in urban areas about health Insurance cover.
- 2) To understand the purpose of buying health insurance.
- 3) To understand the knowledge of individuals about need& benefits of health insurance.

STATEMENT OF HYPOTHESES

- 1) The salaried individuals in the urban area are well aware about Health Insurance cover.
- 2) Health insurance companies have good scope to expand their business among salaried individuals residing in urban area.
- 3) The salaried individuals in the urban area are aware of benefits of Health Insurance.

RESEARCH FRAMEWORK OF THE STUDY

Scope of the Study

This study is conducted in order to analyze and assess the awareness of the Semi-Government employees residing in Kalyan-Dombivli Municipal Corporation Area for the health insurance cover.

The period of the study is from April 2018 to June 2018.

Methods of Data Collection

Primary data are collected by direct interview of the respondents through structured questionnaire. The secondary data are collected from published research papers articles, books and other related material. The study is conducted by collecting primary data by a structured questionnaire and secondary data based on the research papers, publications, reports and other related literature.

Research Design

The research is descriptive & analytical in nature.

Universe and Sample Size

The study will be descriptive in nature. The sample size is 75 respondents selected from the salaried employees belonging to semi-government category from Kalyan-Dombivli Municipal Corporation Area.

A convenient sampling is used to select respondents from the above area.

Analysis & Interpretation

In this paper, we tried to assess awareness of the respondents in regard to various aspects of health Insurance. The results and findings are as under-

Sr. No.	Questions	YES (%)	NO (%)
1.	Awareness about health insurance cover	95.0	5.0
2.	Sources of Information (Among the respondents who are aware of it)	(78.66)	(21.4)
	Media	(32.20)	—
	Agents	(35.60)	—
	Employer	(20.30)	—

	Medical practitioners/Hospitals	(3.40)	—	—
	Peers/Relatives	(8.50)	—	—
3	Knowledge about availability of various schemes offered by major Insurance companies		79.7	20.3
4.	Awareness about terms and conditions of Health Insurance		71.7	28.3
5	Awareness about various diseases covered/not covered by Health Insurance policies		75.0	25.0
6.	Knowledge about general cost of Health Insurance premium		73.3	26.7
7.	Knowledge of the procedure to claim Health Insurance		66.7	33.3
8.	Awareness about various schemes offered by major health insurance companies		79.7	20.3
9.	Awareness about benefits of having health insurance		96.7	3.3

FINDINGS

- 1) It was found that 95% respondents were aware about health insurance cover, while 5% were unaware of it. Most of the respondents in this category are aware about health insurance as they are literate and working in the semi-government organizations.
- 2) It was found that the respondents were getting information as to availability of the health insurance cover mostly through media and agents who altogether formed (67.80%) and playing major role, while the employers are also providing knowledge (20.30 %) of health insurance to the employees. The role of sharing knowledge of the above is least in case of peers/relatives (8.5) and medical practitioners/hospitals (3.4).
- 3) As regards knowledge about availability of various schemes offered by major insurance companies, it was found that most of the people were well aware (79.70%) of those schemes while 20.30% were yet not aware of them.
- 4) It was observed that the awareness about terms and conditions to purchase health insurance policy was found good (71.70%) among the respondents but 28.30 % people were unaware.
- 5) It was found that 75% of the respondents knew about the coverage of various diseases under medical insurance.
- 6) The knowledge about general cost of health insurance premium was good among the respondents (73.30%).
- 7) The knowledge of the procedure to claim health insurance was relatively good among the respondents (66.70%), still sizeable percentages (33.30%) of respondents were unaware of it.
- 8) Regarding various schemes offered by the major health insurance companies, 79.7 % of the respondents were aware of it, whereas 20.3 % did not know about them. It shows that the health insurance companies have a good reach among people.
- 9) 96.7 % of the respondents were aware of the benefits of health insurance.

CONCLUSION

This study is conducted in order to know awareness and the behavior of the respondents towards health insurance. It reveals that the semi government employees of the Kalyan-Dombivali Municipal Corporation Area have significant degree of awareness about need and benefits of health insurance/ Mediclaim. Therefore, it would be easy for health insurance companies to penetrate within this segment. The government sector contains class I to class iv employees, their needs and affordability are varied, therefore, health insurance companies need to offer varied products suiting to their individual needs & incomes. A detailed study of the specific needs & demands of these employees would be beneficial to them as well as to the health insurance companies. This will lead to greater coverage of the people by the health insurance and growth of insurance business in India. It will surely help to make people aware of the need of the health insurance and sensitize them to purchase health cover to secure and ensure stress free life.

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A STUDY ON GREEN MARKETING AND ITS IMPACT ON THE SOCIETY

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ABSTRACT

Marketing is an essential act that helps in enhancement of standard of living of the society. It attempts to create and satisfy consumer needs. It builds foundation for and gives sense and life to the production of any product. However, over the years, it has come under severe criticism because of many products being unhealthy to consumption, packages being non-recyclable, production processes being pollution-driven, and so on. To face this challenge, marketing should have the objective of not only earning profit by satisfying the consumers with less prices but also keeping the consumers and society healthy by distributing such products in such a manner acceptable to all stakeholders in the long run. This understanding lead to the concept of green marketing with its elements such as green product, green price, green consumer, green branding and green distribution. This paper talks about such elements along with the relevance of green marketing and the problems associated to it.

Key words: Green marketing, Green product, Eco-friendly, Environment, Impact

1.1. INTRODUCTION

Consumers are the nerve centre of marketing. They should be satisfied by marketers in all dimensions to have a continuous relationship. Product quality for immediate satisfaction with cheaper prices alone cannot create satisfied consumers. Marketers are bound to consider the state of ecological environment they are responsible for. This has led to a multi-dimensional development, called, green marketing.

Environmental risk factors, such as air, water and soil pollution, chemical exposure, climate change and ultraviolet radiation contribute to more than 100 diseases and injuries. Children and old age people, birds and animals are mostly affected by environmental degradation and, according to WHO, such diseases are preventable if necessary efforts are taken. Green marketing can help a lot in resolving these issues.

1.2. REVIEW OF LITERATURE

A green marketing focuses on the lives of humans and brings a qualitative change in the relationship between customers and companies. (De Bakker & Frank, 2009)

Green marketing strategy has to address some fundamental areas such as developing a green product, green positioning, setting green prices, application of green logistics, proper waste management, launch of green promotion, forging green partnerships and in essence having the right green marketing mix. (Peattie, 1999)

Companies have to make necessary alterations in the product design to be in harmony with environment, which may require huge investment. Having designed products, they need to be positioned appropriately. (Singh, 2004)

Some companies prefer to indulge in promoting their products through media pro-environment, to reach out to environmentally conscious groups of customers. (Staib, 2009)

Developing green products involve huge sum of money in terms of research and development, wastage management, recycling and incorporating other external costs. But, there is a tendency among customers to pay a premium price for green products considering the positive impact. (Keegan et al., 2000)

1.3. OBJECTIVES OF THE STUDY

1. To study the background of Green Marketing
2. To understand the green initiatives in India
3. To analyse the impact of Green Marketing
4. To learn the relevance of Green Marketing and suggest measures.

1.4. RESEARCH METHODOLOGY

The data for the study are collected from secondary sources such as reference books, published articles in journals and internet materials. The analysis is done with the help of data available in the monthly and annual publications, books and websites.

1.5. LIMITATIONS OF THE STUDY

This study gives a broader outlook of green marketing. Green Marketing consists of various elements such as product planning, pricing, channel and promotion, each of them can be individually studied. The study does not have primary data. It uses only secondary data for analysis.

GREEN MARKETING- AN OVERVIEW

Green Marketing is a comprehensive adaptation of green measures in all areas of business activities, keeping in mind the interest of all stakeholders: profit to owners, health and satisfaction to consumers, self-sustainability to society, socio-economic development of a country and holistic existence of the world.

Charter (1992) has defined green marketing as a holistic and responsible strategic management process that identifies, anticipates, satisfies and fulfils stakeholder needs, for a reasonable reward, that does not adversely affect human or natural environmental well-being.

Green marketing consists of efforts by organizations to produce and promote products in a manner that are conducive to ecological concerns. The green marketing practices verifiable claims such as green messages, green packaging programs, recyclable and reusable packages, safe transportation, and so on. Health is a concern of every consumer. Environmentally conscious consumers purchase eco-friendly products and services, even at a bit higher price.

The deterioration of natural resources leads to a lot of problems to human beings and others such as: respiratory diseases, cardiovascular diseases, heart attacks, asthma attacks, nervous system damage, lung damage and various types of cancer, affecting the quality of life of living-beings. Going green is the only solution to these problems.

TECHNIQUES OF GREEN MARKETING**GREEN PRODUCT**

Green products are those products or services that reduce ill-effect on human health and the environment when compared with competing products or services that serve the same purpose. They are the eco-friendly organic products that are produced with the conservation of water and energy, reduction of liquid and solid waste, prevention of pollution and consumed fearlessly.

GREEN BRANDING

Green brand is a name or symbol or design assigned to an eco-product, harmless to the environment. This enables the customers to distinguish the green and non-green products. Socially responsible consumers and marketers give recognition to green branded products because of their eco-friendly nature.

GREEN LABELING

This act enables consumers to know the contents of a green product, its manufacturer, the process of manufacture, post-use reversed logistics, prices, how to use, etc. Green label is a marketing tool for eco-friendly products that assist the consumers in selection of right products.

GREEN PACKAGING

Green packaging which is the explicit phenomena in most instances has to do with suitable packaging that reduces environmental damage. Much of the pollution of air, water and soil can be avoided by using biodegradable packages

GREEN PRICE

Green price is understood as a premium price for the green products. Most of the time, the green price is more because of the expenses on R&D and other processes that the company has to incur such as installation of new technology, machines, training people, waste management, pollution controls, innovative packaging, reversed logistics and so on. Some products may have low prices owing to the lowering of unwanted packaging cost.

GREEN DISTRIBUTION

This comprises of creating channel members considering the environmental protection and damages in logistics. If the intermediaries are rightly trained, they can create an impact on the green marketing.

REVERSED LOGISTICS

Taking back used packages, wrappers, and even the used products from customers go a long way to preserve the environment. The marketers such as big bazaar give money back for plastic bottles, used products, etc brought back to them.

GREEN PROMOTION

Green promotion happens when marketers select right mode of means and messages at the right time to reach out to the intended group of consumers. No promotion can be effective unless what is being propagated is not practiced in real sense.

GREEN ADVERTISING

Green advertising is an approach to making advertising messages that focus on the customer benefits and social concerns than that of products/brands benefits. Green advertisements largely influence the consumers' buying behavior. Ottman, 1998 says, green communication fosters a positive image and conveys a business firm's concern towards the environment and the public.

MEASURES OF GREEN MARKETING IN INDIA

To encourage the movement, the Ministry of Power and the Bureau of Energy Efficiency have come up with a Perform, Achieve and Trade (PAT) programme for big energy consumers. The government has identified 478 companies that together consume 75 per cent of industrial energy and given them targets to reduce energy consumption over a period of three years.

On the corporate side, the CII has initiated the 'GreenCo' rating for companies based on their environmental performance across nine parameters, including energy efficiency, water conservation, use of renewable energy and waste management. Experts say it is more advanced than the ISO 14000 certification.

A large number of companies in India adopt green measures to save the environment in the forms such as invention of green technologies, less use of scarce natural resources, reduced use of harmful materials, waste reduction, recycling of wastages, reuse of wastages, energy saving, green campaigns, etc.

Following are some of the activities in relation to going-green in India.

COMPANY**GREEN ACTIVITIES**

<i>LG India</i>	LED E60 and E90 series monitors with eco-friendly features such as 40 percent less energy consumption than the traditional LCD monitors, and minimum use of hazardous materials.
<i>HCL</i>	India's first PVC free and eco-friendly notebook, 100 percent recyclable and toxin free.
<i>Samsung Electronics</i>	Environment friendly LED monitors with its range of 50 and 30 series. No use of environmentally hazardous substances, such as mercury or lead.
<i>Voltas</i>	In 2007, Voltas initiated the 'Green' range of air-conditioners, Its computer products and peripherals, kitchen appliances and other products, use about 20-30 percent less energy than the set standards.
<i>Panasonic India</i>	Econavi home appliances, air conditioners & LCD screens use sensor and control technologies to minimise energy consumption, based on a family's lifestyle.
<i>Nokia</i>	Won the Greenpeace Award mainly because of its back take-back program in India. Known for launching models free of PVC, brominated flame retardants and antimony trioxide.
<i>Wipro</i>	Launched wide range of eco-friendly desktops. Wipro has 17 e-waste collection centres in India. 12 Wipro campuses in the country have been certified as green buildings.
<i>MRF Tyres</i>	Eco-friendly tubeless tyres MRF ZSLK are made from unique silica-based rubber compounds and promises to offer fuel efficiency for vehicle owners, suitable for wet and dry braking.
<i>ACC Ltd</i>	Eco-friendly brand, 'Concrete+' uses fly ash (a hazardous industrial waste) to help conserve natural resources.
<i>Fevicol</i>	India's first eco-friendly adhesive, Fevicol AC Duct King Eco Fresh, boasts of being an all-in-one adhesive.
<i>Grassroot</i>	Eco-fashion, a process of creating garments with environment friendly techniques and processes which are non-hazardous to the environment, uses organic cotton, bamboo jersey, viscose and linen.

Kirloskar Brothers India's first pump manufacturing facility to receive the GreenCo rating. Plant in Dewas, was recognised as a 'Green Company' by CII's GBC. Dewas plant has reduced specific energy consumption by 30%, water consumption by 40%.

Source: <http://www.rediff.com/money/slide-show/slide-show-1-world-environment-day-some-of-indias-leading-green-companies/20110603.htm#1>

IMPACT OF GREEN MARKETING

Researches show that consumers generally prefer eco-friendly products that produce positive environmental impact. If the green marketing is rightly implemented, following could be the results.

1. Growing awareness regarding environmental hazards
2. Healthy life to self, family and community
3. Complete customer satisfaction.
4. Cutting down cost by reducing waste
5. Developing great brands and brand loyalty
6. Increased sales and revenue
7. Tax benefits and loans from governments
8. Right disposal of wastages, avoidance of climatic changes
9. Incorporating environmental concerns in business activities
10. Minimum use of raw materials thus preserving natural resources
11. Introduction of Eco-friendly designs
12. Minimum pollution and hazards from packaging
13. Easy promotion of green products and brand position.
14. Developing a spiritual relationship between green products and customers.

CHALLENGES

Generally green marketing gets tremendous boost from environmental conscious consumers. But, it was found that the purchase decisions of consumers may not be governed by their environmental concerns if the green product does not appear to be superior, and cost-efficient.

Researches show that people have better attitude towards green products. But the market share is abnormally minimal, making it a niche activity.

Lack of trust of customers on the green companies is a bigger concern because most of the customers began to doubt the authenticity. Many business units use green marketing as cost cutting measures. Reducing packaging is considered as green marketing. Compliance with environmental regulations is treated as green marketing.

Numerous green products have flooded the markets and confusing consumers in deciding a right choice. Lack of long term planning by the marketers is another factor. The success depends on the involvement of different stakeholders of a business.

CONCLUSION

Green marketing is a strategy not to impress the people, but to create a positive mind to preserve the globe. People are generally concerned about ecological issues since the latter affect the human life in a greater way. Consumers are not hesitant to pay higher prices if the green measures are real and the green products are more worthy. Hence the business organizations have to adopt green marketing to gain more profits while preserving the environment and satisfying the customers' needs fully.

Those companies which are committed to engaging green actions to protect the customers, employees and other stakeholders can avoid most of its business and social problems. The businesses that adopt green marketing practices will not only enhance their profitability but also can become permanently-friendly with the society and the government.

India has launched eco-labeling schemes connected to conservation of energy, recycling of paper, herbal agricultural products, nontoxic packaging materials, reduced use of plastic, bio electrical and electronic

products. The companies out of necessity or pressure are adopting green measures to comply with government demands.

Green marketers will definitely sell better than their counterparts because green marketing has its own merits and is welcome by most of the consumers. However, the strategy will work effectively if the cost element is comparable and the green products can make a visible difference in its quality. Whether adopted voluntarily or compulsorily, green marketing has captured a place in the heart of consumers and marketers, and for its guaranteed benefits, it will stay forever.

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A STUDY ON THE ETHICAL DILEMMAS IN CUSTOMER RELATIONSHIP MANAGEMENT

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ABSTRACT

Purpose: *The purpose of this paper is to examine the ethical dilemmas faced by organisations in CRM, given the current highly competitive market.*

Research Implications: *The paper provides a preliminary account of the various ethical issues which arise while implementing Customer Relationship Management strategies with instances from different sectors of the market.*

Findings: *Customer Relationship Management is one of the core business strategy that aims to maintain mutually beneficial relationship with customers by using information technology to collect accurate data on whereabouts of customers. Since, this data is stored in a huge database, there are concerns about secrecy of the information. These are the ethical issues in CRM faced by organisations like data mining, knowledge and data sharing et cetera. Examples of pharmaceutical sector, online sector and loyalty programmes have been used to elaborate on the subject.*

Originality/Value: *This paper talks about how business organisations get stuck in a conflict between business ethics and customer relationship management, especially when the current market is concentrated with strong competitors for every product and service.*

Keywords: *Customer Relationship Management, ethical issues in CRM, data sharing, customer's privacy, CRM programmes*

INTRODUCTION

Customer Relationship Management, as defined by Francis Buttle, is “the core business strategy that integrates internal processes and functions, and external networks to create and deliver value to targeted customers at a profit. It is grounded on high quality customer data and enabled by information technology”. It focuses on achieving customer-specific objectives by undertaking action plans that are particular to the customers.

CRM may be beneficial to both supplier and customer. The supplier gets opportunity to reduce costs by offering products that are wanted, when they are wanted, and he passes the cost savings on to the customer who signed up for the company's CRM.

In order to implement such strategies, comprehensive and reliable information about the customers is required to be collected and stored through CRM programmes. This gives rise to major ethical issues for the organisations, as listed below:

- **COLLECTING CUSTOMER DATA**

As mentioned earlier, ethical issues originate with the collection of customer data through secured collection methods. Verification of customer identity and the collected information is vital to check if it is authentic and accurate. This level of high security is ethically necessary. Companies with strong ethical values ensure that sensitive information such as credit card details or medical histories are collected and transferred to database in a secure environment.

- **STORING CRM DATA**

Once customer data is safely transmitted in a company database, ethical companies adhere to following four principles regarding storage.

1. Data is only stored with the agreement of the customer.
2. Customers must be able to view their data, change it or ask for it to be changed.
3. Customers can withdraw from the program as per their wishes.
4. Withdrawal from the programme must cause their data to be erased.

The ethics underlying the aforementioned principles are that the data belongs to the customer and the customer must be able to control his/her data.

- **USING CRM DATA**

Given the fact that customer data for CRM is sensitive and may be confidential, ethical companies ensure the data is kept as private as possible. This is why the company must store the data in a form or at a location not easily accessible to all the employees. The database must be accessed only when required for a CRM task, and only those employees who are assigned to complete the task be able to access the data.

- **DISPOSING OF CRM DATA**

Since customers must be allowed to withdraw from the CRM program and their data is erased thereafter, the company needs a procedure in place for safely destroying customer data on such an event. While deletion from the database is initially sufficient as long as the database remains secure, data on obsolete equipment and equipment that changes status to non-secure is at risk. An ethical company will have detailed policies and procedures for tracking and destroying data.

- **PERSONALISATION TECHNOLOGY**

Personalisation is a new strategy being adopted these days so as to maintain customer relationships. However, it requires monitoring or it may get too personal and the organisation may lose out on clients.

- **CUSTOMER FOCUS**

CRM involves frequent contacts with customers to extract maximum information possible. This raises privacy and secrecy concerns in the minds of the consumers as companies collecting huge amounts of data. Especially, in today's digital market, online transactions have become a convenient means for businesses to obtain data over the internet. Hence, it is quite reasonable for customers to have privacy concerns.

The vast collection of customer data and storing it in the database of the company is not unethical per se, but, it may be said as intrusive. However, it is the unregulated arena of using this data that makes it unethical. Following are some of the instances that show the ethical issues with a CRM strategy:

1. PHARMACEUTICAL SECTOR

The pharmaceutical companies have done a stellar job of exploiting CRM. Before 1994, the companies had spent less than 50 million USD/year for direct consumer marketing, but in 2000 they spent nearly 2.5 billion USD. Pharmaceutical companies are using CRM to hone their marketing messages to specific doctors and patients. Studies have shown that when patients go to a doctor and request a drug seen in an ad or a direct mail solicitation, almost half the time they will walk out with a prescription for that drug.

A November 2001 study by The Henry J. Kaiser Family Foundation, a health-care research organisation based in Menlo Park, Calif., found that of those people who talked to their doctor about a medicine they saw advertised, 44 percent said that the doctor gave them the prescription medicine they had asked about.

2. ONLINE SECTOR

The Wall Street Journal reported that Orbitz(an online travel aggregator website) displayed higher prices for hotels to Mac users than the Window users. Consequently, users of Apple devices ended up paying at least 30% more for one night stay than other guests(Mattioli, 2012).

Another observation from daily internet surfing is that the online platforms are so in sync with each other that the search history of the customer is shared. For example, If a customer searches for flights from Mumbai to Delhi on an online travel aggregator like Goibibo or Makemytrip, etc, his or her social media platforms will start displaying advertisements or customised offers for flight from various sources. This kind of phenomena can be observed for almost every online purchase actually made or is potential such as ordering for books, clothes, gadgets, et cetera.

3. LOYALTY PROGRAMMES

The stores offer special discounts to customers who join their loyalty card programme. For instance, Lifestyle has a loyalty programme called 'The Inner Circle', while Pantaloons offers a 'Green Card' Rewards programmes, Westside have 'Club West' and 'First Citizen' from Shopper's Stop to woo the customers. These programmes allows the customer to earn loyalty points on every purchase and these points can be redeemed later. Customers are asked to give their personal information such as birth date, anniversary date and address while joining these kind of CRM programmes. While most of the customers do give such information, there are some people who may be concerned about privacy and secrecy of the same.

Seth Godin published Permission Marketing in 1999 and established the basic groundwork for ethical CRM: Ask for permission and keep the relationship honest at all times. Retention of customers is based on trust developed through clear, consistent, nonintrusive and honest dialogue that meets expectations all around. But

permission marketing is hard work. It takes longer to acquire customers who have "raised their hand" and invited the company to communicate with them. With the rapid growth of technology that can mine even the smallest detail about a customer, IT professionals, marketers and policy-makers must be sensitive to these ethical issues.

OBJECTIVES OF THE STUDY

1. To examine the ethical dilemmas organisations face in CRM.
2. To analyse the impact of knowledge sharing and the ethical dilemma associated with it.
3. To highlight the importance of ethics in CRM.

REVIEW OF LITERATURE

- Bert Markgraf in article titled "Ethical issues in CRM" gives content on what are the major ethical issues in customer relationship management in four points on customer data collection, storage, usage and disposal. The content is in line with this research paper.
- Bang Xuân Nguyen, Lyndon Simkin and Ana Isabel Canhoto in short review of their book "The Dark Side of CRM" give an outline of the book and mentions what individual chapter talks about along with some examples and statistics used in the book. The book, as name suggests, presents the negative aspects of CRM like data mining and privacy concerns.

SIGNIFICANCE & IMPORTANCE

While CRM is an important business strategy, at the same time, it is vital that the customer data be kept secured and it must be made sure that there is no privacy breach by the organisation or any employee of the organisation. Pharmaceutical sector has picked up the sales since inception of CRM, as mentioned earlier in this paper. Next, the online sector benefits a lot from customer data and synchronisation of databases which leads to sharing of search history and other things across platforms. Also, the loyalty programmes initiated as a part of CRM strategies asks for personal information about the customers in lieu of discounts and loyalty points. Nowadays, consumers from every age group take their privacy and secrecy very seriously and the recent data breaches by companies like Facebook have become a wake up call to the consumers at large. Reports of several studies show that consumers have already started shifting between products due to privacy concerns or are likely to shift. Acts of data mining, knowledge sharing, et cetera decreases the clientele of the company and also tarnishes the reputation earned over years. Hence, the organisations must ensure of the safety of sensitive information collected from the customers.

LIMITATIONS OF THE STUDY

The study is not exploratory as it relies only on secondary sources like online journals, articles, websites, et cetera.

CONCLUSION

Customer Relationship Management (CRM) is a business strategy to achieve customer-specific objectives with the customer oriented actions. It involves collection and storage of customer data through information technology. This information is used to formulate more accurate CRM strategies and gain profits through increased sales. The major ethical issues identified in the paper are- secure collection, safe storage, usage and disposal of customer data, personalisation and concerns on privacy. These issues have been supported by examples of pharmaceutical sector, that gained customer satisfaction and earned profits; online sector, that syncs customer data across platforms and personalises offers; and loyalty programmes, that attract customers with rewards or points or discounts.

The researcher has come to the conclusion that though CRM is a crucial form of business strategy, the marketers and companies as a whole must be cautious in keeping secure the customer data. Companies may lose out on their clientele if customers suspect of any privacy breach by the organisation and may switch to another product or service or brand, as per the circumstances.

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A STUDY ON THE ROLE OF DATA ANALYTICS & TECHNOLOGY IN CRM

Shivam Pandagre

ABSTRACT

This paper provides an overview of relationship marketing (RM) and how it evolves to customer relationship management (CRM). The author also discussed the role of data analytics in CRM. Nowadays, the data scarcity problem has been encountered because of the data deluge problem. Marketers and Customer Relationship Management (CRM) specialists now have access to richer and bigger data on consumer behavior. The current challenge is effective utilization of these data in CRM processes and selection of appropriate data analytics techniques. Data analytics techniques help to find hidden patterns in data. This Research paper explores the characteristics of data analytics as the integrated tool in CRM for sales managers. The paper aims at analyzing some of the different analytics methods and tools which can be useful for continuous improvement of CRM processes.

This paper also discusses the increasing role of technology in CRM process. The focus of this paper is a theoretical discussion of the technological developments and their application in the CRM context in the implementation of CRM strategy. The paper examines the nature of CRM and the components of the various technological CRM systems as well as the specific types of systems that can be used in relationship building, concluding with a discussion of specific technological tools in the CRM context.

Keywords: Consumer Relationship Management, Data analytics, e-CRM, Information Technology, Internet, E-commerce, Evolution

RESEARCH OBJECTIVES

- To study the evolution of CRM process.
- To study the role of Data Analytics and Technology in CRM.
- To compare Traditional and Modern CRM practices.

RESEARCH METHODOLOGY

The topic of this research paper is “A STUDY ON THE ROLE OF DATA ANALYTICS AND TECHNOLOGY IN CRM”. The research methodology used for this research is solely based on secondary data due to lack of adequate resources. The researcher used online websites, journals, books and previous researches for the following research.

REVIEW OF LITERATURE

- **D. Sasikala, S. Kalaiselvi, and M. Phil Scholar, “Data Mining for Business Intelligence in CRM System,” *International Journal of Multidisciplinary Research and Development* :** This journal helped researcher in understanding the role of Big Data Analytics in CRM.
- **CUSTOMER RELATIONSHIP MANAGEMENT by V. Kumar and Werner J. Reinartz :** This book helped researcher in dealing with info related to evolution of CRM.
- **Chen IJ & Popovich K. 2003. Understanding customer relationship management (CRM) People, process and technology. *Business Process Management Journal*, 9(5): 672-688 :** This journal also helped researcher in collecting info related to role of technology in CRM.

INTRODUCTION

Customer relationships have increased in importance in the field of business and marketing in the recent time. This importance can be linked to the changing nature of competition and technological developments. For example in the case of competition, relationships can serve as the basis for competitive advantage, while in the same context technology serves as the enabler of relationship building.

This paper highlights step by step changing in marketing strategies from the original production base than move to transaction and lastly relationship orientation. The changes in the marketer focus are in line to the customer demand trend, the increasing numbers of market players, technology support and open market mechanism that build the marketing environment. Even CRM strategies facilitate technology as the core success, the principle of marketing to ensure customer satisfaction; brand loyalty and repeat purchase intention still become a main focus. Therefore, CRM performance is come from the evolution of marketing which represent marketer strategies to fulfill market growth instead of customer needs and profitability. In short, CRM performance

ensures mutual benefit between customer and marketer; customers can capture product and service benefit and marketers can grab the profit.

The focus of this research paper is on a theoretical discussion of the technological developments and their application in the CRM context in the implementation of CRM strategy. This research examines the nature of CRM and the components of the various technological CRM systems as well as the specific types of systems that can be used in the ambit of relationship building, concluding with a discussion of specific technological tools in the CRM context.

CONSUMER RELATIONSHIP MANAGEMENT AND ITS EVOLUTION

Customer relationship management (CRM) is nowadays replacing the traditional 'four Ps' of marketing - product, price, place, and promotion. Long-term relationships, formulation with customers are the most important key to stability in an increasingly dynamic market. However, forging long-term relationships which are formed between customers and service provider is the key to stability in an increasingly dynamic market. Electronic customer relationship management (e-CRM) emerges from the Internet and web technology to help or facilitate the implementation of CRM. It focuses on internet or on web-based interaction between customer and service provider.

Customer Relationship Management (CRM) within businesses has increased dramatically over the last years, and will continue to increase in the future as well. The market of CRM products in all economic sectors increased rapidly to \$125 billion by 2004, up from \$34 billion in 2002 which is quite shocking. According to studies conducted by www.marketingfind.com in 2002 revealed that spending on CRM software by small and mid-sized businesses reached \$651 million by 2006 and covered 19% of the entire CRM market, up from 10% in 2001. The relationship between customer and service provider will become more challenging and competitive in future. As a result, as the number of customers increase; service provider will have to focus more on their services and software to manage the critical relationships with their subscribers and customers. Customer Relationship Management CRM is now become the main strategy for companies' regardless of its size. A company's customer care strategy and its CRM software will have to go hand in hand. The reason for this is that it costs up to five times more than a present customer to acquire a new customer, than to get an existing customer to make a new purchase. According to Connolly and Yager (2001), the damage caused by a dissatisfied customer can be expanded exponentially. Dissatisfied customers are more likely to defect to competition and more likely to convince others to switch to another service provider. Nowadays, it is not surprising that customer relationship management is a significant issue for discussion in the academic as well as in the business arena. Therefore this paper explores the evolution of CRM from the marketing domain which change to organizational strategies those focus on the growth and sustainability of company. This paper highlights the evolution of marketing that change from transactional orientation towards relational orientation that brings CRM as an important tool for organization growth and sustainability.

As above mentioned there are two classifications of approach in marketing that is on one hand the traditional based approach which is also called as transactional approach and on the other hand strategic market-based approach. According to Jackson, "*Traditional (transactional) approach focuses additional on dealing, competition, firm-induced, worth to the firm, client passiveness, companies as focus management, firm as boundary, short focus and freelance, while on the other hand strategic market relationship focuses more on the partnership, collaboration, co-operation, value in partnership, buyer as active participant, firm as part of the process, boundary-less, long-term focus and dependence and network-led*". The move from transactional orientation i.e. the questionable ancient selling towards strategic market relationship was wide mentioned in Eighties. Due to the changes in market ways that move towards client focus and worth creation instead of product or services focus, a new paradigm of marketing are stress on buyer-seller relationship as another technique in worth creation for each parties. Thus, the situation has led to the amendment from ancient to strategic relationship. Furthermore, Webster (1992) contended that the amendment from dealing selling to strategic relationships demonstrates that there's a time from the natural event dealing to the vertically integrated organization at the other end of the spectrum.

The literature suggests that, Consumer Relationship Management (CRM) as a concept began to emerge in the mid-1980s and over a relatively short period of time the application of Relationship Management became rapid. Since then, CRM started to represent a new leading approach or a paradigm shift in as it emphasizes valuable customer retention strategy. In other words, since 1980s, CRM represents an emerging school of marketing thought, which offers an essential framework for understanding, explaining, and managing the relationships. It represents an important phenomenon in the focus of marketing continuum from transactional approach to relational approach. Specifically, the general focus of CRM is to build long term relationships with customers.

The changes in CRM marketing focus have been dramatically shaped from decade to decade. In the early 1900s, the focus of market was on consumer marketing with companies having the ability to adapt their offerings to treat each customer as an individual person. After world wars, companies tended to focus on product differentiation and then in 1950s the focus moved from production process and marketing efforts to acquisition strategies with a new media and communication. In the late 1980s, direct marketing helped to differentiate products from the mass market, the service quality and the satisfaction made marketing more focused. This phase was proceeded by the information era that personalized customers and focused on their retention. By the year 2000, communication mediums have changed, which enabled companies to know more about the customers, thus allowing them to target and customize their offering.

DATA ANALYTICS IN CRM PROCESSES

Data analytics research has its origins in the late 1970s. However, it has experienced a huge recent explosion of publications since 2008, mainly, due to improvement of computing and means of technologies. Nowadays many companies that consider themselves market driven in the past are now almost organized around their products. In the era of rapidly changing, globalized economies, and highly competitive markets, transformation from a product-centric focus to a more customer-centric view is the basic requirement in the present times. Customers expect more personalized products and services because they know that companies have data about them to act according it and there exists the opportunity to provide customization. Nowadays, the ability to generate useful information from data collected by the customers is essential for CRM specialists. This can be achieved by using data mining (DM) techniques to find the hidden and unknown customer information from customer data and, thus, achieve effective CRM to cater customers in more effective manner.

These are the five most important roles of data analytics in CRM :

➤ PREDICTIVE MODELING

The preferences and tastes of today's digitally empowered customers are constantly evolving with the developing world. With the help of Business Intelligence and data analytics we can gain the ability to better forecast how a customer is going to respond in the future based on his/her past behavior, segmented demographics and psychographics. Analytics can isolate large numbers of customers who are ready for renewal and segment them according to how they're expected to behave at that time. If they haven't made complaints in the past and have upgraded their service and bought additional products, it means they are satisfied and will renew without any problem. You may want to target these customers with future marketing campaigns but no additional investment need to be made to retain them. On the other hand, if a customer has several complaints in past he/she would create problems for the company in the future also.

➤ MARKET ANALYSIS

As we already know every brand has a story to tell and a story to sell. The need to know your customer (KYC) base for targeted marketing has now become more important than ever. With CRM & Big Data Analytics, customer trends can be mined and used to predict their needs, directing product development and promotional efforts which will also help in analyzing the situation of the market.

➤ BETTER CUSTOMER UNDERSTANDING

Customers are the heart of the modern enterprise and understanding their preferences, their values and their histories is the most important step in guiding your company towards greater success. By analyzing all customer data points which are important for data collection like call center, Internet, email and social media, CRM analytics can group customers according to their buying behavior allowing you to identify your best customers for special treatment to maximize their lifetime value and profits.

By integrating or analyzing big data with CRM, companies can now easily find out how the product or brand is understood by the customers online. They can use the data to identify their weaknesses & strength and then revise their marketing and sales strategies.

This will both improve customer retention and enrich customer experiences which will help company in increasing their sales.

➤ DRIVE REVENUE & GROWTH

Big Data Analytics provides companies with accurate performance metrics, helping them to make more informed decisions in the context of customers. Sales team of a company can generate leads and close deals knowing their target audience. Moreover customer service staff of a company will have more information at their disposal when serving customers.

➤ BENCHMARKING

A powerful customer data analytics provides the data to perform detailed benchmarking over the specific time.

Basically, benchmarking is the ability to determine how well you are or are not performing according to your plan or similar organizations in your industry as well as companies in other industries. Benchmarking analytics focuses on defined key indicators such as customer satisfaction, customer retention, cost per customer service call and revenue occurred per call. A company can see the operational areas in which it is lagging behind, and bring them up to (or above) industry standards.

TECHNOLOGY AND CRM

Technology plays a significant role in each side of business world. Communication between the corporate and therefore the customers become easier and quicker. It is conjointly necessary for the shoppers to possess established smart communication with the corporate in order that their wants would be catered properly. The utilization of technology in communication is a technique to become progressive and to become alert to what's today's latest trend.

Technology and CRM as partners would result to a prospering and productive form of business. It would conjointly facilitate corporations to be a lot of updated in order that they might be ready to beat the competition and create their company one in every of the simplest. Technology integration has several effects for the betterment of CRM.

Here following are the roles of technology in Customer Relationship Management (CRM):

CRM cannot survive without technology: Technology is the partner of CRM so as to cater the wants of the shoppers. It makes their relationship significant in a very method that the corporate understands what the shoppers want. They become aware if the customers are satisfied enough on their products and services if not, it would be easy for them to look for strategies to make them satisfied.

Databases serve as the soul of CRM: It would not become useful while not the utilization of technology. Databases facilitate collect knowledge and create it organized before victimisation it to serve its purpose. It gathers data from the shoppers through the utilization of net that produces communication quicker.

Online services for the customers: Since there's no not possible once it involves technology, the connection between the corporate and therefore the customers would become stronger through the utilization of media technology like the social media. Even though they're off from one another, negotiating isn't that arduous to attain.

Services are always available: Due to the rise of different gadgets, it is now easy for the customers to have an access to the companies that will suit their needs. Cellphones and laptops are just few of the many gadgets that can be used as long as it has an application that the companies are using.

Low-cost CRM: The evolution of technology makes it for the CRM to price moderately. Companies will afford to possess this as a result of they might not pay immeasurable cash simply to cater the wants of the shoppers. As the technology evolves, the CRM will also evolve to adapt the continuous demands of the customers.

The rise of technology paved thanks to the good positive effects in terms of building a business. It is now easy for the companies to make their customers access directly what they offer to them and CRM is a strategy to keep customers and it can also add attractiveness to form to extend the quantity of shoppers to form the business survive the competition. The integration of technology in CRM will create it more practical and performance the method it's. CRM works higher once the sheer power of technology is totally integrated.

COMPARISON BETWEEN TRADITIONAL AND MODERN CRM

Social media adds this missing dimension to the normal, operational areas of CRM. And in line with a recent Nielsen Company study, common fraction of the world's web population visited a social networking website} or blogging site -- what they see as "member communities." the mixing of social media into metal strategy is termed as Social CRM that differs it from ancient client relationship management in an exceedingly few key ways :

DATA-DRIVEN VS. CONTENT-DRIVEN

Businesses began finance in CRM applications within the '90s principally to store contact information. Before contact management code was accessible, businesses had to store their valuable client data in Rolodexes, spreadsheets, and even filing cabinets. It was vital to own a central location to store the information that was additionally simply accessible to speak effectively with contacts. And with multiple folks "touching" the client for varied reasons, it quickly became vital to be ready to track activities, appointments, potential deals, notes, and other information. Consequently, ancient CRM grew out of this got to store, track, and report on important data regarding customers and prospects.

Social CRM is growing out of a very completely different want -- the necessity to draw in the eye of these victimization the net to search out answers to business challenges they're trying to overcome. And nothing captivates the eye of searchers like relevant, compelling content. Having the proper content, and enough of it, can facilitate connect you with those needing your product or service. Creating content in formats that make it easy for your target audience to consume it increases the probability that you will move them to action -- starting a conversation with you. Whether it's by developing a journal post, podcast, YouTube video, or Webinar, making engaging content could be a key pillar of social CRM strategy.

PROCESS-CENTRIC VS. CONVERSATION-CENTRIC

Traditional client relationship management is heavily targeted on implementing and automating processes. Companies trying to implement processes like lead and activity management would address CRM. Management would address CRM to standardize on sales processes to extend the accuracy of sales forecasts. And client service requests can be half-track, routed, escalated, and resolved in an exceedingly uniform fashion to make sure correct handling. Traditional CRM helped create it attainable to make sure the right activities and tasks would be performed by the acceptable folks, within the correct sequences.

There square measure various ways in which to participate in important conversations with folks searching for facilitate in determination challenges. Formalizing a strategy to increase the likelihood of engaging in these conversations is a tenant of social CRM.

OPERATIONALLY-FOCUSED VS. PEOPLE/COMMUNITY-FOCUSED

As mentioned on top of, managing client data could be a major concern to businesses of all sizes. It plays a key role within the ability of companies to reply to client requests, manage resources required to shut deals expeditiously, and supply management with reports to stay track of sales performance. This helps executives attain operational effectiveness, and is especially vital for businesses increasing their sales and promoting operations, needing to implement new processes to manage growth. Businesses have generally turned to CRM to boost communication between sales and promoting operations, as well as to improve data-access to positively impact decision making.

Whereas ancient CRM activity targeted heavily on operational effectiveness and its impact -- each internally and on the client -- social CRM is all regarding folks and community. It's regarding however your company intends to participate within the current conversations going down within the business. How you embrace non-traditional potent folks like fashionable business bloggers, and social sites on the net frequented by your audience. And totally understanding the importance of tributary to discussions, in an exceedingly clear manner, can assist you build the sort of name required to become a valued member of the online communities important to your business.

CONCLUSION

Successful CRM strategy implementation is the goal of any organization that is seeking to build Relationships with customers. To facilitate this, CRM systems hold a great deal of promise in

enhancing these activities. Despite questionable implementation to date, predictive CRM, interactive CRM and interaction technologies in this area can be some of the major contributors in this regard, which can provide the organization with a competitive edge in the marketplace. It must be ensured that the CRM systems that are selected are appropriate for the organization and used purposefully in order to gain the maximum benefits from them, namely the attainment of CRM goals.

Application of data analytics in CRM is an emerging trend in the industry. It has attracted the attention of industry practitioners and academics. This literature review has identified 51 articles related to data analytics in CRM, published between 2013 and 2017. This paper has provided a detailed review based on four CRM dimensions, seven CRM functional solutions and nine data mining techniques.

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**A RESEARCH ON EVOLUTION OF TECHNICAL WORLD
TECHNOLOGY! TECHNOLOGY!! TECHNOLOGY!!!****Dhanshe Neha Mohammed Yasin and Amit A. Jadhav**I. C. S College of Arts, Commerce and Science

ABSTARCT

From small children to every senior citizen , all are aware about what the technology is? I have choosen this research as it is most evolved topic in the modern world where everything is surrounded by Technology. Instead everyone is aware about technology but we will overview how the evolution of technology took over the traditional ways and to learn the future aspects.

You can easily figure out that , No single human is unaware about “What The Technology Is?”. In this developing world , even a 3 to 4 year old of children can easily operate mobiles and other electronic devices.

“Technology is damaging our lives”, as everyone is fully addicted to this technical and evolved world or technological development. Tough technology has various disadvantages but according to the Darwin’s theory of Evolution, the fittest survive where it becomes more important to make the use of technology. the world which is developing, growing and has reached some unimaginable thinking making and leaving people curious ,small and connective through the technical evolution.

Technology plays an vital role in different sectors without which it becomes impossible to survive in this technical world. Due to growing technology the education system has evolved so much till the day and the future is also expected to be bright. Technology has many more contribution to the medical, military and other fields.

Keywords:- Evolution Of Technology ,Medical Technology, Educational Technology ,Technology In Banking Sector, Future Of Technology.

INTRODUCTION

The learning process has been improved, education is the economy’s backbone. Technology has brought about best organizations and industries in the infrastructure which has interpreted good information. Various technologies are use to make the education system advance and boost the students toward learning and technology.

Visual Education is growing popularly and has revealed to be best learning technique in most subjects like science and mathematics . Due to this growing technology the long distance learning has become possible. In this technical world people can send S.M.S. can interact and collaborate through social media like Facebook and Instagram. Technology has improved the communication process.

Future of technical world is expected to be bright especially in learning. In this technological world, using smart phone one can search on internet for gaining access to information, can get knowledge of programming . You Tube gives millions of free tutorials on educational matters.

It may take little more time for human to be beaten by computer but advances in artificial intelligence that have been took over from past decades.[1]

EVOLUTION OF TECHNOLOGY

The term “techne” is a Greek word which means art or craft but use to defined advancement and changes around us. It initiated with the beginning of life on the planet and continues till the modern techniques such as computer and nuclear power.

The main era of technology and invention came in 18th century when industrial revolution ,development and production started. The evolution of new technology depends upon a good theorotical basis for developing technology as well as experimental validation. As every minute and every second is passing we are becoming more and more globalized.

Modern technology has evolved in last 10 to 20 years, when computer first came out their size were of one room. Now the technology has reach the level that we can carry them in our backpacks. Many people think that technology is bad and pollutes children brain. The example is internet leads to small but significantly increases in misery and loneliness but according to my research everyone in my college uses internet and no one lonely and depressed.

Starting in UK in 18th century, the Industrial Revolution was the time of great technological discovery, especially in the fields of agriculture, manufacturing, mining, transportation and metallurgy. Technology has taken another step in the 2nd Industrial Revolution with the innovations such as electric motor, light bulb. The rise in the technology has led to discovery of powered flights, medicines etc.

Communication got improved with the invention of telegraph, telephone and radio. The late 19th and 20th centuries saw a great revolution in transportation with discovery of airplanes and automobiles.

The 20th century brought a boost innovations. Computers were invented and later ICs and transistors. In physics, nuclear fission has led to both nuclear weapons and power.[2]

In medicine, the era brought innovations such as open-hearted surgery and later stem cell therapy.

Now these technologies have become so complicated that entire fields have been created to support them including engineering, medicine and computer science and other sectors have been made more complex like transportation, construction and architecture.

DEFINITION OF TECHNOLOGY

“The specialized manner of accomplishing a particular task by the use of technical processes, methods or knowledge“.[3]

There are various fields as mentioned in the evolution of technology which are fully technology oriented.

1) MEDICAL TECHNOLOGY

Healthcare is becoming an increasingly extreme field as doctors and researchers generate medical reports on the patients and their illness. A patient visiting physician 20yrs ago, may have reports generated of basic information such as BP, weight and some symptoms, but due to the innovation of technology in the medical field, One medical encounter today gives long trail of medical data from the use of high- definition medical implantable like monitors, more importantly, the medical reports of patients are available in an electronic format using various secured applications.

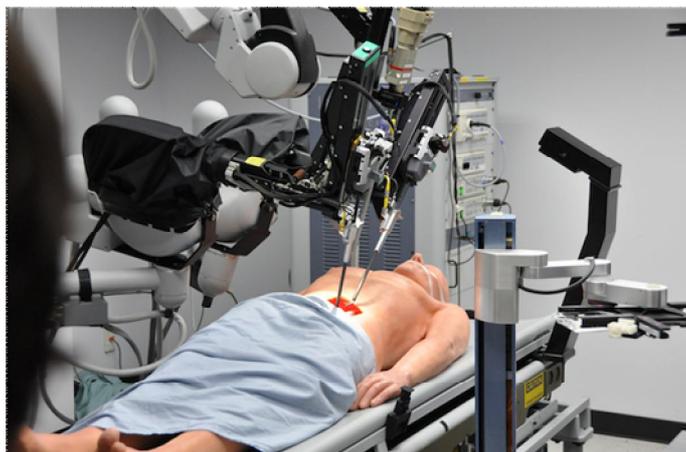
In the field of bioinformatics, it's to study the molecular biology and genomics research. Researchers use bioinformatics to gain better understanding of complex biological processes, such as analyzing DNA sequences.[4]

System biology uses the computer modelling and mathematical stimulation to predict how complex the biological system is. Example: Researchers have created a model to predict the tumor growth, through this the physician can easily predict and rectify the affect of disease on patients biological health.

Medical technology like minimal surgeries, better monitoring system, and more comfortable scanning tools and devices are allowing patients less time in recovery.

The incorporation of medical technology has also created robotic surgeries, where in some cases physicians do not even need to be in operating room with the patient when surgery is performed.

Scientists are able to examine diseases on cellular level and produce antibodies against them. As technology in the world healthcare center begins to evolve, rules and regulations situated with its use must be established. Rules like HIPAA and its privacy and security Act target the security and confidentiality of the patients information in digital world.[5]



EDUCATIONAL TECHNOLOGY

A teacher must be well educated and knowledgeable to be able to educate others. When population increased the demand for learning also goes up and thus the traditional schools and education system doesn't cope with the requirements. Thus new schools had to be created, new teachers were required to deliver the education

Nowadays due to support and developed tools of technology in educational sector, the learning process has expanded and growing till the day.

TRADITIONAL EDUCATION

In Sri Lankan context, formal education was traditionally centered on schools at village level while non-formal education was centered in libraries at central places in the form of books, articles or newspaper. Teachers delivered formal education either by using textbooks or notes.

The transformation of analogue signal to digital emerged a new technology that was capable of performing effective tasks. Since 1960s educators and computer scientists began to use computers for teaching-learning processes.

Early computers were time-consuming due to its low level interaction but with the invention of affordable microcomputers and graphics, there was a rapid development of computers in sectors such as business, educational institutes and homes.[6]

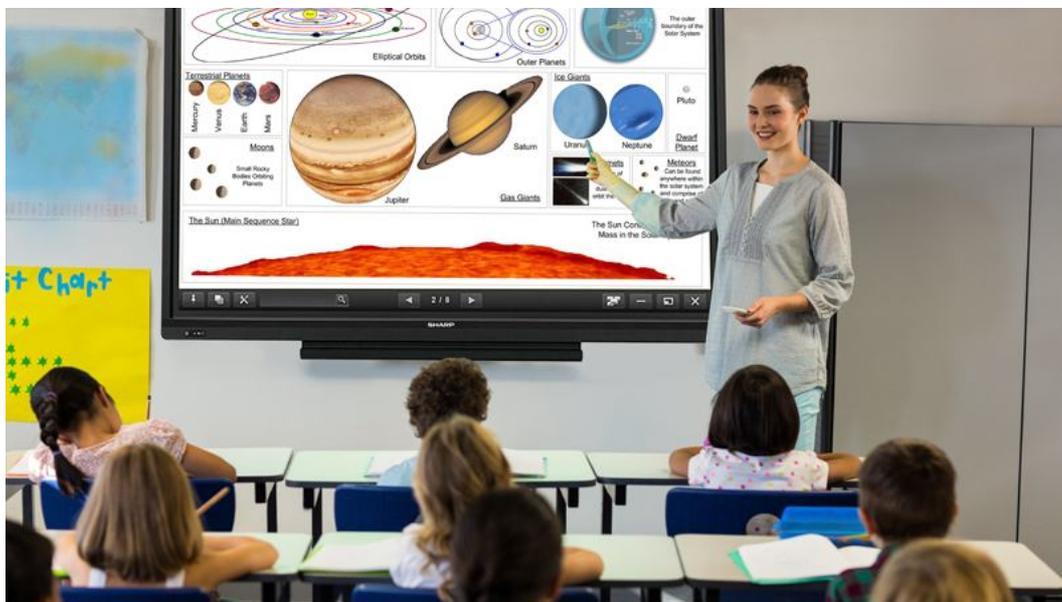
DIGITAL AND ELECTRONIC ERA

Electronic era is concerned with the use of wireless communication. Transmitting telegraph messages and radio are important applications of this technology. Messages were sent through air, on radio waves. Since then, the technology has moved from radio to recording, movies, computers, CDs, ROM and internet.

This has become an informal but effective form of education. Intranets are the backbones of this technology. They give transparent speedy transfer of knowledge among people and applications.

CHANGES TAKEN PLACED

Availability of vast amount of information on web has provided all types of different learning material. Lecture notes are no longer the main focus as various tools and applications are developed due to technology.[7]

**2) TECHNOLOGY IN BANKING SECTOR**

In 1991, the changes in economic liberalization and globalization process had taken place which has impact on financial institutions. Technology has created transformation in banking sector: banking structure, business process and human resource development. It has great effect on productivity, profitability and efficiency of the banks. Electronic funds transfer is enhanced in terms of security by the use of digital signatures. All the technological development has changed the Indian Banking system.

BANKS TRANSFORMATION AND TECHNOLOGY

The activities of banks have grown in multi-directional as well as multi-dimensional procedure. The virtual financial services can be divided as follows:

.Automated Teller Machine.

.Remote Banking Services.

.Smart cards.

.Internet Banking. [8]



Potential Risks

Increase in the usage of new products and channels create new potential risks in different markets places.

Risks to customer.

Risks to Banking.

Systematic risk.

Social risk.

EMERGING ROLES FOR REGULATIONS

Government and regulators has to perform the following roles to minimize risks in future:-

TO PROVIDE A LEGAL FRAMEWORK

It ensures the laws and regulations related to the use of new products, delivery channels, Internet frauds, hacking, money laundering and cyber terrorism needs to be enacted.

TO ESTABLISH REGULATORY AND SUPERVISORY ARRANGEMENTS

Regulators have to specify safety features for secured transactions.[9]

FUTURE OF TECHNOLOGY

A team of researchers says digital life will continue to expand the opportunities in the upcoming decades and that the world to come will help more to people's lives than doing harm.

When the Researchers at the Pew Center asks American internet users for their judgement regarding the role of digital technology in their personal lives, the majority feel it is a good thing.[10]

AR WILL DO GREAT, BUT VR WON'T?

The battle between AR and VR ,has been won.AR is increasingly useful, but VR has yet to take off.

DATA SCIENTIST WILL TURN TO CONSULTING

The demand for the Data Scientist will increase sharply . It is most great job which will become very different from what we know today.[11]

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DATA STORAGE SECURITY ISSUES IN CLOUD COMPUTING

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ABSTRACT

Data storage security abstract cloud computing delivers on-demand services to its customers. Data storage is amongst one of the primary services delivered by cloud computing. The cloud service provider hosts the data of data vendor on their server and the user can access their data from these servers. As data vendors and servers are different identities the paradigm of data storage brings up many safety challenges. Independent machinery is necessary to make sure that data is properly hosted into the cloud storage server. In this paper, we will discuss the different methods that are used for safe data storage on the cloud

Keywords: Cloud computing, Data storage, Cloud storage server.

I. INTRODUCTION

Cloud computing is the combination of many pre-existing technologies that have mature at different rates and in different contexts. The aim of cloud computing is to allow

consumers to take advantage of all these technologies. Many administrations are moving into the cloud because it allows the users to store their data on clouds and can access at any time from wherever. Data breaching is likely in a cloud environment since data from

different users and business organizations lie together in the cloud. By sending the data to the cloud the data vendors transfer the control of their data to a third person that may raise safety problems. Occasionally the cloud service provider CSP itself will use/corrupt the data illegally.

Safety and privacy stand as the main obstacle on cloud computing i.e. conserving privacy integrity and availability of data. a simple solution is to encode the data before uploading it onto the cloud. This approach safeguards that the data are not noticeable to external users and cloud administrators but has the limitation that plain text-based searching algorithm is not applicable. In this paper we discuss the safety flaws in data storage and the devices to overcome it.

II. CLOUD STORAGE

Cloud storage is one of the main use of cloud computing. We can describe cloud storage as the storage of the data online in the cloud. a cloud storage method is considered as distributed data centers which naturally use cloud-computing technologies and offers some kind of interface for storing and retrieving data. When storing data on the cloud it seems as if the data is stored in a particular residence with a specific name. There are four main types of cloud storage: Personal cloud storage: it is also recognized as mobile cloud storage. In this kind of storage individual's data is stored in the cloud and he/she may access the data from anywhere. Public cloud storage: in public cloud storage the creativity and storage service supplier are separate and there aren't any cloud properties stored in the enterprise's data center. The cloud storage supplier fully manages the enterprise's public cloud storage.

Private cloud storage: in private cloud storage the enterprise and cloud storage supplier are combined in the enterprise's data center. In private cloud storage, the storage supplier has an organization in the enterprise's data center that is typically managed by the storage supplier. Private cloud storage helps resolve the perspective for safety and performance concerns while still contributing to the advantages of cloud storage.

Hybrid cloud storage: it is a combination of public and private cloud storage wheresome serious data resides in the enterprise's private cloud while other data is stored and accessible from a public cloud storage supplier.

III. CHARACTERISTIC OF CLOUD COMPUTING

There are five features of cloud computing. The first one is on-demand self-service where a customer of services is providing the needed resources without human interference and interaction with cloud supplier. The second characteristic is wide network access which means properties can be accessed from wherever through a standard device by thin or thick client platforms such as mobile phone laptop and desktop computer. Resource combining is another characteristic which means the properties are joint in order for multi-tenants to share the resources. In the multi-tenant model properties are assigned dynamically to a customer and after the customer finishes it can be allocated to another one to respond to the great resource request. Even if the resources are allocated to consumers on request they do not know the site of these assigned resources.

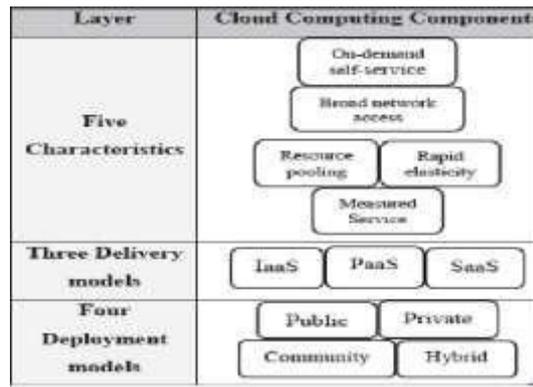


Figure. 1: Cloud environment architecture

Occasionally they know the site at a high-level abstraction such as country state and data center. Storage processing storage and network are the kind of properties that are assigned. Rapid spring is an additional characteristic which means that properties are dynamically increased when needed and reduced when there is no need. Also, one of the characteristics that a customer needs is measured facility in order to know how much is consumed.

IV. ENCRYPTED DATA STORAGE FOR CLOUD

Since data in the cloud is located wherever it is significant that the data be encrypted. We are using secure co-processor as part of the cloud infrastructure to enable efficient encrypted storage of sensitive data. By implanting a secure co-processor SCP into the cloud infrastructure the system can handle encoded data efficiently. Parts of the future instrument see figure 2 basically SCP is tamper-resistant hardware accomplished of limited general-purpose calculation. For example, IBM 4758 cryptographic coprocessor IBM is a single-board computer containing a CPU memory and special-purpose cryptographic hardware limited in a tamper-resistant shell specialized to level 4 under fips pub 140-1. When installed on the server it is accomplished of execution local calculations that are totally hidden from the server. If interfering is detected then the secure co-processor clears the internal storage. Since the safe coprocessor is tamper-resistant one could be tempted to run the entire important data storage server on the safe coprocessor. Pushing the entire data storage functionality into a safe co-processor is not possible due to many reasons. first of all due to the tamper-resistant shell safe co-processors have typically limited memory only a few megabytes of ram and rare kilobytes of non-volatile memory and computational power smith 1999 performance will recover over time but difficulties such as heat dissipation/power use which must be controlled to avoid disclosing processing will force a gap among general drives and safe computing. Another matter is that the software running on

the SCP must be totally reliable and verified. This safety requirement suggests that the software running on the SCP should be kept as simple as possible. We can encode the sensitive data sets using arbitrary private keys and to ease the risk of key disclosure we can use tamper-resistant hardware to stock some of the encryption/decryption keys i.e. the main key that encrypts all other keys

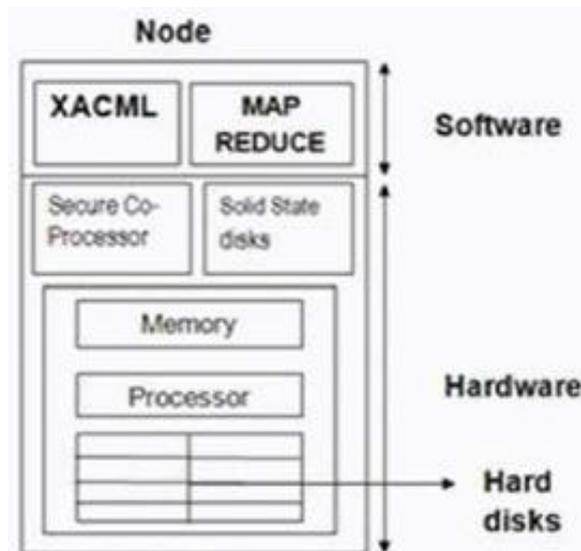


Figure 2: Parts of the proposed instrument

V. SAFETY AND PRIVACY ISSUES IN DATA STORAGE

Cloud computing permits the users to store their data on the storage site maintained by a third party. Once the data is uploaded into the cloud the user misplaces its control over the data and the data can be tampered by the attackers. The invader may be an internal CSP or external. Illegal access is also a common practice due to weak access control. The guard the information raises the following challenges:

The safety and privacy issues connected to data storage are privacy, integrity and availability. A. Confidentiality

The major argument in cloud computing is privacy. Data privacy means retrieving the data only by authorized users and is powerfully related to verification. In another way privacy means keeping users data secret in the cloud methods. As we are storing the data on a remote server and moving the control over the data to the provider here rises the questions such as: for confirming privacy cryptographic encryption algorithms and strong verification mechanisms can be used. Encryption is the process of changing the data into a form called cipher text that can be understood only by the official users. Encryption is an efficient method for protecting the data but has the difficulty that data will be lost once the encryption key is steeled algorithms. Blow fish is a heavy and simple encryption algorithm

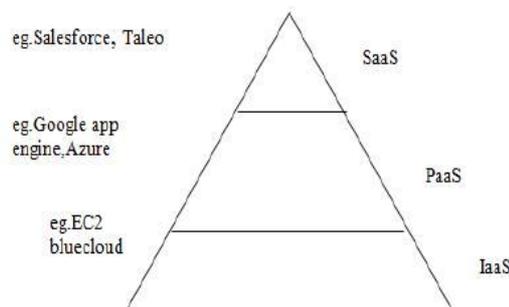


Figure 3: Symmetric encryption

The above encryption methods have the restriction that for searching the data from the file the entire file has to be decrypted. it is a time-consuming procedure and thus searchable encryption was presented. searchable encryption allows shape an index for the file comprising the keywords and is encoded and stored along with the file so that while examining the data only the keywords are decrypted rather than the whole file and search is made on it.

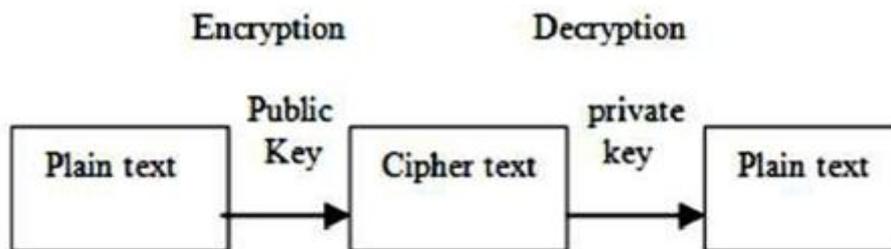


Figure 4: Asymmetric encryption

B. Integrity

Additional serious problem faced by cloud computing is reliability. Reliability of data means to make sure that the data has not been changed by an illegal person or in an illegal way. It is a technique for ensuring that the data is actually precise and safeguarded from illegal users. as cloud computing supports resource distribution there is a probability of data being corrupted by illegal users. Digital signatures can be used for preservative the reliability of data. The simple way for providing reliability is using message authentication code mac

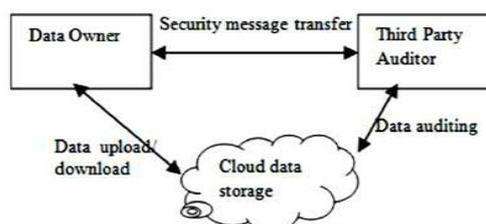


Figure 5: Remote auditing mechanism

C. Availability

Availability denotes to be available and accessible to official users on request. The goal of availability in cloud computing systems is to guarantee that its consumers can use them at any place and at any time

VI. CONCLUSION

Cloud computing allows users to store their data in a remote storage site. But data safety is the main threat in cloud computing. Due to this many administrations are not ready to move into a cloud environment. To overcome this privacy integrity obtainability should be summarized in a CSPs service- level agreement SLA to its customers. Otherwise, ensure that any sensitive information is not put into a public cloud and if any it is to be stored in encoded form. effective auditing devices also can be used for providing data reliability.

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GENDER PERSPECTIVE ON INNOVATIVE SMART PHONE UTILITIES AND ITS NEGATIVE IMPACT ON THE YOUTH OF TWO TIER CITY

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ABSTRACT

Many people are increasingly spending their time using smart phones as they do on computers. However, despite the convenience offered by smart phones, sometimes they might affect one's daily life in a negative sense. Among the most affected groups are the students, a generation which embraces technology with a lot of force. Students are highly influenced by technology and are thus vulnerable to the effects of smart phone overdose. Smart phones have various negative effects on youngsters, such as sleep deprivation and attention deficits. This emerging issue motivated the researcher to analyze the usage patterns related to smart phones. This study examines the negative impact of increasing use of smart phones by college going students.

INTRODUCTION

Mobile phone has affected almost every field of life but its effects on students' learning especially at university level are deep, multidimensional and multifarious. Youngsters have been completely mesmerized and hypnotized by this magical device.

OBJECTIVES OF THE STUDY

1. To explore the various smart phone utilities and applications influencing male and female youth to use smart phones.
2. To study the impact of use of smart phones on students.

REVIEW OF LITERATURE

Wilska (2003) was of the opinion that a lot of consumers' choice may be having both functional/primary/rational features (eg.communication, time management) as well as emotional features (eg.games, music, camera, applications etc).the young consumers prefer emotional features rather than rational ones in mobile phones. There is a great connection between age, gender, marital status and usage of smart phones among college students (Iringa Lusekelo, 2015).The study also revealed that every student, irrespective of whether he/she is pursuing undergraduate/post-graduate studies, owns or is about to own a smart phone due to mob psychology or educational requirements. Baylor University researchers say they were astonished to discover that college students are spending an average of 8-10 hours a day on their smart phones. Almost 60 percent of the respondents admitted to being possibly addicted to their phones and said that they get "frantic" if they lose sight of their device. The findings also showed that messaging is the top activity averaging 95 minutes a

day, followed by email and time on Facebook.(Health eNews, 2014)

Uichin Lee, Joonwon Lee (2014) demonstrated that smart phone overuse is closely related to the content consumption function of smart phones. The results also provided detailed evidence of addictive usage behaviors. College students are considered to be vulnerable to technology overuse because of their developmental dynamics and independence from social roles.

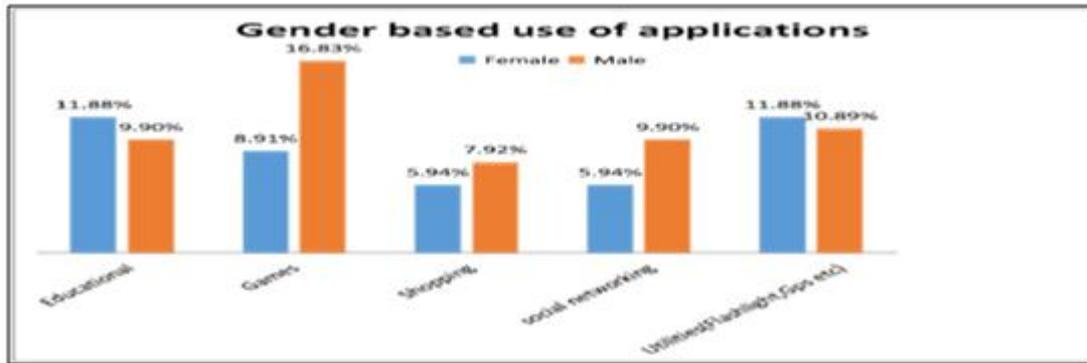
Vandana Goswami (2016) Over usage of the mobile phone leads to physiological health issues like headaches, fatigue, earache, warmth sensation and musculoskeletal symptoms. Use of mobile phones while driving is one of the leading causes of accidents, and some controversy still exists in the over usage of the mobile phone whether it produces tumor or not. Mobile-addicts can be seriously affected at the psychological level. They don't show any physical and psychological symptoms, their disorder goes unnoticed by others.

HYPOTHESES

1. There is a negative impact of over usage of phones.

FINDINGS AND OBSERVATIONS

Applications Used



om the above table, it can be seen that 16.83% male respondents use games whereas only 8.91% female respondents use game applications. Female respondents are found to be using more of educational applications (11.88%) whereas 9.90% male respondents use educational applications. Thus male respondents mostly use gaming applications on their mobile whereas females use educational applications.

Social networking sites are more popular among male respondents with 9.90% respondents using them whereas 5.94% female respondents use social networking sites.

Both male and female respondents show 10.89 % and 11.88 % use of utilities which

depicts that smart phones also prove to be a handy tool for students. Utility applications are the most popularly used applications. The above observation has resulted from use of smart phones for all purposes as a smart phone nowadays is almost considered to be a mini computer where students can access internet easily. This helps them to use smart phone for various purposes like shopping, finding information through various webpages, sharing notes through popular features of phone like Bluetooth, e mails etc. It is also easy to share class related information through popular social networking sites like facebook, whatsapp etc. Students are increasingly using samrtphone for communicating within their groups through social networking sites, making smart phone an essential tool for smooth flow of communication between friends and classmates.

Descriptive Statistics for use of smart phones

		To make phone calls	To check E-mail	For texting or instant messaging	To read class related notes PDF/Word	To view other web pages(not in class)	To take notes in class	To listen to music	To watch movies	To play games	To share notes
N	Valid	101	101	101	101	101	101	101	101	101	101
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		4.0792	3.9208	4.4653	4.1386	4.0198	4.0396	4.3861	3.9604	3.7723	4.2673
Median		4.0000	4.0000	5.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Mode		4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Std. Deviation		.75741	.85654	.59269	.81277	.59967	.92651	.63199	.95834	1.13032	.59818
Skewness		-.415	-1.112	-.893	-1.287	-.858	-1.157	-.771	-.963	-.979	-.745
Std. Error of skewness		.240	.240	.240	.240	.240	.240	.240	.240	.240	.240
Kurtosis		-.335	1.909	1.428	3.086	2.931	1.454	.802	.760	.283	2.535
Std. Error of Kurtosis		.476	.476	.476	.476	.476	.476	.476	.476	.476	.476
Minimum		2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00
Maximum		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Perc entil es	25	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	3.0000	4.0000

	50	4.0000	4.0000	5.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
	75	5.0000	4.0000	5.0000	5.0000	4.0000	5.0000	5.0000	5.0000	5.0000	5.0000

This is the descriptive statistics given by the researcher. The above Table 5.9 shows

the mean, median and mode values of the various questions put forth by the researcher. It shows that most of the respondents agree to using smart phones for various purposes. This is observed from the modal value which is 4.00 in most of the cases. The table shows a modal value of 5.00 for texting and instant messaging as most of the respondents strongly agree to using the same. This can be an outcome of availability of apps like Whatsapp, Hike etc which help the students to communicate faster with their peers. The table depicts negative skewness for all the variables of use of smart phones.

Hypothesis: There is a negative impact of over usage of phones

		I usually spend more time than I expect on smart phones	I feel uncomfortable without smart phones	I feel there is a social stress while using smart phones
N	Valid	101	101	101
	Missing	0	0	0
Mean		3.8020	3.7525	3.3069
Median		4.0000	4.0000	3.0000
Mode		4.00	4.00	3.00
Std. Deviation		.93829	1.08080	.91370
Skewness		-.407	-.798	-.171
Std. Error of Skewness		.240	.240	.240
Kurtosis		-.667	.036	-.340
Std. Error of Kurtosis		.476	.476	.476
Range		3.00	4.00	4.00
Minimum		2.00	1.00	1.00
Maximum		5.00	5.00	5.00
Percentiles	25	3.0000	3.0000	3.0000
	50	4.0000	4.0000	3.0000
	75	4.5000	5.0000	4.0000

CONCLUSION

It is clear that the popularity of smart phones is growing each day among students, and that smart phone capabilities are continuously improving. The students mostly use smart phones for entertainment, learning, communication and utility purposes. Most of the students were found to be medium users, hence they did not reveal any addiction to smart phones also implying the fact that limited use of smart phone use does not cause any physical discomfort. However, the students have become dependent on smart phones as they feel uncomfortable without smart phones and tend to use them for a longer time than expected. The negative effects of use of smart phones include less time spent on studies, overindulgence in smart phones leading to psychological and physical disorders, less time spent on sleeping; due to the distractions from smart phones. Overuse of smart phones is most likely to affect students' academic performance and health.

SUGGESTIONS

1. Restrictive use of cell phones by parents can be a leading example to their children. Quality time should be spent with Family, Friends and Neighbors in order to get personal touch and quality networking and should avoid use of cell phones especially while talking or being with others.
2. Parental control plays a very important role in curbing the use of smart phone. Usage of smart phones and

various applications should be monitored by parents to make sure that the students are not making misuse of smart phones.

3. Policies regarding cell phone use in the classroom, laboratories, and other settings where learning occurs to avoid overuse of smart phones.
4. Some forms of smart phone addiction are hard to overcome and may require help from mental health professionals. It is extremely difficult when stimulants surround a teen almost everywhere. Mental health professionals can help the youth without creating family tension.
5. Disallow smart phone use in college premises and impose appropriate penalty. Smart phones can be used for learning purpose outside the college premises if the college does not promote smart phone based learning in class. They may be allowed in canteen common room when no lectures are conducted.

College can take the initiative to conduct workshops or seminars regarding effective use of smart phones for academic purposes thus motivating students to use educational applications rather than just social networking sites and games. They could also be counseled regarding the social, psychological effects of overuse of smart phones

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MULTI RANKED KEYWORD SEARCH OVER ENCRYPTED CLOUD STORAGE

Shraddha S. KarandeSmt. P. N. Doshi Women's College

ABSTRACT

Cloud storage is used for storing large amount of data. Time from time the amount of people using the cloud storage is increases. The data that has been stored in cloud may contain some secret documents, files. Many searchable algorithms for cloud is existing. But less of them provide proper protection for the data that is stored. To increase confidentiality in the case of multiple data owners a ranked multi-keyword search scheme can be used. Considering the large number of data users and documents in the cloud, it is necessary to allow multiple keywords in the search request and return documents in the order of their relevance to these keywords. In this paper, we define and solve the challenging problem of privacy-preserving multi-keyword ranked search over encrypted data in cloud computing (MRSE) using a fuzzy logic.

Keywords: Cloud storage, multi-ranked search

INTRODUCTION

Nowadays the data can be sensitive and hence when it gets into the hands of wrong people, it can turn out to be harmful for both the owners and the receivers. Hence to overcome such a situation, encryption and decryption of data can be done for the safe exchange of any amount and type of data. There are two sets of parties which would use this technique; one being the data owners, which would own the data and the next are the data users which do not own the data but use this after getting the permission for the usage. The data owners and the data users need to be authenticated on the cloud servers beforehand to use any of the services provided. When the sensitive data is outsourced to the cloud, so as to enable the easier accessing of the data by the data owners and the data users, it is encrypted. The data encrypted has a list of keywords which are sent to an administration server. This in turn is then re-encrypted and uploaded by the administration server. When the data users would want to access these encrypted files, they will have to get themselves authenticated. Once the data users are authenticated and verified, they would search the files using keywords. The keywords are sent to the administration server which in turn would encrypt the given keyword. The encrypted keyword is then compared to the existing keywords and the files are given to the data users after the decryption. Hence this helps in creating a secure environment for the exchange of the information among the data owners and the data users.

OBJECTIVE

- To understand how data owners can securely upload their data on cloud storage and also how data users can search the data by using a multi ranked keyword
- To understand a fuzzy logic on cloud

LITERATURE SURVEY

Cong Wang et al discusses over the drawbacks of the traditional cloud file retrieval system. There are majorly two drawbacks of this system. The user when tries to retrieve a file from the cloud, the user has to download all the files that are related to the keyword or the query that the user has entered. This leads to a huge consumption of the bandwidth. As the user has downloaded a large number of files, user has to decrypt each file in order to understand whether the file is required or not. The file that is retrieved can be either useful to the user or can be an older file which has not much significance. Therefore, the authors put forward an idea about ranking of the files and documents that are saved over the cloud. This would help in retrieving the files which are recent or most downloaded. The paper also discusses the shortcomings of the Searchable Symmetric Encryption (SSE).

Jin Li et al discusses about the fuzzy keywords that might occur during a search. Fuzzy keywords are the words which are spelled wrong and are entered into the query box. They can be done using the simple spell checking. These kinds if words should be given suggestion and have to show results which might be possibly near the word. For example, if a query is made for Lonfon, the fuzzy keyword correction should show any data that might contain Lonfon or London as it is the nearest word which might be correct. It may also consider every possible keyword. This might include *Lonfon, L*onfon, etc.

RESEARCH METHODOLOGY**AES ALGORITHM FOR ENCRYPTION**

AES(advanced encryption standard).It is symmetric algorithm. It used to convert plain text into cipher text .The need for coming with this algorithm is weakness in DES. The 56 bit key of des is no longer safe against attacks

based on exhaustive key searches and 64-bit block also consider AES was to be used 128-bit block with 128-bit keys. Rijndael was founder. In this drop we are using it to encrypt the data owner le.

INPUT

128 bit /192 bit/256 bit input(0,1)

secret key(128 bit)+plain text(128 bit).

PROCESS

10/12/14-rounds for-128 bit /192 bit/256 bit input

Xor state block (i/p)

Final round: 10, 12, 14

Each round consists: sub byte, shift byte, mix columns, add round key.

FUZZY KEYWORD SEARCH

INPUTS

1. $C=(F_1, F_2, \dots, F_n)$

2. $W=\{W_1, W_2, \dots, W_n\}$

3. Edit distance d

4. A searching input (w, k) ($k \leq d$)

FOR NORMAL SEARCH SET UP

$\Pi=(Setup(\lambda), Enc(sk, \cdot), Dec(sk, \cdot))$

$T_{wi}=f(sk, w_i)$

FOR FUZZY KEYWORD

The wildcard-based fuzzy set of w_i with edit distance d is denoted as $S_{wi,d}=\{S_{wi,0}, S_{wi,1}, \dots, S_{wi,d}\}$.

$d=1 \quad (2L+1)*26+1$

$d=2 \quad C1L+1+C1L*C1L+2C2L+2$

For Searching Input:

$\Pi=(Setup(1^\lambda), Enc(sk, \cdot), Dec(sk, \cdot))$

$T_{wi}=f(sk, w_i) \quad T_{w'i}=f(sk, w'i)$ for each $w'i \in S_{wi,d}$

Step1 $FID_{w_i} = Enc(sk, FID_{w_i} || w_i) \{ (T_{w_i} \} w_i \in S_{wi,d}, Enc(sk, FID_{w_i} || w_i) \} w_i \in W$

Step 2 $\{T_{w'}\} w' \in S_{w,k}$

Step 3 $Enc(sk, FID_{w_i} || w_i)$

OUTPUT

Get Expected result which is search by the user.

COMPARATIVE RESULTS

In our result, in table 1, find out number of file upload and file download. In our experimental setup, in our system number file upload and download of files.

Sr No.	Number of files Upload	Number of files Download
1	50	30

Table 1. No of files upload and download

In table 2, User can search different file with different keywords so get information about how to user can search any files.

Sr No.	No of files keyword search	No of files keyword search2
1	20	40

CONCLUSION

A thorough analysis of different methods of storing data, the formation of the dictionary, maintenance of the dictionary, the ranking of the files that are to be retrieved, the number of files to be retrieved was done. The above mentioned methods have helped in a better understanding. A secure method of retrieving data from cloud would help the users to trust the cloud services, as it is not very widely used due to a misconception of lack security. As more and more data would be saved over the cloud, the data can be retrieved at any given point in time and place.

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A STUDY OF MOBILE BANKING AND IT'S FUTURE VIABILITY**Ravindra Pradeep Phadke**

Prof. Ramkrishna More College of Arts, Commerce & Science, Pune

INTRODUCTION

There is a radical transformation undergoing today in the world of banking sector and there are obvious symptoms appearing daily with the emerging new products with new channels of servicing to its customers in the banking industry. The Technology playing the major role in this transformation has created a new range of products and services which is breaking the geographical barrier. Daniel (1999) defined the term electronic banking as the provision for information, products and services by the bank towards its customers via electronically by the mode of wire or wireless channels, for example services like: interactive television, Internet, mobile phone, and telephone. Keen and Mackintosh (2001) in their study have showed that hi-tech features has played an important role in the adoption of mobile banking, which are expected to grow and hence the mobile phones are no longer used only for talking and text messaging (SMS) like before. The convergence of telecommunications becoming wireless, has made way for a potentially tremendous platform for providing various business services. Dholakia (2003); stated that the mobile phones are the most-fastest devices adopted by the consumer that uses the data also. According to the research conducted by Forrester research group (2007)³, more than 219 million users are having access to the Internet via mobile Phone. The mobile phone usage is estimated to be approaching four billion subscriptions globally, making the operators and advertisers an opportunity to connect to the potential consumers through mobile phones (Hibberd,2007).The rapid increase of innovations in telecommunications sector and the mobile phone usage with the newly emerging delivery channels for service has become a vital element for the financial services industry which is extremely competitive has led to usage of mobile phones in the financial sector including banking. Most leading observers have speculated the fact that, the personality of mobile phones offered by top range devices as an alternative to PC's due to their functioning like computers, and many people in the near future will be using only mobile phone instead of PCs The introduction of advanced technologies in delivery of various services have indeed created lot of challenges for the developers of financial industry; and to face these challenges the industry is more interested in understanding the patterns of customer behavior and enhance the same.. The rapid changes in the technology has in-turn altered the behavioral pattern of customer and the way of interaction with Volume1, Issue2, Dec 2016 **ISBR Management Journal** 55 the financial institutions. Today most of the customers in the banking sector are more technology savvy, and reduce the uneasiness towards the infusion and involvement of new technologies in the services of banking sector, is ubiquitous and hence shall continue to increase. The implementation of electronic business transactions by using the mobile phones is an additional boost to increasing adoption of new technologies, like WAP -wireless application protocol, Bluetooth, and other technological developments. The recent channels for wireless delivery by using the mobile phones which are Internet-enabled, is the starting point for adopting the mobile banking in the development of technology in the recent years. Yet the mobile banking operational service are still in their initial stage and has enormous scope for development, hence there is a need to understand the acceptance of its users and introduction of mobile banking, identify the factors affecting for mobile banking and its usages.

Keywords: Banking Services, Internet Technology, Net Technology, Mobile Technology, Phone Banking, SMS, WAP

OBJECTIVES

1. To understand the basic concept of Mobile Banking.
2. To Accolade of application.
3. To understand practicability of Mobile Banking.

HYPOTHESIS

1. **H0:** Account holder's don't find viable
2. **H1:** Account holder prefer to use Mobile Banking

LIMITATIONS

The present study will be limited to Mumbai Suburban only.

SAMPLING

30 account holders from Mumbai suburbs area will be considered as a sample in the present study. Random sampling method will be used for sampling to collect primary data.

RATIONALE OF THE STUDY

Sr. No.	R. Scholar	Factor	Year	ISSN No.
1	Nisha Sharma, Rupinderdeep Kaur	Convenience	April- June 2016	GIAN JYOTI E-JOURNAL, 2250-348X, Vol 06, Issue 02
2	V. Devadevan	Confidence	June 2013	IJETAE, 2250-2459 Vol 03, Issue 06, ISO- 9001:2008
3	Dr. Parul Deshwal	Potential	Dec. 2015	IJARIT &ENG., 2278-6244, Impact Factor: 5.41, Vol 04, Issue: 12, December 2015
4	Vijayshri Gurme	Higher Speed	2017	Centre for Mgt. Studies & Research, Pune, 2395-7786P/ 2395-7794OL, Issue 02, Vol 03
5	Purna Bamoriya, Pradnya Meshram	Security/Privacy	2011	Research Journal of Finance & Accounting, 2222-1697P/ 2222-2847OL. Issue: 02, Vol 02
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7	Dr. Vinod Gupta, Renu Bagoria, Neha Bagoria	Reduced Cost	January 2019	IJSRP, 2250-3153, Vol 03, Issue: 01
8	Archana Sharma	Lack of Awareness	October- 2011	IJMR, 2231-5780, Vol: 01, Issue: 06
9	Ms. Shilpa D. Dr. Veena K.D	Easy Navigate	January: 2019	ISOR: JBM, 2319-7668P/ 2278-487X OL, Vol: 20 Issue: 01

IMPORTANCE OF MOBILE BANKING

Mobile Banking nothing but a fusion occurring between the telecommunication industry and the banking industry, to avail the services of banking by the help of mobile devices. There are enormous advantages of Mobile banking is for those customers who avail these services form the banking sector. Mobile banking is mutual beneficial for both the banks and the customer. In this mode of operations, the banks do not require huge investment nor have to alter their existing infrastructure, send the message to a huge number of people in lesser effort, also helps to form good cordially relations with customers. Banks get the most valuable data regarding The requirements of the customers and the same is achieved with the help by customer's relationship management with effective practices which in-turn gets a quick feedback and also helps the banks in customer retentions and their loyalty. The banks are not able to reach out to its customers in isolated areas, but today it is possible through mobile phones. All the banks are having their customer database, so the SMS advertising is used to give information about the products and service to existing customers and at the same time the SMS services can also be used for communication and promotion of products and service to new customers. Coming to the advantages of the customers is that they can operate anywhere and anytime and avail the services. of banking provided by their banks with the help of mobile phones. Now there is no need for standing in the queues or talk to the employees for getting the services. Hence mobile banking is cost- effective for both the banks as well its customers.

NEED FOR MOBILE BANKING

The innovation of ATM (Automated teller Machine) and Internet Banking enabled customers to complete the financial transactions by sitting at home but the customers were having problems of carrying but mobile phones are free from these difficulties. Mobile phones can be carried everywhere and used by large number of people. .

In the age of globalization and digitalization mobile banking has shown a way to reach the top of the pyramid in the banking business through its variety of services. Mobile banking helps to bring the unbanked in the banking world.

RESEARCH METHODOLOGY

1. Descriptive Statistics

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Some measures that are commonly used to describe a data set are measures of central tendency and measures of variability or dispersion. Measures of central tendency include the mean, median and mode, while measures of variability include the standard deviation (or variance), the minimum and maximum values of the variables, kurtosis, skewness, and many more.

The following table provides the descriptive statistics based on the data collected.

Descriptive Statistics										
Variable	Mean	Median	Mode	Standard Deviation	Sample Variance	Range	Minimum	Maximum	Sum	Count
V01	4.70	5.00	5.00	0.60	0.36	4.00	1.00	5.00	141.00	30.00
V02	4.60	5.00	5.00	0.62	0.39	4.00	1.00	5.00	138.00	30.00
V03	4.53	5.00	5.00	0.82	0.67	4.00	1.00	5.00	136.00	30.00
V04	4.13	4.50	5.00	0.94	0.88	4.00	1.00	5.00	124.00	30.00
V05	3.53	3.00	3.00	1.04	1.09	4.00	1.00	5.00	106.00	30.00
V06	3.97	4.00	5.00	1.03	1.07	4.00	1.00	5.00	119.00	30.00
V07	4.17	4.00	5.00	0.91	0.83	4.00	1.00	5.00	125.00	30.00
V08	4.47	5.00	5.00	0.78	0.60	4.00	1.00	5.00	134.00	30.00
V09	4.40	5.00	5.00	0.89	0.80	4.00	1.00	5.00	132.00	30.00

Table 1, Descriptive Statistics

Source: Primary Data

2. Percentage Analysis

Overall Percentage Analysis												
Variable	5	4	3	2	1	total	"5"%	"4"%	"3"%	"2"%	"1"%	total%
V01	23	5	2	0	0	30	77%	17%	7%	0%	0%	100%
V02	20	8	2	0	0	30	67%	27%	7%	0%	0%	100%
V03	22	2	6	0	0	30	73%	7%	20%	0%	0%	100%
V04	15	4	11	0	0	30	50%	13%	37%	0%	0%	100%
V05	8	4	14	4	0	30	27%	13%	47%	13%	0%	100%
V06	13	5	10	2	0	30	43%	17%	33%	7%	0%	100%
V07	14	8	7	1	0	30	47%	27%	23%	3%	0%	100%
V08	19	6	5	0	0	30	63%	20%	17%	0%	0%	100%
V09	19	5	5	1	0	30	63%	17%	17%	3%	0%	100%

Table 2: Percentage Analysis

Source: Primary Data

The following table shows the percentage analysis of variable.

The percentage analysis/ descriptive analysis describes the distribution of respondents in each classification as it is expressed in percentage it facilitates comparison

3. GENDER WISE ANALYSIS

The Table below describes the distribution of respondents based on gender considered in the study. The gender is classified as Male and Female.

Gender of Respondents

Gender	Number of respondents	Percentage (%)
Male	22	73.3%
Female	7	23.3%
sPrefer Not To Say	1	3.4%
Total	30	100%

Table – 3, Source: Primary Data

Gender wise Percentage Analysis

Var code	Female(2)					Male(1)					Total
	5	4	3	2	1	5	4	3	2	1	
PG1	5	4	3	2	1	5	4	3	2	1	
V01	20.00%	10.00%	6.67%	0.00%	0.00%	56.67%	6.67%	0.00%	0.00%	0.00%	100.00%
V02	16.67%	16.67%	3.33%	0.00%	0.00%	50.00%	10.00%	3.33%	0.00%	0.00%	100.00%
V03	20.00%	3.33%	13.33%	0.00%	0.00%	53.33%	3.33%	6.67%	0.00%	0.00%	100.00%
V04	13.33%	3.33%	20.00%	0.00%	0.00%	36.67%	10.00%	16.67%	0.00%	0.00%	100.00%
V05	3.33%	6.67%	20.00%	6.67%	0.00%	23.33%	6.67%	26.67%	6.67%	0.00%	100.00%
V06	13.33%	3.33%	16.67%	3.33%	0.00%	30.00%	13.33%	16.67%	3.33%	0.00%	100.00%
V07	16.67%	6.67%	10.00%	3.33%	0.00%	30.00%	20.00%	13.33%	0.00%	0.00%	100.00%
V08	16.67%	6.67%	13.33%	0.00%	0.00%	46.67%	13.33%	3.33%	0.00%	0.00%	100.00%
V09	16.67%	6.67%	13.33%	0.00%	0.00%	46.67%	10.00%	3.33%	3.33%	0.00%	100.00%

Table- 4, Primary Source

4. AVERAGE SCORE ANALYSIS

The Average score analysis is mainly used in any study is to assess the level of opinion/awareness/satisfaction of the different category of respondents on the various aspects relating to the study. First the opinion of the respondents are assessed through a scaling technique and then based on the consolidated opinion of the respondents, the average score is calculated.

In this study the opinion of the respondents are assessed through a **five point scaling technique** similar to likert scaling and then based on the consolidated opinion of respondents the average score is calculated and the results are presented in different tables with suitable interpretations. The following table contains the analysis based on Average Scoring of responses.

Overall Average Score Analysis

Variable	Highly Agree score	Agree score	Neutral score	Disagree score	Highly disagree score	total score	Grant Mac score	Grant Min score	Average Score	Low score	Lower HL	Middle HL	High score
V01	110	16	12	0	0	138	150	30	2.76	1	2.5	3.75	5
V02	95	32	9	0	0	136	150	30	2.72	1	2.5	3.75	5
V03	110	8	18	0	0	136	150	30	2.72	1	2.5	3.75	5
V04	70	16	33	2	0	121	150	30	2.42	1	2.5	3.75	5
V05	40	16	42	8	0	106	150	30	2.12	1	2.5	3.75	5
V06	65	20	30	4	0	119	150	30	2.38	1	2.5	3.75	5
V07	75	32	18	2	0	127	150	30	2.54	1	26.5	3.75	5
V08	95	28	12	0	0	135	150	30	2.7	1	2.5	3.75	5
V09	95	20	15	2	0	132	150	30	2.64	1	2.5	3.75	5

Table – 5, Source: Primary Data

It is found from the above table that,

- ❖ In case of variable **V0(Convenience)**, Average Score is highest i.e. **2.76**
- ❖ In case of variable **V08 (Awareness)**, Average Score is lowest i.e. **2.7**

SUGGESTIONS

1. The awareness about phone/mobile banking has to be given before or once technology is launched and merits & demerits of this technology should be revealed to customers.

2. Proper security services should be provided because that is the main reason for not adopting this technology.
3. The customers' safety in-terms of availing the services should be strengthened as there is a possibility of hacking and cracking of personal details.
4. Time is precious therefore the banks must come up with a system that tries to solve the issue on such factors affecting the mobile banking services.
5. Customers must be given individual training regarding the usage of mobile banking services who want to avail such services as they may not be technically sound and also it takes some time for understanding the technology.
6. The banks must give a breakup of the charges levied on various services, but the banks have to reduce its annual charges for mobile banking.

CONCLUSION

Therefore, the study concludes with an analysis and suggestion on various factors affecting Mobile banking namely giving importance and taking immediate measures on security issues so that the customer shall not face the factor such as in-complete transaction and problem of network, awareness and training to customers regarding the technical aspects, and make them feel confident in adapting the mobile banking in their daily life. Since there are number of other studies that have suggested that this particular delivery channel is yet to grow towards its potential, the financial sector particularly the banks has to make the system much faster, mobility access and convenience to customers so that it reaches to all the citizens of the country.

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A STUDY ON USAGE OF CASHLESS MODE OF BANKING IN INDIA

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ABSTRACT

Cashless Banking transactions are those transactions which do not include cash i.e. payment is made through debit cards, credit cards, cheques, prepaid payment instruments. There are various systems to meet the remittance requirements of users depending upon their time criticality and cost sensitive like National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), Aadhar Enabled Payment System (AEPS) and recently Unified Payment Interface (UPI). If we want to make bulk and repetitive payments then it can be met by systems such as Electronic Clearing Service (ECS), National Automated Clearing House (NACH), and Aadhar Payment Bridge System (APBS). On the spot payments can be made through various E-wallets like Paytm, free charge and Googlepay which were recently introduced.

Before demonetisation, cashless transactions were used but not so popular. During demonetization, cashless transactions increased in November 2016 and in December 2016 it increased more than November 2016. During the month of December 2016, the cashless transactions were used highest. But after December, in January 2017 onwards it was noticed that there was reduction in the use of cashless transactions.

This study tries to understand the usage of cashless banking services and highlights the challenges faced by banking industry in making people use cashless mode of transactions. This study aims at finding solutions to the problems faced in achieving India's goal of being 100% cashless economy by 2020.

Keywords: cashless, banking, demonetization, challenges

INTRODUCTION

Indian economy primarily continues to be driven by the use of cash and less than 5% of the total payments in India happened electronically (before demonetization). This is largely due to lack of access to formal banking system for a large part of the population. Large and small transactions continue to be carried out via cash. Even those who can use electronic payments, use cash. Indians traditionally prefer to spend and save in cash and vast majority of the population, around 40%, do not have a bank account. The unorganized sector heavily relies on cash. A report by Google India and Boston Consulting Group showed that in 2015, around 75% of the transactions in India were cash based while in developed countries like USA, Japan, France, Germany, etc it was just around 20-25%.

As per 2015-16, India's cash to GDP ratio – an indicator of cash being used in the economy and its share in overall GDP- is around 10.86% which is higher than major economies including US, UK and Euro area but below that of Japan (20.66%). Hence there is a need to transit cash economy into cashless economy. Many efforts have been taken by government to make India a cashless economy by making efforts towards financial inclusion such as Jan Dhan accounts, Rupay cards, Kisan Credit Card, etc. But still the usage of cashless / branchless mode of banking is comparatively less. Therefore a study of use of cashless transactions in India and challenges faced by banking sector to make people switch over to cashless mode of payment becomes very significant.

OBJECTIVES OF STUDY

1. To understand what is cashless banking.
2. To understand various modes of cashless transactions.
3. To analyze usage of cashless banking after demonetization.
4. To find reasons for not using cashless modes of transactions
5. To offer suggestions to banks, government.

SCOPE OF THE STUDY

The research was undertaken to gather information from the respondent to know exactly how many people are aware and using cashless banking services and their response towards this cashless policy. Research was conducted and 52 responses were collected. Study was limited to Ghatkopar and Mulund and from age group of 18 to 60 years.

LIMITATIONS OF THE STUDY

1. The study was conducted in Ghatkopar and Mulund areas in Mumbai. Hence the sample area was small and it does not represent the entire area of Mumbai.
2. The study was conducted in a period of 3 months due to shortage of time.
3. The study is restricted to only 52 respondents between the age group of 18 years to 60 years.
4. The information provided by the respondents may not be fully accurate due to unavoidable biases.

RESEARCH METHODOLOGY

This research is mainly based on the action research. The data was collected through primary and secondary sources.

Primary data

Primary data were collected with the help of standard questionnaire using google forms. 52 respondents had filled the google forms.

Secondary data

The secondary data was collected with help of online sources and journals and newspapers and RBI annual and monthly bulletins.

CASHLESS BANKING

Cashless banking is one in which all transactions take place by using cards or digital means. An economy where vast majority of transactions are cashless is known as cashless economy.

To make India a cashless economy and curb black money, the government introduced a scheme called “Pradhan Mantri Jan Dhan Yojana” (PMJDY) on 28th August, 2014 for financial inclusion of all people in the banking sector. Then, the union government led by Prime Minister Narendra Modi took a very bold step of demonetization of old currency of Rs 500 and Rs 1000 on 8th November, 2016 which was 86% of the total currency in circulation.

A Digital India programme was launched by Government of India with a vision to transform India into a digitally empowered society and knowledge economy. “Faceless, paperless, cashless” is one of the professed role of Digital India.

MODES OF CASHLESS TRANSACTION

To promote cashless transactions and convert India into less-cash society, various modes of digital payments are available. These modes are as follows:

- Credit Cards and debit cards issued by various banks
- USSD(Unstructured Supplementary Service Data)
- “*99#” works on USSD channel. This service involves mobile banking transactions using basic feature mobile phone. There is no need to have mobile internet data facility but mobile number should be linked with your bank account.
- AEPS(Aadhar Enabled Payment System)
- It is a bank led model which allows online interoperable financial transactions at PoS(Point of Sale/Micro ATM) through the Business Correspondent(BC)/ Bank Mitra of any bank using Aadhar authentication.
- UPI(Unified Payments Interface)
- It is a system that powers multiple bank accounts into a single mobile application. BHIM(Bharat Interface for Money) app is simplest and well known UPI app.
- Mobile wallets
- It is a way to carry cash in digital format. Examples of mobile wallets are PayTM, Freecharge, Oxigen, ICICI pockets, etc.
- Micro ATMs
- It is a mini version of ATM. They are like modified PoS terminals connected to banking network via GPRS to perform banking transactions such as cash deposit, cash withdrawal, fund transfer and balance enquiry.
- Internet and mobile banking

Internet banking enables a customer of the bank to conduct various banking transactions through the bank’s website. Mobile banking allows customers to do banking transactions via a mobile phone by downloading the bank’s mobile banking app.

1. RuPay debit cards- an Indian version of debit cards
2. Kisan Credit Cards to offer credit to farmers.
3. General Credit Cards caters all non-farm entrepreneurial credit to individuals

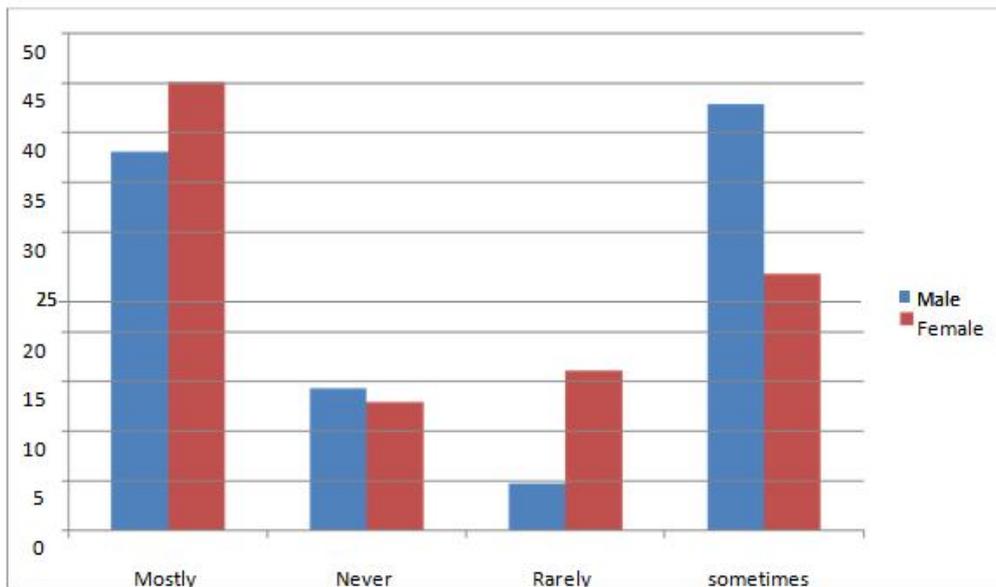
REVIEW OF LITERATURE

- Ashish Das, and Rakhi Agarwal, 2010 study the cashless payment system in India. They suggested that the cash payment is an expensive proposition to the government and so the nation first step towards cashless payment system which reduces the track transaction, currency management course, eliminate tax avoidance, fraud at etc. Moreover, it widens and encourages financial inclusion and regret the parallel economy to the main stream.
- .Annamalai, s and Muthu R. Iiakkuvan (2008) studied the future of plastic money in retail transaction. The growth of the Debit Card and Credit Card in retail transactions were projected by them in their study. The popularity leading growth factors, the obstacles faced by the banks, future and scope of the plastic money were explained in their study.
- Dr Garima Malik et al, 2013 in her paper entitled “A exploratory study on adoption and use of SMS/Mobile banking in India with special reference to public sector banks” investigated the perceptions of banks and the customers regarding use of digital technology. The study indicated that though sms/mobile banking has increased but still banks have the potential to increase its usage for customers. However, lack of regulation in India on mobile banking has led to a setback on its use and RBI needs to address this problem.

DATA ANALYSIS AND INTERPRETATION

The data was collected from 52 respondents- 31 female and 21 male in areas Ghatkopar and Mulund.

1. Details of how often cashless services provided by bank are used



As per the research study, 38% males and 14% females were mostly using cashless transactions. 14% males and 13% females never used cashless transactions. 5% males and 16% females rarely used cashless services and 43% males and 26% females sometimes used cashless transactions provided by bank.

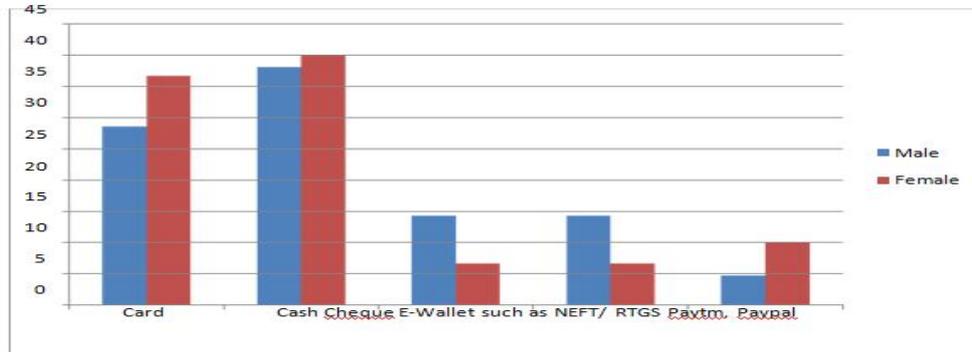
2. Details of Modes of cashless transactions that are used

As per the research study, 38% males and 45% of females use debit and credit cards. 5% males and 10% females use internet banking. 5% males use internet banking and any other modes of cashless transactions. 24% males and 13% females use both internet banking and debit/ credit cards. 5% males use mobile banking and any other modes of cashless transactions. 10% males use mobile banking and debit/ credit cards. 5% males and 19% females use mobile banking, debit/ credit cards and internet banking services. 10% males and 13% females use none of the above cashless services.

3. Frequency to use online banking/internet banking

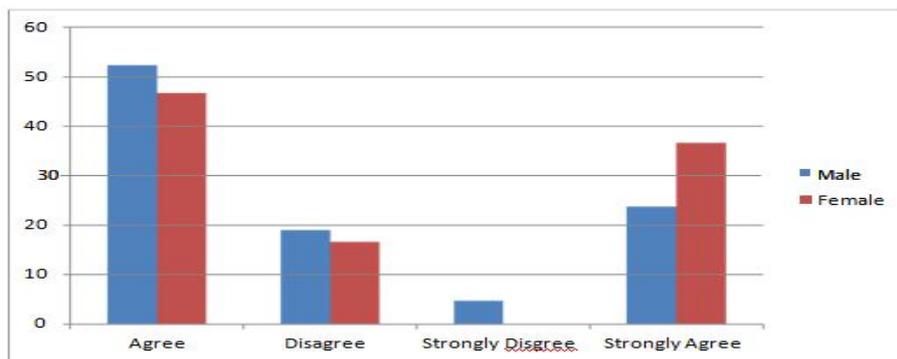
As per the study, 37% males and 27% females used online banking/internet banking 1-2 times in a week. 11% males and 7% females used it for 3-6 times a week, 5% males and 13% females used it every day and 47% males and 53% females used it for once in every few months.

4. What is your most preferred option for payme



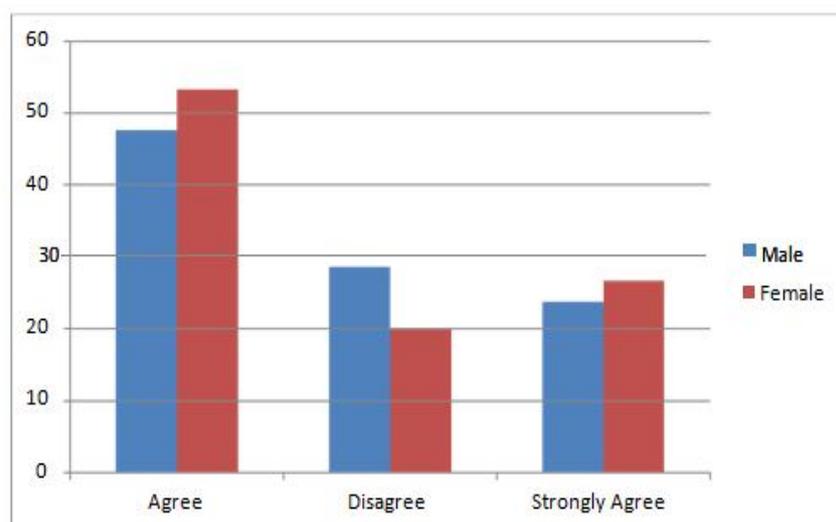
As per the research study conducted 29% males and 37% females used cards as their most preferred option. 38% males and 40% females used cash as their most preferred option. 14% males and 7% females used E-Wallet options such as Pay tm and Pay pal. 5% males and 10% females used NEFT/ RTGS as their most preferred option for payment.

5. Do you think cashless transactions are more convenient than cash transactions for daily transactions?



52% males and 47% females think that cashless transactions are more convenient than cash transactions for daily expenses. 19% males and 17% females disagree to the point. 5% males strongly disagree with the point. 24% males and 37% females strongly agree with the point.

6. Do you think that using your mobile or making cashless payments will increase the chances of suffering from fraud or theft?



Agree Disagree Strongly Agree 48% males and 53% females agree that using your mobile or making cashless payments will increase the chances of suffering from fraud /theft. 29% males and 20% females disagree with the point. 24% males and 27% females strongly agree with the point.

FINDINGS OF STUDY

From the analysis above, the paper discovered that the adoption of the cashless economy policy can enhance the growth of the financial stability in the country. It appears that much has already been done in making the people aware of the cashless economy and that a sizeable proportion of the people are actually using cashless mode of transactions but still many people still do cash payments. In cashless modes, debit and credit cards are the most preferred options. But people are still worried about frauds or thefts happening in using cashless mode of payments. They believe the government efforts to curb such frauds are still not sufficient.

SUGGESTIONS

- More awareness regarding cashless modes of banking
- Improve Net Connectivity in India
- Reduce amount of service charges on debit cards, credit cards, etc
- Make it compulsory for merchants to use cashless modes of accepting payments
- There should be tax rebates for consumers and for merchant's who adopt electronic payments.
- Electronic payment Infrastructure should be made completely safe & secure so that incidents of cyber crimes could be minimized and people develop faith in electronic payments system.
- Rural people should be taught about the cashless transactions and how to operate it and faith in cashless transactions.

CONCLUSION

The whole country is undergoing the process of modernization in money transactions, with e-payment services gaining unprecedented momentum. A large number of businesses, even street vendors, are now accepting electronic payments, prompting the people to learn to transact the cashless way at a faster pace than ever before. The cashless transaction system is reaching its growth day by day, as soon as the market become globalised and the growth of banking sector more and more the people moves from cash to cashless system. The cashless system is not only requirement but also a need of today society. All the online market basically depends on cashless transactions system. The cashless transactions not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money. It also helps in record of all the transaction done.

So it is without doubt said that future transaction system is cashless transaction system.

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**A COMPARATIVE STUDY ON GROWTH AND PERCEPTIONS OF DEBIT CARD USERS' OF
SELECTED PRIVATE SECTOR BANKS IN MUMBAI REGION**

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ABSTRACT

Technological advancement in banking sector has given rise in use of Electronic Banking products and services. Among all, the use of plastic money - debit card use has compounded at highest. Debit card, linked with bank account, performs two function; cash withdrawal and as cheque at Point of Sale. The aim of the present study is to analyze incremental growth and compare perceptions of selected private sector banks; Axis Bank, Industrial Credit and Investment Corporation of India (ICICI) and Housing Development Financial Corporation Limited in Mumbai region. A sample size of 50 debit card users from each of the bank (total sample of 150) has been surveyed. The sample banks by Stratified Random Sampling and debit card users by Convenience Random Sampling were selected. Both primary data through well-structured questionnaire and secondary data from various published sources were centered and cited. The results indicate that there is an incremental growth in number of debit card and its use at PoS and ATM by Axis bank, ICICI bank and HDFC bank debit card users. They found to be satisfied with their perceptions towards debit card use issued by bank. However, it was found that there is no association between demographic profile and debit card use. The study will help banks to understand area of their debit card services weaknesses, improve the same and make it easy to use, widely accessible and increase market share.

Keywords: Plastic Money, Debit Card, RTGS, Payment Gateway, NEFT

1. INTRODUCTION

New Economic policy in 1991, Banking Sector Reforms in 1991 and 1998, has changed banking and financial market scenario drastically. Further, technological advancement, changes in Banking Policy and Companies Act in 2013, and to curb over black money and money laundering, demonetization announcement made by Indian Government in November, 2016 have given rise to use of e-banking product and services. An E-banking service includes Digital Banking, Plastic Money, RTGS, M-banking, NEFT etc.

2. MEANING AND WORKING OF DEBIT CARD

Debit card is one of the e-banking product providing bank account-money related services in plastic form, issued by bank to those having account with bank to access and carry out account transactions. It is a check card, uses varies, subject to account balance with bank and services offered by bank.

Generally, the bank provides debit card with Personal Identification Number, which is to be used at Automated Teller Machine. The cardholder insert debit card in ATM and press PIN to access and account and avail account related services. Such debit card can also be used at Point of Sale Terminal to make payment for purchases.

3. REVIEW OF LITERATURE

Assurance of payments to retailers, use interest free period to avoid high interest cost, reduce annual charges, easy electronic fund transfer, point of services offer, huge acceptance of debit cards, cutting down the cost associated with the paper based clearing and payment services were found to be major factors considered for more of debit card than credit [01]. The different bank provides various debit card services to their consumers not only to attract them but also to increase its use such as tele-ticketing, offers, insurance coverage and reward points etc. Debit cards penetrate very rapidly in the consumers' market [02]. Various services of ATM have given rise to use and popularity of debit card. The service of withdrawal of cash as per convenience of the customers than during the banking found to be most preferred one. Besides providing off time and off shore services, there is a reduction in cost of servicing [03]. The rising interest of customers towards debit cards is because of combination of factors like ease in availability and use of debit cards, profile of customer inclined towards debit averse and zero or reasonable fees on its use have motivated bank customers towards more debit card use [04]. There are many benefits of ATM, hence it is important. There is an incremental growth of debit card use, number of ATM and number of banks [05]. It is the right time to study the concept and make comparison between credit and debit card, its growth in value and volume from 1995 to 2005 and concluding that the debit card growth is out placing the growth of credit card [06]. At the initial stage the debit cards were used by the higher income group settled in cities, but gradually debit card is accepted by salaried and fixed income group and also by bank consumers in rural areas [07]. The debit cards are one of the many banking technologies that have emerged in modern society to facilitate retail payments [08].

4. STATEMENT OF THE PROBLEM

Technological advancement and electronic banking has created competitive environment in terms of advanced banking products and services (like NEFT, core banking, debit card, credit card RTGS) among banks of different and within the sector. Changes in banking policy and demonetization policy in 2016 has given rise to the more use of plastic money. A Check Card popularly called as Debit Card, money in plastic form, linked with accountholders, allows the users' to access and carry out online and offline transactions. Among the banking sector Indian private sector banks were foremost to adopt and introduce e-banking. Almost all banks offers debit cards with same benefits and services, which may differs timely and geographically. Hence, the need arises to study and compare perceptions of private sector banks (within sector) Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD. Hence, the researcher has explored the growth and perceptions of debit card users of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD, toward its use and services. Thus, the researcher has undertaken the study titled, "A Comparative Study on Growth and Perceptions of Debit Card Users' of Selected Private Sector Bank in Mumbai Region".

5. OBJECTIVES OF THE STUDY

1. To study the meaning and working of debit card.
2. To study the growth (i.e. number of debt card) and use (in terms of number and amount at PoS and at ATM) of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD.
3. To study about the demographic profile of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
4. To study and compare the satisfaction level of debit card users of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD.

6. HYPOTHESES OF THE STUDY

- There is no significant difference in growth of number of debit cards of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD.
- There is no association between number of debit card and number of point of sale transactions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
- There is no association between number of debit card and amount of point of sale transactions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
- There is no association between number of debit card and number of ATM transactions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
- There is no association between number of debit card and amount of ATM transactions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
- H_0 : There is no significant difference in satisfaction level of debit card users of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD.
- H_1 : There is a significant difference in satisfaction level of debit card users of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD.
- H_0 : There is no association between demographic profile and perceptions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.
- H_1 : There is an association between demographic profile and perceptions of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD debit card users.

7. RESEARCH METHODOLOGY

7.1. Type of the Study: Descriptive Research, both in Qualitative and Quantitative in nature.

7.2 Universe or Population: Private Sector Banks and Debit Card users.

Bank

Three banks from private sector has been selected considering their month and year of establishment, number of debit card as on January, 2018, number of ATM and number of branches.

Table No. 1: Details of Sample Bank as on 1st January, 2018 in India

Details	Axis Bank Ltd.	ICICI Bank Ltd.	HDFC Bank Ltd.
Year of Establishment	April, 1994	June, 1994	August, 1994
Number of Debit Card	22,34,0847	24,31,8975	41,49,9827
Number of ATM	12,705	14,367	13,160
Number of Branches	3,964	4,867	4,963

It was found that the Axis bank, ICICI bank and HDFC bank Ltd. lead in above criteria. Hence, the same has constitutes the sample bank for the present study.

Debit Card Users: 50 number of actual debit card users of Axis Bank LTD, ICICI Bank LTD and HDFC Bank LTD that is 150 numbers in total.

7.4 Sampling Frame: Well-Structured Questionnaire for debit card users

7.5 Sampling Method Bank: Stratified Random Sampling

Debit Card Users: Convenience Random Sampling

7.6 Collection Data: Both Primary and Secondary data has been collected

7.6.1 Primary Data

For the present research study, the researcher has collected required primary data from debit card users of Axis bank, ICICI bank and HDFC bank Ltd. in Mumbai Region. Based on the research objectives and hypotheses, a Well-Structured Questionnaire, which includes 07 variables related to debit card services, using Likert's Scale. It is difficult to determine and calculate the exact difference between highly satisfied and satisfied and highly dissatisfied and dissatisfied. Hence, the researcher has used 3 - point Likert's Scale, in which 3 = Satisfied, 2 = Neutral and 1= Dissatisfied.

7.6.2 Secondary Data

The required secondary data for debit card use trend has been collected from Reserve Bank of India (<https://rbi.org.in/scripts/ATMView.aspx>). The researcher has collected 60 monthly data (from January, 2014 to December, 2018) related to number of debit card, number and amount of point of Sale transactions and number and amount of Automated Teller Machine (ATM) transactions of Axis bank, ICICI bank and HDFC bank Ltd have been centered and cited. The other secondary data collected from the Published Materials such as Books, Journals, Articles, and Magazines etc.

7.7 Method of Data Collection

Survey and Questionnaire

7.8 Period of Data Collection

Primary Data- 28nd January, 2019 to 10th February, 2019

Secondary Data - 60 monthly (January, 2014 to December, 2018) data related to Number of Debit Card, Number and Amount of Point of Sale Transactions and Number and Amount of Automated Teller Machine (ATM) Transactions.

7.9 Geographical Area

Mumbai Region

7.10 Data Cleaning

Data cleaning includes finding and filling up missing responses, identifying outliers and smooth out noisy data. For the present research paper, the researcher has done data cleaning as follow;

7.10.1 Missing Value

Collected data were screened to find Missing Values and No Missing Values were found.

7.10.2 Test of Normality

The researcher has used K-S and S-W test to test Normality of data for the present study.

Table No. 2: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	D = Statistic	df	Sig.	W = Statistic	df	Sig.
VAR00001	.386	150	.000	.683	150	.000
VAR00002	.404	150	.000	.657	150	.000
VAR00003	.488	150	.000	.480	150	.000
VAR00004	.430	150	.000	.615	150	.000
VAR00005	.356	150	.000	.717	150	.000
VAR00006	.404	150	.000	.658	150	.000
VAR00007	.422	150	.000	.625	150	.000
a. Lilliefors Significance Correction						
From the table above, the calculated Test Statistics (W for S-W, D for K-S) is greater than its table value and p-value is less than 0.05. The results in the table above for three Sample Banks show that the Data Set of the present research study significantly deviates from a Normal Distribution.						

7.10.3 Reliability Analysis

Cronbach’s alpha was found to be 0.681, suggesting acceptable internal consistency among variables.

Table No. 3: Reliability Statistics

Cronbach's Alpha	Number of Items
.681	07

7.10.4 Analytical Tools

The researcher has used SPSS 21 to study the Objectives and Testing of Hypotheses of the present study. The researcher has used K-S and S-W (to test Data Normality), Cronbachs’ Alpha (to test Data Reliability), Frequency and Percent Count, Test of Homogeneity of Variances, ANOVA, Multiple Comparison - Post HOC Test Tukey (HSD), Pearson’s Correlations, Durbin-Watson (for Autocorrelations), Coefficient (for Regression Equation) and Expert Molder.

8. ANALYSES AND INTERPRETATION

To understand the behavior of debit card users of Axis bank, ICICI bank and HDFC bank Ltd., the respondents were asked questions related to gender, age, educational qualification, occupation and type of account. Further, to measure their satisfaction level, questions based Likert three point scale were asked. The collected data were analyzed using Descriptive Statistics and Inferential Analysis.

9. DATA ANALYSIS

(A) DESCRIPTIVE ANALYSIS

Descriptive analysis gives information that describes the collected data in some manner. The researcher has described data as follow;

9.1 Demographic Profile

Table No. 4: Descriptive Statistics of Demographic Profile

Particular	Bank	Axis Bank		ICICI Bank		HDFC Bank	
	Frequency and Percent	F	Percent	F	Percent	F	Per cent
Gender	Male	28	56	26	52	35	70
	Female	22	44	24	48	15	30
	Total	50	100	50	100	50	100
Age	Up to 20 year	10	20	09	18	09	16
	20 to 40 year	17	34	25	50	20	40

	40 to 60 year	21	42	14	42	18	36
	60 year and above	02	04	02	02	03	06
	Total	50	100	50	100	50	100
Occupation	Government Employee	02	04	10	20	05	10
	Service\Private employee	20	40	21	42	19	38
	Businessmen	24	48	17	34	22	44
	Profession\Technical	04	08	02	04	04	08
	Total	50	100	50	100	50	100
Qualification	Up to HSC	05	10	10	20	05	10
	Graduation	21	42	16	32	15	30
	Post-Graduation	20	40	22	44	27	54
	Professional	04	08	02	04	04	08
	Total	50	100	50	100	50	100
Type of Account	Saving	27	54	28	56	22	44
	Current	19	38	22	44	25	50
	Other	04	08	00	00	03	06
	Total	50	100	50	100	50	100

Source: Compiled from Primary Data

9.2 DESCRIPTIVE ANALYSIS ON PERCEPTIONS OF DEBIT CARD

There are various services of debit card issued by Axis Bank, ICICI Bank and HDFC Bank Ltd.. The researcher has taken into consideration following services of debit card. The respondents were asked to give rating as 3 to Satisfied (S), 2 to Neutral (N) and 1 to Dissatisfied (D) on a three Point Likert Scale. The details are as follow;

Table No. 5: Descriptive Statistics of Perceptions on Debit Card Use

Type of Bank	S (%)	N (%)	D (%)	Total
Bank ATMs are more in number				
Axis Bank	29 (58.00)	18 (36.00)	03 (06.00)	50 (100%)
ICICI Bank	40 (80.00)	07 (14.00)	03 (06.00)	50 (100%)
HDFC Bank	25 (50.00)	14 (28.00)	11 (22.00)	50 (100%)
Bank ATM seldom found without cash				
Axis Bank	33 (66.00)	10 (20.00)	07 (14.00)	50 (100%)
ICICI Bank	36 (72.00)	13 (26.00)	01 (02.00)	50 (100%)
HDFC Bank	30 (60.00)	11 (22.00)	09 (18.00)	50 (100%)
Bank ATM is fully secured guard and CCTV camera				
Axis Bank	39 (58.00)	05 (10.00)	06 (12.00)	50 (100%)
ICICI Bank	48 (96.00)	02 (04.00)	00 (00.00)	50 (100%)
HDFC Bank	36 (72.00)	09 (18.00)	05 (10.00)	50 (100%)
Bank Allows maximum amount and number of ATM transactions				
Axis Bank	34 (68.00)	11 (22.00)	05 (10.00)	50 (100%)
ICICI Bank	40 (80.00)	08 (16.00)	02 (04.00)	50 (100%)
HDFC Bank	32 (64.00)	09 (18.00)	09 (18.00)	50 (100%)
Bank Charges comparatively less fees on debit card use				
Axis Bank	32 (64.00)	12 (24.00)	06 (12.00)	50 (100%)
ICICI Bank	32 (64.00)	12 (24.00)	06 (12.00)	50 (100%)
HDFC Bank	22 (44.00)	15 (30.00)	13 (26.00)	50 (100%)

Bank debit card highly secured for all type of Transactions				
Axis Bank	34 (68.00)	13 (26.00)	03 (06.00)	50 (100%)
ICICI Bank	40 (80.00)	07 (14.00)	03 (06.00)	50 (100%)
HDFC Bank	25 (50.00)	16 (32.00)	09 (18.00)	50 (100%)
Bank Debit Card can be easily connected online payment platform such as Google Pay, Paytm, Phone Pe Etc.				
Axis Bank	36 (72.00)	05 (10.00)	09 (18.00)	50 (100%)
ICICI Bank	38 (78.00)	08 (16.00)	04 (08.00)	50 (100%)
HDFC Bank	29 (58.00)	08 (16.00)	13 (26.00)	50 (100%)

Source: Compiled from Primary Data

5. INFERENCE ANALYSIS

To describe and make inferences, the researcher has used Inferential Statistics, on the basis of data collected from the samples drawn from the population. The objectives and hypotheses of the present study have been studied and analyzed as under.

1. There is no significant difference in growth of number of debit cards of Axis bank, ICICI bank and HDFC bank Ltd.

To test above hypothesis, the researcher has collected secondary data related to number of debit cards issued by Axis bank, ICICI bank and HDFC bank Ltd. from January, 2014 to December, 2018.

Table No. 6: Test of Homogeneity of Variances of Number of Debit Cards of Axis bank, ICICI bank and HDFC bank Ltd.

Levene Statistic	df1	df2	Sig.
26.718	2	177	.000

The Calculated Levene Statistic (at df1 2 and df2 177) is 26.718, p-value is 0.000. Therefore, the null hypothesis of equal variances is Rrejected. Thus, the variances are not equal.

Table No. 7: ANOVA Test for Number of Debit Cards of Axis bank, ICICI bank and HDFC bank Ltd.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7326433537513194.000	2	3663216768756597.000	143.824	.000
Within Groups	4508217779653059.000	177	25470156947192.420		
Total	11834651317166250.000	179			

The Calculated Fisher Value Fcrit (2, 177) = 143.824 is greater than its Critical Value 3.8415 (at df1 2 and df2 177) and its Significance Value is 0.000 (i.e. p = 0.000), which is less than 0.05, and therefore there is a Statistically Significant Difference in Mean Length of Number of Debit Card users of SBI, ICICI and Citibank.

Table No.8: Multiple Comparisons - Dependent Variable: Number of Debit Cards of Axis bank, ICICI bank and HDFC bank Ltd. Debit Card Users, Post Hoc Tests Tukey HSD

(I) TOB	(J) TOB	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
AXIS BANK	ICICI BANK	-4836471.183333334*	921414.798868067	.000	-7014325.36905809	-2658616.99760857
AXIS BANK	HDFC BANK	15287472.100000001*	921414.798868067	.000	17465326.28572476	13109617.91427524
ICICI BANK	AXIS BANK	4836471.183333334*	921414.798868067	.000	2658616.99760857	7014325.36905809

BANK	HDFC BANK	- 10451000.916666668*	921414.798868067,000	- 12628855.10239143	-8273146.73094191
HDFC BANK	AXIS BANK	15287472.100000001*	921414.798868067,000	13109617.91427524	17465326.28572476
	ICICI BANK	10451000.916666668*	921414.798868067,000	8273146.73094191	12628855.10239143

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

From the above table of Multiple Comparison, it is concluded that there is a Statistical Significant Mean difference between AXIS-ICICI, AXIS-HDFC, ICICI-AXIS, ICICI-HDFC, HDFC-AXIS and HDFC-ICICI, in growth of i.e. number of debit card of Axis bank, ICICI bank and HDFC bank.

Table No.9: Number of Debit Cards of Axis bank, ICICI bank and HDFC bank Ltd. - Homogeneous Subsets Tukey HSD^a

TOB	N	Subset for alpha = 0.05		
		1	2	3
AXIS BANK	60	18218348.08333333		
ICICI BANK	60		23054819.26666667	
HDFC BANK	60			33505820.18333333
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 60.000.

The above table, Homogeneous Subsets Tukey HSD, shows the Significant difference in number of debit card of Axis bank, ICICI bank and HDFC bank.

Therefore, the Alternate Hypothesis, “There is a significant difference in growth of number of debit cards of Axis bank, ICICI bank and HDFC bank Ltd.”, is accepted. (It is Accepted)

- There is no association between number of debit card and number of point of sale transactions of Axis bank, ICICI bank and HDFC bank Ltd. debit card users.

To test above hypothesis, the researcher has collected secondary data related to number of debit card issued and point of sale transactions from January, 2014 to December, 2018 of Axis bank, ICICI bank and HDFC bank Ltd..

Table No.10: Descriptive Statistics: Number of Debit Cards and Number of Point of Sale Transactions

	Mean	Std. Deviation	N
NOOFPOS	30080998.61666667	4948400.362475708	180
NOOFDC	24926329.17777778	8131135.866959935	180

Table No.11: Correlations: Number of Debit Cards and Number of Point of Sale Transactions

		NOOFPOS	NOOFDC
Pearson Correlation	NOOFPOS	1.000	.415
	NOOFDC	.415	1.000
Sig. (1-tailed)	NOOFPOS	.	.000
	NOOFDC	.000	.
N	NOOFPOS	180	180
	NOOFDC	180	180

In the table above, a Pearson’s Data Analysis shows a Positive Correlation, $r = 0.415$, which clearly states that the increase in number of debit card results into increase in number of Point of Sale transactions of Axis bank, ICICI bank and HDFC bank debit card users.

Table No.12: One-Way ANOVA: Number of Debit Cards and Number of Point of Sale Transactions

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	753351753043398.800	1	753351753043398.800	36.944	.000 ^b
	Residual	3629761487332201.000	178	20391918468158.434		
	Total	4383113240375599.000	179			
a. Dependent Variable: NOOFPOS						
b. Predictors: (Constant), NOOFDC						
The Calculated Fisher Value Fcrit (1, 178) = 36.944 is greater than its Critical Value 3.8415 (at df1 1 and df2 178) and its Significance Value is 0.000 (i.e. p = 0.000), which is less than 0.05, and therefore there is an association between number of debit card and number of point of sale transactions of Axis bank, ICICI bank and HDFC bank debit card users.						

Table No.13: Coefficient: Number of Debit Cards and Number of Point of Sale Transactions

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23792029.034	1088057.349		21.867	.000
	NOOFDC	.252	.042	.415	6.078	.000
a. Dependent Variable: NOOFPOS						
From the table above, following regression equation can be formed; Y = assumed to be number of point of sale transactions of Axis bank, ICICI bank and HDFC bank debit card users X = assumed to be number of debit card Y = a + b (X) Y = 23792029.034 + 0.252 (X)(1)						

Therefore, the Alternate Hypothesis, “There is an association between number of debit card and number of point of sale transactions of Axis bank, ICICI bank and HDFC bank Ltd. debit card users”, is accepted. (It is Accepted)

- There is no association between number of debit card and amount of point of sale transactions of Axis bank, ICICI bank and HDFC bank Ltd. debit card users.

To test above hypothesis, the researcher has collected secondary data related to number of debit card issued and amount spent at point of sale from January, 2014 to December, 2018 of Axis bank, ICICI bank and HDFC bank Ltd..

Table No.14: Descriptive Statistics: Number of Debit Cards and Amount of Point of Sale Transactions

	Mean	Std. Deviation	N
Amtofpos	20137218.78333334	12068293.544653216	180
Noofdc	24926329.17777778	8131135.866959935	180

Table No.15: Correlations: Number of Debit Cards and Amount of Point of Sale Transactions

		AMTOFPOS	NOOFDC
Pearson Correlation	AMTOFPOS	1.000	.648
	NOOFDC	.648	1.000
Sig. (1-tailed)	AMTOFPOS	.	.000
	NOOFDC	.000	.
N	AMTOFPOS	180	180
	NOOFDC	180	180
In the table above, a Pearson’s Data Analysis shows a Positive Correlation, r = 0.648, which clearly states that the increase in number of debit card results into increase in amount of Point of Sale transactions of Axis bank, ICICI bank and HDFC bank debit card users.			

Table No.16: One-Way ANOVA: Number of Debit Cards and Amount of Point of Sale Transactions

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	10945773941571730.000	1	10945773941571730.000	128.821	.000 ^b
	Residual	15124449983733670.000	178	84968820133335.270		
	Total	26070223925305408.000	179			
a. Dependent Variable: AMTOFPOS						
b. Predictors: (Constant), NOOFDC						
The Calculated Fisher Value Fcrit (1, 178) = 128.821 is greater than its Critical Value 3.8415 (at df1 1 and df2 178) and its Significance Value is 0.000 (i.e. p = 0.000), which is less than 0.05, and therefore there is an association between number of debit card and amount of point of sale transactions of Axis bank, ICICI bank and HDFC bank debit card users.						

Table No.17: Coefficient: Number of Debit Cards and Amount of Point of Sale Transactions

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3834756.977	2221020.348		-1.727	.086
	NOOFDC	.962	.085	.648	11.350	.000
a. Dependent Variable: AMTOFPOS						
From the table above, following regression equation can be formed; Y = assumed to be amount of point of sale transactions of Axis bank, ICICI bank and HDFC bank debit card users X = assumed to be number of debit card Y = a + b (X) Y = -3834756.977 + 0.962 (X)(2)						

Therefore, the Alternate Hypothesis, “There is an association between number of debit card and amount of point of sale transactions of Axis bank, ICICI bank and HDFC bank Ltd. debit card users”, is accepted. (It is Accepted)

- There is no association between number of debit card and number of ATM transactions of Axis bank, ICICI bank and HDFC bank Ltd. bank debit card users.

To test above hypothesis, the researcher has collected secondary data related to number of debit card issued and transactions at ATM from January, 2014 to December, 2018 of Axis bank, ICICI bank and HDFC bank Ltd..

Table No.18: Descriptive Statistics: Number of Debit Cards and Number of ATM Transactions

	Mean	Std. Deviation	N
NOOFATM	142343.90648283	31027.991915992	180
NOOFDC	24926329.17777778	8131135.866959935	180

Table No.19: Correlations: Number of Debit Cards and Number of ATM Transactions

		NOOFATM	NOOFDC
Pearson Correlation	NOOFATM	1.000	.411
	NOOFDC	.411	1.000
Sig. (1-tailed)	NOOFATM	.	.000
	NOOFDC	.000	.
N	NOOFATM	180	180
	NOOFDC	180	180

In the table above, a Pearson’s Data Analysis shows a Positive Correlation, r = 0.411, which clearly states that the increase in number of debit card results into increase in number of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users.

Table No.20: One-Way ANOVA: Number of Debit Cards and Number of ATM Transactions

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29145673260.892	1	29145673260.892	36.233	.000 ^b
	Residual	143184121277.759	178	804405175.718		
	Total	172329794538.652	179			
a. Dependent Variable: NOOFATM						
b. Predictors: (Constant), NOOFDC						
The Calculated Fisher Value Fcrit (1, 178) = 36.233 is greater than its Critical Value 3.8415 (at df1 1 and df2 178) and its Significance Value is 0.000 (i.e. p = 0.000), which is less than 0.05, and therefore there is an association between number of debit card and number of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users.						

Table No.21: Coefficient: Number of Debit Cards and Number of ATM Transactions

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	103226.717	6833.767		15.105	.000
	NOOFDC	.002	.000	.411	6.019	.000
a. Dependent Variable: NOOFATM						
From the table above, following regression equation can be formed; Y = assumed to be number of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users X = assumed to be number of debit card Y = a + b (X) Y = 103223.717 + 0.002 (X)(3)						

Therefore, the Alternate Hypothesis, “There is an association between number of debit card and number of ATM transactions of Axis bank, ICICI bank and HDFC bank Ltd. bank debit card users”, is accepted. (It is Accepted)

- There is no association between number of debit card and amount of ATM transactions of Axis bank, ICICI bank and HDFC bank Ltd. bank debit card users.

To test above hypothesis, the researcher has collected secondary data related to number of debit card issued and amount of transactions at ATM from January, 2014 to December, 2018 of Axis bank, ICICI bank and HDFC bank Ltd. bank.

Table No 22: Descriptive Statistics: Number of Debit Cards and Amount of ATM Transactions

	Mean	Std. Deviation	N
AMTOFATM	29266.17836538	16960.825157699	180
NOOFDC	24926329.17777778	8131135.866959935	180

Table No.23: Correlations: Number of Debit Cards and Amount of ATM Transactions

		AMTOFATM	NOOFDC
Pearson Correlation	AMTOFATM	1.000	.654
	NOOFDC	.654	1.000
Sig. (1-tailed)	AMTOFATM	.	.000
	NOOFDC	.000	.
N	AMTOFATM	180	180
	NOOFDC	180	180

In the table above, a Pearson’s Data Analysis shows a Positive Correlation, $r = 0.654$, which clearly states that the increase in number of debit card results into increase in amount of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users.

Table No.24: One-Way ANOVA: Number of Debit Cards and Amount of ATM Transactions

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	22050884149.774	1	22050884149.774	133.315	.000 ^b
	Residual	29441972465.601	178	165404339.694		
	Total	51492856615.375	179			
a. Dependent Variable: AMTOFATM						
b. Predictors: (Constant), NOOFDC						
The Calculated Fisher Value $F_{crit}(1, 178) = 133.315$ is greater than its Critical Value 3.8415 (at df_1 1 and df_2 178) and its Significance Value is 0.000 (i.e. $p = 0.000$), which is less than 0.05, and therefore there is an association between number of debit card and amount of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users.						

Table No.25: Coefficient: Number of Debit Cards and Amount of ATM Transactions

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4758.466	3098.819		-1.536	.126
	NOOFDC	.001	.000	.654	11.546	.000
a. Dependent Variable: AMTOFATM						
From the table above, following regression equation can be formed; $Y =$ assumed to be amount of ATM transactions of Axis bank, ICICI bank and HDFC bank debit card users $X =$ assumed to be number of debit card $Y = a + b(X)$ $Y = -4758.466 + 0.001(X) \dots\dots(4)$						

Therefore, the Alternate Hypothesis, “There is an association between number of debit card and amount of ATM transactions of Axis bank, ICICI bank and HDFC bank Ltd. bank debit card users”, is accepted. (It is Accepted)

- 6. H_0 : There is no significant difference in satisfaction level of debit card users of Axis bank, ICICI bank and HDFC bank Ltd..
- H_1 : There is a significant difference in satisfaction level of debit card users of Axis bank, ICICI bank and HDFC bank Ltd..

To test the above Null Hypothesis, the researcher has used Non-Parametric Pearson’s Chi-Squared Test of independence and association for each of the Axis bank, ICICI bank and HDFC bank Ltd. debit card users.

Table No.26: Calculated Chi-Square Value

	VAR00001	VAR00002	VAR00003	VAR00004	VAR00005	VAR00006	VAR00007
Chi-Square	59.320 ^a	60.960 ^a	43.320 ^a	53.320 ^a	62.760 ^a	85.960 ^a	79.840 ^a
df	2	2	2	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.							
In the table above, the calculated Chi-Square Value of the Axis bank, ICICI bank and HDFC bank Ltd. debit card users’ variables are greater than its table Value (obtained from chi-square table @ 5% Level of Significance) and its respective p-value = 0.000 is less than the 0.05. Hence, it can be conclude that there is a significant difference in listed variables of Axis bank, ICICI bank and HDFC bank Ltd. debit card users. Hence, there is significant difference in satisfaction level of Axis bank, ICICI bank and HDFC bank Ltd. debit card users in Mumbai region.							

Thus, further to study the extent of difference in satisfaction level of debit card users of Axis bank, ICICI bank and HDFC bank Ltd., the researcher has conducted Kruskal-Wallis test to measure difference in Mean length.

Table No.27: Mean Rank Value of Perceptions of Axis bank, ICICI bank and HDFC debit Card Users

	TOB	N	Mean Rank
VAR0001	Axis Bank	50	73.89
	ICICI Bank	50	88.52
	HDFC Bank	50	64.09
	Total	150	
VAR0002	Axis Bank	50	74.82
	ICICI Bank	50	81.87
	HDFC Bank	50	69.81
	Total	150	
VAR0003	Axis Bank	50	72.09
	ICICI Bank	50	86.22
	HDFC Bank	50	68.19
	Total	150	
VAR0004	Axis Bank	50	73.86
	ICICI Bank	50	83.22
	HDFC Bank	50	69.42
	Total	150	
VAR0005	Axis Bank	50	81.16
	ICICI Bank	50	81.16
	HDFC Bank	50	64.18
	Total	150	
VAR0006	Axis Bank	50	77.87
	ICICI Bank	50	85.97
	HDFC Bank	50	62.66
	Total	150	
VAR0007	Axis Bank	50	77.41
	ICICI Bank	50	82.24
	HDFC Bank	50	66.85
	Total	150	
It is observed that there is a significant difference (from Mean Rank Difference) in satisfaction level of Axis bank, ICICI bank and HDFC bank Ltd. debit card users.			

Table No.28: Test Statistics^{a,b}

	VAR0001	VAR0002	VAR0003	VAR0004	VAR0005	VAR0006	VAR0007
Chi-Square	10.897	2.781	10.665	4.112	6.450	10.635	4.911
df	2	2	2	2	2	2	2
Asymp. Sig.	.004	.249	.005	.128	.040	.005	.086
a. Kruskal Wallis Test							
b. Grouping Variable: TOB							
It is observed that there is a significant difference in satisfaction level (for variable 1, 3, 5 and 6) and no significant difference (for variables 2, 4 and 7) of Axis bank, ICICI bank and HDFC bank Ltd. debit card users.							

7. H₀: There is no association between demographic profile and perceptions of Axis Bank Ltd., ICICI Bank Ltd. and HDFC Bank Ltd. debit card users.

H₁: There is an association between demographic profile and perceptions of Axis Bank Ltd., ICICI Bank Ltd. and HDFC Bank Ltd. debit card users.

To test the above hypothesis the researcher has considered the various debit card services (in Table No. 4 and 5). Further to test above null hypothesis the researcher has used Non-Parametric Chi-Square test of independence\association. The details are as follow;

Table No.29: Chi-Square Test Result - Demographic Profile and Perception Level of Debit Card Users

Gender	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7
Calculated Pearson Chi-Square Value	2.611	3.229	2.463	0.622	0.502	1.655	2.250
Table Value (5% I.o.s.) at a df = 2	5.991	5.991	5.991	5.991	5.991	5.991	5.991
P-value	0.271	0.199	0.292	0.733	0.778	0.437	0.325
Inference	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig
Age	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7
Calculated Pearson Chi-Square Value	12.196	11.509	4.292	7.712	5.730	2.641	10.518
Table Value (5% I.o.s.) at a df = 6	12.592	12.592	12.592	12.592	12.592	12.592	12.592
P-value	0.058	0.074	0.637	0.260	0.454	0.852	0.104
Inference	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig
Qualification	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7
Calculated Pearson Chi-Square Value	2.380	4.191	1.154	3.022	15.723	2.690	6.180
Table Value (5% I.o.s.) at a df = 6	12.592	12.592	12.592	12.592	12.592	12.592	12.592
P-value	0.881	0.651	0.979	0.806	0.015	0.847	0.403
Inference	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Sig	Not-Sig	Not-Sig
Occupation	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7
Calculated Pearson Chi-Square Value	4.031	1.963	2.143	6.020	8.309	7.995	4.556
Table Value (5% I.o.s.) at a df = 6	12.592	12.592	12.592	12.592	12.592	12.592	12.592
P-value	0.672	0.923	0.906	0.421	0.216	0.238	0.601
Inference	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig
Type of Account	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7
Calculated Pearson Chi-Square Value	6.962	1.188	2.636	2.128	6.338	2.666	2.314
Table Value (5% I.o.s.) at a df = 4	9.488	9.488	9.488	9.488	9.488	9.488	9.488
P-value	0.138	0.880	0.620	0.712	0.175	0.615	0.678
Inference	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig	Not-Sig

Source: Compiled from Primary Data

10. SIGNIFICANCE OF THE STUDY

1. The present research study will be helpful to understand the perceptions and satisfaction level of debit card services users of Axis Bank Ltd., ICICI Bank Ltd. and HDFC Bank Ltd. in Mumbai Region.
2. It will be beneficial to banks to identify and improve the areas of flaw related to debit card services.

11. LIMITATIONS OF THE STUDY

Following are the limitations of the present study;

1. The study is limited to debit card services users of selected private banks only.
2. Other plastic card products and its services like reward card, credit card, prepaid or any club card is not a part of the study.
3. The study is restricted within Mumbai region only.
4. Due to time, geographical and financial constraints a sample size is limited to 50 debit card users of sample private banks only.

12. RECOMMENDATIONS AND SUGGESTIONS

From the present study, it has been observed that the use and growth of debit card huge, which reduces the risk of carrying cash.

1. The introduction of any new debit card service should be immediately informed.
2. The transaction fees at other bank ATM should be reduced.
3. Regional language at the time of debit card use should be introduced.
4. Specifically for women and teenagers bank should offer special privileged debit card.

5. Bank should provide old age benefit on debit card use.
6. All banks should increase number of ATM near railway stations, shopping mall and market place.
7. Bank ATM should dispense lower denomination currency.
8. ATM should be well networked with bank server, for transaction easiness.

13. CONCLUSION

Technological advancement and demonetization has given rise to use of various services on debit card issued by **Axis bank, ICICI bank and HDFC bank Ltd., perceptions on which has** been studied and analyzed. The result shows that there is a tremendous change in financial market in terms of growth and its use. All respondents found well aware debit card services and its use. Thus, it makes it possible for banks to provide training at the bank branch to encourage consumers to adopt the same.

14. SCOPE FOR THE FUTURE RESEARCH

1. A similar study can be undertaken in region other than Mumbai.
2. Other banking products/services can be considered on the basis of similar study.
3. A use of debit card in rural and urban area can be compared.
4. A comparative study on debit card issued by public sector, private sector and foreign bank conducted.

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A STUDY ON ROLE OF E-BANKING W.R.T THANE REGION RESHMA PADMANABHA GOWDA**Ritesh Ashok Jaiswal**

Satish Pradhan Dnyansadhana College

ABSTRACT

Banks can make use of electronic tools in marketing their services. The role of E-banking is very important for the modern life. It makes a huge difference in the banking system. Here the researcher trying to find out the role of E-banking w.r.t Thane region. . The sample size for this study is 50 respondents and sampling method is simple random sampling and data is analysed through graphs.

Keywords: Banks, E-banking, Roles

INTRODUCTION

Electronic banking termed as e-banking provides banking services to customers by using electronic means such as ATM, mobile-internet banking facilities, etc. digitalization in India has made a huge differences in all factors along with the banking system, which made the use of banking very easy. E-banking can be used by the illiterate people also. The banks had provided the basic knowledge to the people in the rural area to how to use the E-banking system. E-banking has emerged as the biggest focus area in the 'digital transformation'. Through the e-banking customer can access his account and conduct transaction using his mobile, computer. Due to the E-banking , people no longer have to leave the house to shop, communicate and even do their banking.

OBJECTIVES

4. To know about role of E-banking in Thane region.
5. To create awareness of role of E-banking among people.
6. To gather information about role of E-banking in Thane region.

HYPOTHESIS

H0: There is no role of E-banking in Thane region.

H01: There is role of E-banking in Thane region.

REVIEW OF LITERATURE

Maurice ayuketang ns(2018), In his research paper he have explained that E-Banking innovation had completely made a changes in the banking system, which not only help to the customer but also helped to the banking system. Digitalized world has mostly affected on the E-banking.

Chandrawati nirala, Dr. BB pandey(2017), the rapid advancement in information and communication technology has significantly influenced our banking industry. Banks and financial organizations have improved their services as a financial intermediary through adopting various IT solutions.

IMPORTANCE OF E-BANKING

E-banking provides many advantages for the banks and customers. E-banking has made life much easier and banking much faster for both customer and bank.

- It saves time spent in banks.
- It provides ways for international banking.
- E-banking provides banking throughout the year 24/7 days from any place have internet access.
- Taking advantages of integrated banking services , banks may compete in new markets, can get new customers and grow their market share.

DISADVANTAGES OF E-BANKING

As internet trends are changing faster, the use of E-banking is increasing. With the massive usage of it, many people are facing certain problems too.

- Security issues.
- Problems in transaction due to lack of knowledge.

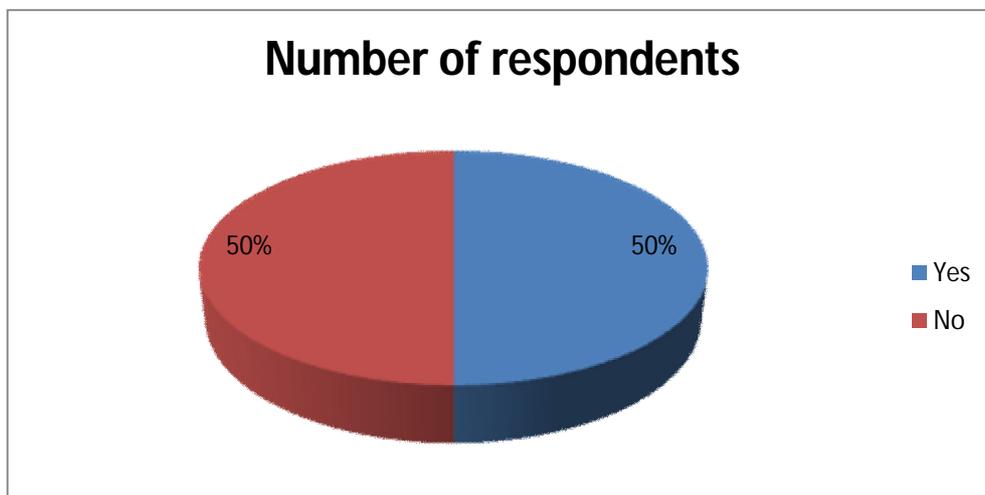
RESEARCH METHODOLOGY

Research Universe	Thane region
Sample Size	50
Method of Sampling	Random sampling
Method of Data Collection	Questionnaire
Method of Data	Primary & Secondary
Data Analysis Technique	Graphs, Percentage method

DATA ANALYSIS AND INTERPRETATION

Question 1: Do you use E-banking?

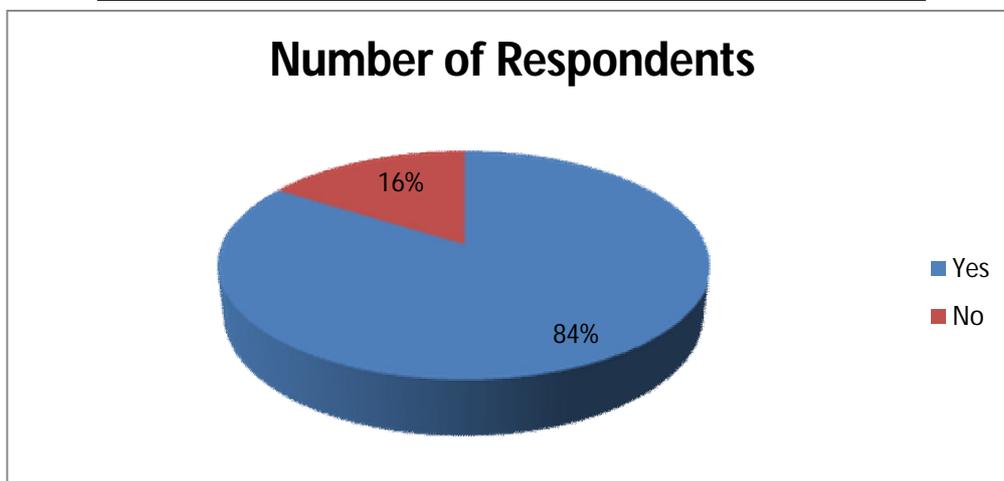
Responses	Number of Respondents	Percentage of respondents
Yes	50	50%
No	50	50%



Interpretation: This pie-chart shows that the 50% of the respondents use the E-banking. And the remaining does not use the E-banking. The proportion of respondents those who use E-banking are significantly equal.

Question 2: Do you get benefits of E-banking?

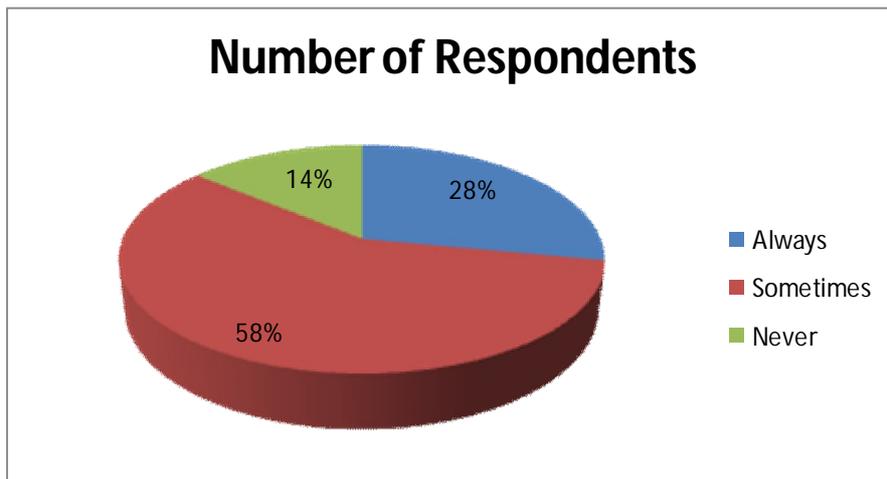
Responses	Number of Respondents	Percentage of respondents
Yes	42	84%
No	8	16%



Interpretation: In this pie chart it shows that the 84% of respondents says that the E- banking is the beneficial to them and the remaining 16% says that they do not get the benefits.

Question 3.How frequently do you use E-banking?

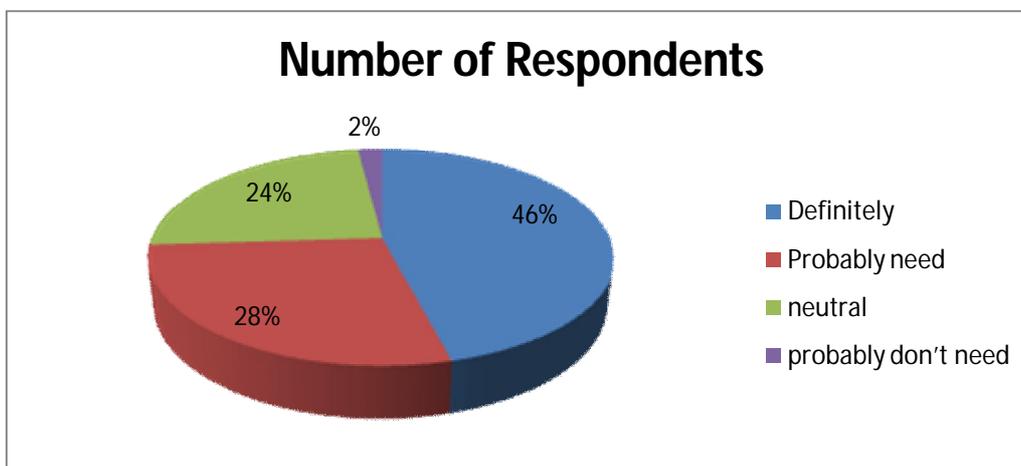
Responses	Number of Respondents	Percentage of respondents
Always	14	28%
Sometimes	29	58%
Never	7	14%



Interpretation: 28% of the respondents show that the they uses the E-banking always and the 58 % of the respondents uses the e-banking sometimes and remaining does not use the E-banking.

Question 4: when you think about E-banking, do you think of it as something you need or don't need?

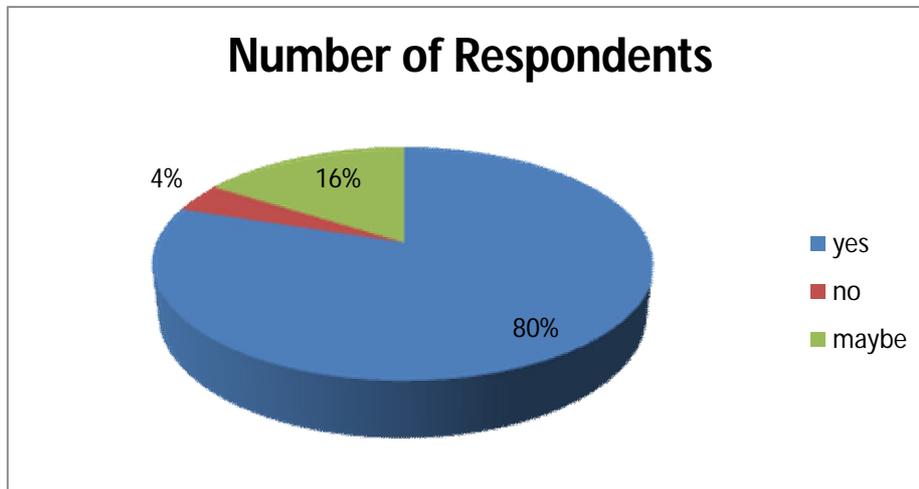
Responses	Number of Respondents	Percentage of respondents
Definitely	23	46%
Probably need	14	28%
neutral	12	24%
probably don't need	1	0.50%
definitely don't need	0	0



Interpretation: 46% of the respondents think they definitely need the E-banking facilities. And the 28% of the respondents thinks they probably need the it and remaining thinks neutral and probably don't need.

Question 5: Does E-banking make the transaction easier?

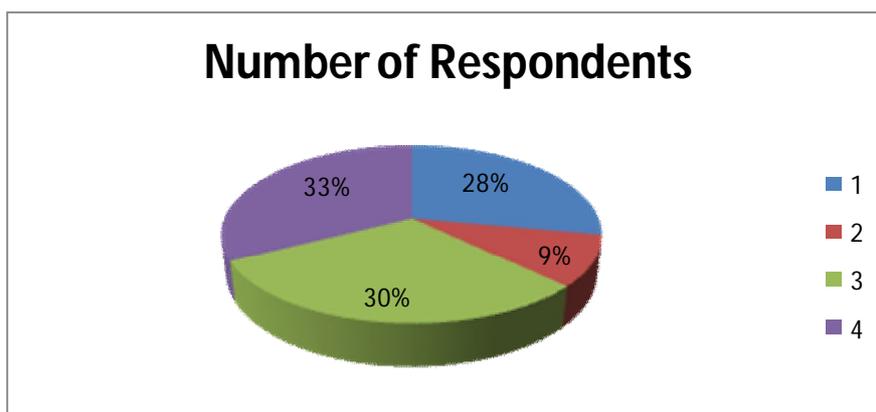
Responses	Number of Respondents	Percentage of respondents
yes	40	80%
no	2	4%
maybe	8	16%



Interpretation: Highest 80% of respondent’s responses that yes, the E-banking make the transaction easier. And remaining says no or maybe makes easy in transactions.

Question 6: Rank E- banking from 1 to 5.

Responses	Number of Respondents
1	12
2	4
3	13
4	14
5	7



Interpretation: The most of the respondents have responded 4th rank to the E-banking. And then the other rank.

FINDING AND CONCLUSION

Following are certain finding from the primary data collection through questionnaire.

- The bank level changes trough online approach.
- The main aim of E-banking is to making transaction through online poses and make customer more beneficial.
- Due to the E-banking, peoples are using net banking and doing their transactions very easily.

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- At the starting they face the problems to operate the net-banking but at the end they use easily.
 - Net-banking is very time saving process. A person can make his transaction anytime and anywhere.

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PERCEPTION OF HOUSEWIVES AS CONSUMERS TOWARDS CASHLESS PAYMENT MODES, A CRITICAL APPROACH

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ABSTRACT

There has been a tremendous upsurge in the use of active Internet and mobile phones in India. The penetration and high usage of Internet with smart phones activations have indeed created a niche market which has led to strong growth moving towards digital India. Internet banking, mobile banking and various other forms and modes of digital media payment modes have a whole lot of Indian population using these with effective advantage. Understanding and motivating the perception of housewives indulging in the usage of these digital and payment modes will enable the 50% of nonworking women towards financial inclusion, financial empowerment, and decision making of their own finances and moving to words development of India. This paper attempts to examine the perception of housewives towards cashless payment modes and try to assess educational as a parameter of the demo graphic factors which can drive the population of towards adoption of cashless payment modes.

Keywords: Cashless payment, decision making, housewives, security

INTRODUCTION

Moving in direction to words digital India in sync with the national goal as announced by Prime Minister Shri Narendra Modi housewives as an important segment of population could be a prime driver towards India's digital development direction. Creating an economy which is cashless and in which all forms of transactions are conducted in digital form is the new horizon for India. A numbers of facilitators and trigger points are drivers of India's growth towards digital payments and transition of India from cash economy to cashless. Few of the core facilitator is the penetration of Internet connectivity on smart phones, Nonbanking financial institutions payments via digital modes, one point access. These and many more elements are creating an environment which is positive towards the development and growth of digital and cashless India.

DIGITAL PAYMENT MODES IN INDIA.

The various forms of making cashless payments in India rank highest from mobile payments, banking Internet, debit card, mobile wallets, PayPal, Paytm, NEFT, AEPS Aadhaar enabled payment systems, USSD unstructured supplementary service data through mobile banking UPI United payments Interface and many more.

LITERATURE REVIEW

Study created in Saudi Arabia found that there is a growth in the payments done through mobile and the various payment transactions found that security and privacy are the main concern is for the consumers which are impacting the penetration of these cashless modes of payment. Bamask (2014) highlights that in other countries like Finland found the mobile wallet as one of the main triggers for decision making process towards online shopping. A study done by the mask suggested that it was going to be explosion of payments through mobile phones in the upcoming years. Mediation of Internet usage of mobile payment modes and online shopping making a strong forum for consumers is going to impact the usage of cashless economy for the better. Digital wallets is becoming a common stay with smartphones being adopted by the masses. Transferring money transferring funds through the mobile as digital mode extends a lot of security and convenience to the consumers. Various wallet many benefits such as Flexi payment of the cash transfer possibility and facilitation having found strongly. Shendge (2017) Advantages of the policy structure is introduced by the government in India for the cashless economy need to create a reduction of the banking service charges They suggest that it is important that Internet access should be reached out to all the Rural and urban sectors of India for the penetration of mobile wallets online banking services and various other modes of digital transactions.

Research problem:

The research paper attempts to assess the consumer perception of urban housewives of India about the digital modes of payment. The aim of this study is to examine the housewives perception and understanding of the various elements and factors of cashless economy. Thus to attain this broader goal the following specific objectives have been considered:

- Understand the concepts of cashless economy.
- Examine the perception of housewives in adopting the cashless economy.

- Assess the importance of demographic factors on adoption of digital modes of payment.

Research Methodology

Primary Data was collected by designing an open ended questionnaire and responses were collected for 100 respondents belonging to Mumbai urban region. Random sampling method is adopted. Secondary data was collected by referring Research papers, Books, Journals and internet. Analysis of closed ended responses was done by percentage distribution and Qualitative analysis of open ended responses was done observing the trends.

SOURCES OF DATA

Data collection is done through two techniques that are:

- Primary source through a structured questionnaire
- Secondary source through preparing literature review of research paper and articles
- Data analysis is done with the help of two techniques and Likert scale analysis is used for limited option questions asked.

Data interpretation is done by converting numerical in to statements and achieving the objectives. Data is presented by using tabular and chart format for better understanding of the impact.

HYPOTHESIS OF THE STUDY

- H_0 : There is no significant relationship between Cashless modes of payment and benefits derived by housewives.
- H_1 : There is a positive relationship between Cashless modes of payment and benefits derived by housewives.
- H_0 There is no significant relationship perceived by respondents for various attributes of digital payment on the basis of education of the respondents.
- H_2 : There is a significant relationship perceived by respondents for various attributes of digital payment on the basis of education of the respondents.

LIMITATIONS OF THE STUDY

- Due to time constraint the study is made only for respondents belonging to Mumbai urban region.
- Basic statistical tools like percentage method are applied.
- The study uses quantitative and empirical method of research design.

SCOPE OF STUDY

The assessment of using cashless economy is the point of study and the paper attempts to analyses the impact and attitude of the housewives towards these developments. The geographical scope of study is Mumbai city area where a sample of urban areas of housewives using smart phones are considered .The study attempts to understand the active engagement of these women and their attitude towards this new environment. The study does not attempt to analyze the income difference in assessing these attributes.

HYPOTHESIS TESTING

Findings and Conclusion

Table 1: Correlation of Attributes of cashless measures for housewives

Safety of cash	Access to various online payment modes	Interacting with mobile wallet is helpful.	Feeling of Independent Choice	Financial Decision making	User Friendly
➔45	➔48	⬆88	⬇16	⬆65	⬇16
⬇29	➔36	⬇12	➔50	⬇26	⬆84
⬇13	⬇10	⬇0	⬇20	⬇5	⬇0
⬇9	⬇4	⬇0	⬇7	⬇2	⬇0
⬇4	⬇2	⬇0	⬇5	⬇2	⬇0

Graph 1: Correlation of Attributes of cashless measures for housewives

Graph 2: Descriptive Statistics

Safety cash	of	access to various online payment modes	Interacting with mobile wallet is helpful.	Feeling of Independent Choice	Financial Decision making	User Friendly	
Mean	20	Mean	20	Mean	19.6	Mean	20
Standard Error	7.523297	Standard Error	9.273618	Standard Error	8.090735	Standard Error	12.11198
Median	13	Median	10	Median	16	Median	5
Mode	#N/A	Mode	#N/A	Mode	#N/A	Mode	2
Standard Deviation	16.8226	Standard Deviation	20.73644	Standard Deviation	18.09143	Standard Deviation	27.08321
Sample Variance	283	Sample Variance	430	Sample Variance	327.3	Sample Variance	733.5
Kurtosis	0.51202	Kurtosis	2.18129	Kurtosis	2.792055	Kurtosis	2.135496
Skewness	0.926316	Skewness	0.706542	Skewness	1.613895	Skewness	1.600385
Range	41	Range	46	Range	45	Range	63
Minimum	4	Minimum	2	Minimum	5	Minimum	2
Maximum	45	Maximum	48	Maximum	50	Maximum	65
Sum	100	Sum	100	Sum	98	Sum	100
Count	5	Count	5	Count	5	Count	5
Largest(1)	45	Largest(1)	48	Largest(1)	50	Largest(1)	65
Smallest(1)	4	Smallest(1)	2	Smallest(1)	5	Smallest(1)	2
Confidence Level (95.0%)	20.88802	Confidence Level (95.0%)	25.74769	Confidence Level (95.0%)	22.46348	Confidence Level (95.0%)	33.62824

Table 3: Correlation of AGE of Housewives for cashless measures

	GRADUATE	MATRIC PASS	12TH CLASS PASS	SUM OF POST GRADUATE
	1		GRADUATE	
Matric Pass	0.999773	1		
12th Class Pass	0.857254	0.86803704	1	
Post Graduate	-0.7753	-0.7616553	-0.339422117	1

Graph 3: Correlation of AGE of Housewives for cashless measures.

DISCUSSION AND CONCLUSION

On the basis of the above table and graph it is clearly evident that there is indeed a positive relationship between the variables as discussed in the tables of the housewives segment of urban population as indicated in the tables and graphs listed above.

Starting from Table1 and Graph1 it is about the correlation of attributes of cashless measures for housewives. It's clearly evident that about the women that how's life feel when they are able to use the digital mode of payments. 65% women respondents believe that using digital modes of payment encourages financial decision making for them strongly and 26% believe it is very helpful .50% of women believe that the feeling of strong Independent choice and 88% of women believe that interaction with the mobile wallet is quite comfortable and helpful and the technical aspects are very comfortable. 48% of women believe that digital modes allows them to do online payment for online shopping at 45% of women consider digital payments is very safe way for cash independent choice and 88% of women believe that interaction with the mobile wallet is quite helpful and the technical aspects are very comfortable. 48% of women believe that digital modes allows them to online payment for online shopping at 45% of women consider digital payments is very safe way for cash transaction. None of the women reported that they don't find these cashless payment modes as non-user-friendly only 5% of the men commented that they do not get the feeling of independent choice and 2% women mentioned that you do not find it interesting to access various online modes and 4% considered unsafe to use these modalities was is for payments. The descriptive mode of statistics outline Kurtosis as .5-.5 or safety of cash and .9 for Skewness. Analyzing the correlation of attributes of cashless measures for housewives graduate housewives had the highest score relation of.999 which is very strongly positive followed by post graduate Raman have a high correlation with feeling of independent choices metric pass the one considers safety of cash as it is the main criteria is for using the online modes

HYPOTHESIS ALTERNATE PROVED CORRECT

This analysis rightly proves hypothesis H1 that there is a strong coordination between cashless modalities and the benefits derived by the housewives in urban segment of population.

The second hypothesis also is proved correct that the positive correlation between mobile banking and education for usage of cashless modalities. Thus Null Hypothesis is rejected.

SUGGESTIONS AND RECOMMENDATIONS

It is suggested that the housewives segment of masses need awareness in digital payments and digital modes to enable them with these new systems. Various workshops and trainngs may be organized in their residential localities. The need to engage educated ladies for sharing of this technical modality is not necessary, rather a matric pass lady with a flair for technical aspects can also be added as a resources person for the workshops.

Present study has made an attempt to understand customer perception regarding

Digital payment. It is suggest that since the demographic factors education

has much impact on the adoption of the digital payment, there should be am impetus towards educating women. Also at the training centers a woman who has studied beyond matriculation and is Internet savvy, she should be included to train for the digital payment mode. It is also recommended that the internet access and mobile banking systems technology should be made more user friendly and smart phones penetration be increased in the masses for digital modes of payment and cashless economy to flourish and thrive.

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TOWARDS A GREEN INDIA

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**ABSTRACT**

According to many studies a positive correlation exists between environmental performance and economic performance. Strong investment, reflecting rising productivity, healthy corporate profits, and robust exports have fueled economic growth exceeding 7% a year in India for almost a decade. That growth in turn has increased employment opportunities and allowed millions to emerge from poverty. But does growth – so essential for development – have to come at the price of worsened air quality and other environmental impacts? This article analyzes some of the key tradeoffs between economic growth and environmental sustainability for India

TOWARDS A GREEN INDIA

Eco-efficiency – doing more with less - is at the core of the business case for sustainable development. Combining environmental and economic operational excellence to deliver goods and services with lower external impacts and higher quality-of-life benefits is a key sustainable development strategy for business.

1.1 INTRODUCTION

All development is now taking place in a world shaped by climate. Climate change is happening now and impacting countries and people, mostly poor. According to the reports of Postdam Institute for Climate Impact Research, first eight months of 2015, the world has seen more than 120 climate related disasters. Fourteen of the 15 hottest years since record keeping began over 130 years ago have been since the turn of the century (2000–2015). Global warming of close to 1.5°C above pre-industrial times – up from 0.8°C warming today – is already locked into Earth’s atmospheric system by past and predicted greenhouse gas emissions.

It warns everyone will feel the impact, particularly the poor, as weather extremes become more common and risks to food, water, and energy security increase. To meet the Global Goals by 2030, the world must cut emissions and invest in greater strength to climate change.

Sustainable business, or green business, is an enterprise that has minimal negative impact on the global or local environment, community, society, or economy—a business that strives to meet the triple bottom line. Often, sustainable businesses have progressive environmental and human rights policies. In general, business is described as green if it matches the following four criteria:

1. It incorporates principles of sustainability into each of its business decisions.
2. It supplies environmental friendly products or services that replace demand for non-green products and/or services.
3. It is greener than traditional competition.
4. It has made an enduring commitment to environmental principles in its business operations.

A sustainable business is any organization that participates in environment friendly or green activities to guarantee that all processes, products, and manufacturing activities effectively address current environmental concerns while maintaining a profit. In other words, it is a business that “meets the needs of the present world

without compromising the ability of the future generations to meet their own needs.” It is the process of assessing how to design products that will take advantage of the current environmental situation and how well a company’s products perform with renewable resources.

The Brundtland Report emphasized that sustainability is a three-legged stool of people, planet, and profit. Sustainable businesses with the supply chain try to balance all three through the triple-bottom-line concept—using sustainable development and sustainable distribution to affect the environment, business growth, and the society.

Sustainability is often confused with corporate social responsibility (CSR), though the two are not the same. Bansal and DesJardine (2014) state that the notion of ‘time’ discriminate sustainability from CSR and other similar concept. Whereas ethics, morality, and norms spread through CSR, sustainability only oblige businesses to make import-export trade-offs to safeguard global equity.

Green business has seen as a possible mediator of economic-environmental relations, and if prospered, would serve to diversify Indian economy, even if it has a negligible effect at lowering atmospheric CO₂ levels. The definition of "green jobs" is unclear, but it is generally agreed that these jobs, the result of green business, should be linked to clean energy, and contribute to the decline of greenhouse gases. These corporations can be seen as generators of not only "green energy", but as producers of new "materiality" that are the product of the technologies these firms developed and deployed.

1.2 PROBLEM

- 1) Environmental sustainability could become the next major challenge as India surges along its projected growth trajectory
- 2) Cost of environment, could become a major constraint in sustaining future economic growth. Further, it may be impossible or prohibitively expensive to clean up later.
- 3) For an environmentally sustainable future, India needs to value its natural resources, and ecosystem services to better inform policy and decision-making

1.3 CHALLENGES AND OPPORTUNITIES

According to many studies a positive correlation exists between environmental performance and economic performance. If an organization’s current business model is inherently unsustainable, becoming a truly sustainable business requires a complete makeover of the business model (e.g. from selling cars to offering car sharing and other mobility services). This can present a major challenge due to the differences between the old and the new model and the respective skills, resources and infrastructure needed. A new business model can also offer major opportunities by entering or even creating new markets and reaching new customer groups.

2.1 BACKGROUND – INDIAN ECONOMY AND ENVIRONMENTAL RISK

Over the last decade, India’s strong growth has increased employment opportunities and allowed millions to emerge from poverty. In a recent survey of 178 countries whose environments were surveyed, India ranked 155th overall and almost last in air pollution exposure. According to another recent WHO (World Health Organization) survey, across the G-20 economies, 13 of the 20 most polluted cities are in India. Simultaneously, poverty remains both a cause and consequence of resource degradation: agricultural yields are lower on degraded lands, and forests and grasslands are depleted as livelihood resources decline. Strong investment, reflecting rising productivity, healthy corporate profits, and robust exports have fueled economic growth exceeding 7% a year in India for almost a decade. That growth in turn has increased employment opportunities and allowed millions to emerge from poverty. But does growth – so essential for development – have to come at the price of worsened air quality and other environmental impacts?

A new World Bank study finds that targeted policy interventions can significantly reduce environmental degradation at minimal cost to GDP (Gross Domestic Products). The report, “India’s economic growth and environmental sustainability: what are the tradeoffs?” focuses on particle pollution from the burning of fossil fuels, which has serious health consequences amounting up to 3% of India’s GDP. The study assesses the impacts of policy measures such as a tax on coal or particulate emissions (PM₁₀) on GDP, health indicators, and CO₂ emissions.

2.2 THREE SCENARIOS

❖ **The Business as Usual Scenario** is based on economic performance for 2007-10 and recent IMF projections of GDP for 2011-15, with associated projections up to 2030. The model calculates the required investments to achieve the projected growth, along with the demands for different types of fuel. Fossil fuel use, the

primary cause of pollution, is expected to decrease under business as usual due to a declining share of coal in the overall energy demand (although coal would still dominate in 2030); greater emissions capture; and the shift to cleaner coal.

- ❖ **The Green Growth Scenario** targets a reduction in PM10 and other small emissions by 10 percent. A tax on coal or PM10 is used to achieve a targeted emissions reduction, a shift to a greener fuel mix, and energy efficiency gains.
- ❖ **The Green Growth plus Scenario** incorporates a more aggressive 30 percent reduction and results in lowers GDP about \$97 billion, or 0.7 percent. The scenario suggests that even a substantial reduction in emissions can be achieved without compromising much on GDP.

One important difference between the **Green Growth** and **Green Growth Plus** scenarios is that the latter assumes that, as the economy matures, the market realizes the economic benefits of cleaner and more efficient production. **There are significant health benefits under both scenarios.** The health damages from PM10 are reduced by \$105 billion in the 30% case and by \$24 billion with a 10% reduction. Under the Green Growth plus Scenario, this more than compensates for the projected GDP loss and another important benefit would be a substantial reduction in CO2 emissions.

3.1 COST OF ENVIRONMENTAL DEGRADATION

Environmental pollution, degradation of natural resources, natural disasters and inadequate environmental services, such as improved water supply and sanitation, impose costs to society in the form of ill health, lost income, and increased poverty and vulnerability.

Table 1: Annual Cost of Environmental Damage - Low and High Estimates (Rs. Billion per year)

Environmental categories	Low	Mid-point estimate	High	Midpoint estimate as % of total cost of environmental damage
Outdoor air pollution	170	1100	2080	29%
Indoor air pollution	305	870	1425	23%
Crop lands degradation	480	703	910	19%
Water supply, sanitation and hygiene	475	540	610	14%
Pastures degradation	210	405	600	11%
Forest degradation	70	133	196	4%
Total annual cost (billion Rs. Per yr.)	1710	3751	5821	1
Total as % of GDP in 2009	2.60%	5.70%	8.84%	

(Source: MOEF)

Estimates of annual costs are presented in Table 1. The "low" and "high" range estimates differ considerably across the 2 categories because of the uncertainties related to economic valuation procedure or uncertainties about exposure to specific hazards. The urban air pollution estimate range is mainly affected by the social cost of mortality which is derived by applying two different valuation techniques. The range for indoor air pollution arises mainly from the uncertainty of exposure level to indoor smoke and from the use of fuel wood. In the case of agricultural soil degradation, the range is associated with uncertainty of yield losses from salinity. The range for water supply, sanitation and hygiene is in large part associated with uncertainties regarding estimates of diarrheal child mortality and morbidity. The range for deforestation is associated with the uncertainty of the use benefits of forest. If we take the lower bound of the estimates, the figures are about 45 percent of the mean values (or 2.6 percent of GDP), while if we take the upper bound they are 64 percent higher than the mean (or about 8.9 percent of GDP).

3.2 Health Related Damages

Climate change is also posing risks to human population health and well-being and thus is emerging as a serious concern worldwide. In year 2000 climate change was estimated to be responsible for approximately 2.4% of worldwide diarrhea and 6% of malaria. According to the IPCC third assessment report the world temperature is expected to further rise during the century, implying increased health threats for human populations, especially in low-income countries. The US literature addressing health impacts of climate variability and change conclude that climate change is expected to increase morbidity and mortality risks from climate-sensitive health outcomes

such as extreme heat events, floods, droughts and fires. A spread in vector-borne diseases, like malaria, is also expected. A study in Mexico revealed that lower greenhouse gases emissions would result in avoidance of some 64,000 premature deaths over a twenty year period.

Table 2: Estimated Annual Cost of Health Impacts (Billion Rs.)

Health categories	Total annual cost	% of total cost (mean)
Mortality		
Adults	1018	92.2%
Children under five	13	1.2%
Morbidity		
Chronic bronchitis	1	0.1%
Hospital admissions	3	0.3%
Emergency room visit / outpatients hospitals visits	8	0.7%
Restricted activities days (adults)	46	4.2%
Lower respiratory illness in children	14	1.3%
Total cost of morbidity	72	6.6%
Total cost (mortality and morbidity)	1103	100%

(Source: MOEF)

Table 3 presents the estimated health impacts from inadequate water, sanitation and hygiene, based on the assumption (from WHO) that 88 percent of diarrheal illness is attributable to water, sanitation and hygiene. The table also provides estimates of DALYs (Disability adjusted life years) lost to water borne diseases. About 60 percent of the DALYs are from diarrheal child mortality. Typhoid/paratyphoid deaths add another 20 percent of DALY.

Table 3: Estimated Annual Health Impacts from Water, Sanitation, Hygiene

	Cases		Estimated Annual DALYS		%of Total DALYS Disability adjusted life years
	Urban	Rural	Urban	Rural	
Children (under the age of 5 years) - increased mortality (Thousand)	41	198	1384	6714	87-93
Children (under the age of 5 years) - increased morbidity (Thousand)	57831	178898	20	63	1
Population over 5 years of age - increased morbidity (Thousand)	149836	344183	177	406	11—6
Typhoid/paratyphoid mortality (Thousand)	0.57		19		0
Typhoid/paratyphoid morbidity (Thousand)	1150		8		0

(Source: MOEF)

3.3 ENVIRONMENTAL DAMAGES AND THE POOR

The losses related to water and sanitation and hygiene are likely to be concentrated among the poor who most often do not have access to piped water or sanitation. The rural population is more affected by the water and indoor air pollution-related damages than the urban population. For the urban population the distribution of impacts by income class is less certain. Some studies indicate that urban ambient air quality does affect the poor more than the rich (Garg, 2011). In overall terms, however, it is very likely the case that the poorer urban population suffers more both from urban air pollution and inadequate water supply, sanitation and hygiene and in general it is the poor who are included in all major cost categories.

3.4 COMPARISON WITH OTHER COUNTRIES

The cost of environmental degradation in India is roughly comparable with other countries with similar income level. The report show that monetary value of increased morbidity, mortality and natural resources degradation

typically amounts to 4 to 10 per cent of GDP, compared to 7 percent of GDP in India. The situation also looks consistent across different countries if one compares only the health cost of outdoor air pollution. In all the selected countries these vary between 1.1 to 2.5 percent of GDP. In India the health cost of outdoor air pollution is estimated at about 1.7 percent of GDP. The high cost of outdoor air pollution-related mortality in urban areas is the main driver of environmental health costs.

In a recent survey of 178 countries whose environments were surveyed, India ranked 155th overall and almost last in air pollution exposure. The survey also concluded that India's environmental quality is far below all BRIC countries [China (118), Brazil (77), Russia (73), and South Africa (72)]. Also, according to another recent WHO survey, across the G-20 economies, 13 of the 20 most polluted cities are in India. Simultaneously, poverty remains both a cause and consequence of resource degradation: agricultural yields are lower on degraded lands, and forests and grasslands are depleted as livelihood resources decline. To subsist, the poor are compelled to mine and overuse the limited resources available to them, creating a downward spiral of impoverishment and environmental degradation.

4 CONCLUSION

The environment affects our health in a variety of ways. The interaction between human health and the environment has been extensively studied and environmental risks have been proven to significantly impact human health, either directly by exposing people to harmful agents, or indirectly, by disrupting life-sustaining ecosystems. However, huge economic development and population growth result in continuing environmental degradation. Intensification of agriculture, industrialization and increasing energy use are the most severe driving forces of environmental health problems.

However, environmental health hazards are not limited to the developing world. Although at a lesser extent, environmental risks are also present in wealthier countries and are primarily attributed to urban air and water pollution. Occurrences of Asthma are rising dramatically throughout the developed countries, and environmental factors appear to be at least partly to blame. The Millennium Ecosystem Assessment synthesis report warns that the erosion of ecosystems could lead to an increase in existing diseases such as malaria and cholera, as well as arising risk of new diseases emerging.

5 SUGGESTIONS

- 1) A population of over thousands of millions is growing at 2.11 per cent every year. It puts considerable pressure on its natural resources and reduces the gains of development. Hence, the greatest challenge before us is to limit the population growth.
- 2) Environment degradation has adversely affected the poor who depend upon the resources of their immediate surroundings. Thus, the challenge of poverty and the challenge environment degradation are two facts of the same challenge. The population growth is essentially a function of poverty. Because, to the very poor, every child is an earner and helper and global concerns have little relevance for him. So it needs to reduce the poverty.
- 3) The people must be acquainted with the methods to sustain and increase agricultural growth with damaging the environment. High yielding varieties have caused soil salinity and damage to physical structure of soil. There should be agricultural growth.
- 4) It is essential to restore the water quality of our rivers and other water body as lakes is an important challenge. It so finding our suitable strategies for consecration of water, provision of safe drinking water and keeping water bodies clean which are difficult challenges.
- 5) The modern knowledge and skills of the forest dept. should be integrated with the traditional knowledge and experience of the local communities. The strategies for the joint management of forests should be evolved in a well-planned way.
- 6) The problem of degradation of land should be solved with the help of technology and expertise.
- 7) The people should be roused to orient institutions, attitudes and infrastructures, to suit conditions and needs today. The change has to be brought in keeping in view India's traditions for resources use managements and education etc. Change should be brought in education, in attitudes, in administrative procedures and in institutions. Because it affects way people view technology resources and development.
- 8) At present most wild genetic stocks have been disappearing from nature. Wilding including the Asiatic Lion are facing problem of loss of genetic diversity. The protected areas network like sanctuaries, national parks,

biosphere reserves are isolating populations. So, they are decreasing changes of one group breeding with another. Remedial steps are to be taken to check decreasing genetic diversity.

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DIGITAL TRANSFORMATION IMPACT ON TEENAGERS

Rutuja Kamble

ABSTRACT

This paper has in a view of studying digital transformation impact on teenagers. Latest trends and development in digitalisation effects the psychology and health of adolescent. Digital improvement will continue and teenagers can't refuse to ignore it. Digital gadgets and apps helps them in improvement of health, education and lifestyle but also cause them troubles like addiction of gadgets which affect their behavior. This research paper studies the positive and negative effects of digitalisation on teenagers.

INTRODUCTION

Digital era brought a very strong impact on every aspect of society especially teenagers, affect the way of communication, learning, construction of relationships and so on. Digital Transformation have grate potential to boost energy of teenagers especial ado scants. According to studies, the number of teenagers using digital based activities has been increased day by day. This activities includes socializing, e-mail, gaming websites. E-reading etc. Digital era is associated with information, communication, Knowledge & innovation. The ability to use digital technology, communication tool & or networks to access, manage, integrate, evaluate & create information are easily learned by teenagers because of digital transformation.

In addition to that the digital gadgets which includes, digital watch, I-pad, Laptop, brought all digital activities more closer to teenagers. Teenagers are the biggest victims and addicts of digitalisation. Teenagers are desperate to stay connected, they are afraid if they left out they will miss something.

Keyword:- Internet culture, Facebook Depression, Trolling, Sexting, Cyberbullying.

OBJECTIVE

- (1) To understand the positive and negative impact of digital transformation teenagers.
- (2) To understand the effects of digitalisation on psychology and health on the teenagers.
- (3) How can parents helps teir children to the use of digital gadgets efficiently.

INTERNET CULTURE

The internet culture is that people breed/ make a unique culture amongst those of us who are connected to internet. In this digital culture teens create social construct that are influenced by information sharing, creation & freedom of thought. Internet culture includes online communities, digital entertainment, gaming, use of social media, online discussion but also kind of fragile.

VIDEO GAMING / ONLINE GAMING

Digital transformation have brought amazing development in online gaming. These games attracts teenagers to play them (PUBG) and some how it becomes an addiction some studies indicates that video games, particularly violent. one can decrease their emotional awareness. These games are played online with other opponent which can brings aggression, anxiety, insomnia, depression, social phobia, poor academic performance and adverse effect on health video gaming can also enhance the multiple skills like better attention, visual processing, hand and eyes coordination Quick thinking and accuracy, can also.

DIGITAL EDUCATION

Digitalisation has affected every aspect of human life from communication to education. New methods of teaching have been introduced which made students thrilled at this concept of innovation and interactive. Digital class brings a complete transformation in classroom. The concept of digitalized classroom has not only made education interesting but also to enhance the performance of students. This helps in fast and accurate understanding of class and teachers keep students engaged in learning process and also get an instant and accurate outcomes at the end of the class.

SOCIAL MEDIA

Digital transformation change social media usage also due to new digital gadgets like Tablets, PC and phones. Social media usage has been increased due to these easy available gadgets. Social media attracts teenagers cause it make them close to their friends, favourite celebrity, fashion trends, lifestyle improvement and fitness videos. Facebook, Instagram and Snapchat are the most favourite apps of teenagers. It actually helps them for enhancement of individuals and collective creativity through development, growth of ideas for blogs and videos

of artistic and music. In some colleges and school uses blogs as teaching tools which helps them in improving communication, English and Creativity. Social medial gives them platform every picture or post they upload gets them a likes and comments, thus it helps them in boosting their moral. This becomes a pattern that leads addiction.

Digitalisation brought social media closer to teenagers with benefits along with lots of disadvantages like Cyberbullying, Online Harassment, Sexting, Facebook Depression and Trolling as well as Privacy Concerns. There are positives and negatives that come along with social media but it is just a way of communication method, just like face to face communication people can support and abuse others. It is important to make teenagers understand the consequences of overuse of social media.

DIGITAL LIBRARY

Many times we found teenagers reading on devices while traveling from one place to another this happens because of digital libraries. With the help of digital gadgets and apps it is easy for them to read anytime and anywhere. One of the favorite apps Kindle which is tending among teenagers as well as new apps like Dreame, Wattpad, Mangatoon, Webnovel, mobireads etc. are also popular among the teenagers. These apps also provide new concept of E-Writer which encourage teenagers to write their own new stories as a writer. Writers and readers gets connected with each other because of reviews and comments. Thanks to technology new feature has been added i.e. audio books. Audio books are just like listening to a book. This can be useful tool because it is a like storytelling just like Grandmother is telling story to her Grandchildren and this actually attract the teenager most. It also helps them to learn pronunciation while listening to them but it also reduce the reading efficiency of teenage.

Digital library attracts teenagers because it have no physical boundaries for accessing books, it also available 24×7 and at reasonable cost with registration with of apps. But due to this new challenge has arise in front of librarians because childreans and youngsters no longer visit library so it is important for them to get digital. To overcome such problems libraries are now provide online websites which help them in reissue and in providing webpages.

DIGITAL SHOPPING

Following a celebrity and his style is the popular among the teenagers. Favourite celebrity clothings, style everything attracts the teenager. Following the style icon and living like them is very common between them. Digitalisation also make this easy to them, following celebrities websites make them more closer to them, nowadays celebrities like Deepika Padukone, Sonam Kapoor, Anushka Sharma, Hritik Roshan, Yuvraj Singh are came up with their online shopping apps and websites. They also play contests and games with them where they can their signed vouchers and gifts. These websites and apps make so many things easy like checking and selecting clothes online, selecting a size, making online payment or cash on delivery, and getting clothes within 3 or 4 days isn't it easy? But at a one point it become addiction. Teen lives in an online world and shopping is their favourite past time. This addiction can become Out-Of-Control and parents needs to take some steps to stop these habits.

FOOD DELIVERY APPS

Eating is one the favorite hobby of teenagers and thanks to digitalisation this also given them a chance to eat anytime, anywhere from their favourite restaurant. UberEats, Swiggy, zomato and so many apps are providing delivery of food at any time 24×7 with discounts and vouchers. Late night studies or group studies are popular among them so thses apps helps them to solve problems of making food or going at restaurants for saving their time. But sometimes teenagers gets on wrong track like for them food is just not something that they need to stay alive physically but socially as well. They use food as a way to express who they are with the helps sharing and clicking pictures of food before eating.

IS DIGITAL TRANSFORMATION IS BOON OR BANE?

Digitalisation has connected people from all over the world. Thanks to What's apps, Skype, Facebook, Viber etc we are able to stay in touch with friends that we might have normally drifted away due to distance. Digitalisation has increase awareness too, today we get what is happening around the world because of minute to minute updates. Digital gadgets helped to reduce the use of paper now that you can store documents online. Digitalisation has encourage self-education also it can also use for reading, enhancing analytical skills, editing videos and more. But digitalisation making teenagers dumber and lazy. In old times, our Parents use to write letters now instead of that they use email. Even for remembering phone number, birth dates we depend on Mobile phone and Facebook. Because of spell check and auto correct we do not make efforts of remembering

spellings. We ignore those who are sitting next to us while we are busy to talk with a person who are miles away.

It is easy to blame Digital World. Digitalisation can be a Boon or Bane but it actually it depends on the parents. As a parents tell them to make best use of digital world. Parents should do research what their child can do online so it can help them to gain learning activities and not just an excuse to escape from real world. But still parents can take some precautions :-

(1) Excessive use of internet can be harmful so there should be a time limit to screen which parents and child should decide mutually.

(2) Tell childrens to use technology for constructive purpose.

(3) There has to be a fixed time of the day when the family sits together and interact and share their day to day experiences.

(4) It is very important to block access of inappropriate sites, chatrooms etc.

(5) Parents are the first teachers of childrens, they learn from them. If you want them to listen to what you are saying then you need to put away your devices when talking to them.

CONCLUSION

Digital transformation will continue to advance and give improvement in communication. On the other hand over addiction of digital gadgets effects the health and behaviour of teenagers. But at the end it is important to let them know how it can be appropriately and safely use.

Fact is that for all its pitfalls, digitalisation here to stay and there is no escape from this. It is wonderful if teenagers use it appropriately.

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A STUDY ON EFFECTS OF DIGITALIZATION ON FINANCIAL INCLUSION AND STABILITY

Ella Gaglani

ABSTRACT**1. PURPOSE**

This paper provides a discussion on some issues associated with digital finance – an area which has not been critically addressed in the literature. Digital finance and financial inclusion has several benefits to financial services users, digital finance providers, governments and the economy; notwithstanding, a number of issues still persist which if addressed can make digital finance work better for individuals, businesses and governments. The digital finance issues discussed in this research paper are relevant for the on-going debate and country-level projects directed at greater financial inclusion via digital finance in developing and emerging economies.

2. METHODS

Primary method – questioners filled from various small entrepreneurs & self employed small businessman. Secondary method –Internet, magazines of microfinance ,research papers etc.

3. RESULTS/FINDINGS

Some key results/findings of the research are as follows,

- *The poor and uneducated communities that do not have the basic financial literacy to use and understand digital finance.*
- *Small businesses in urban and rural areas in the developing world do not accept digital payments due to high bank fees and high set-up costs*

4. CONCLUSION

The basic conclusion which can be derived by studying digital financial measures taken by government were as follows ,

- *digital finance has the potential to provide affordable, convenient and secure banking service to poor individuals in developing countries.*
- *digital finance adoption can significantly reduce the circulation of bad (or fake) money, etc.*

5. KEY WORDS

- *Financial inclusion, Digital Finance, Financial Stability.*
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INTRODUCTION

This study examines the impact of digital finance for financial inclusion and financial system stability. Focussing on digital finance, this article provides a discussion on digital finance and explores the impact of digital finance for financial inclusion and financial system stability - an issue which has not been addressed in the literature. At a conceptual level, the discussions also address the benefits and risks of digital finance, digital financial inclusion and financial inclusion. Since 2010, the G-20 and the World Bank have led the initiative for increased financial inclusion in developing countries to help reduce poverty levels in developing and emerging economies (GPII, 2010). Today, the relevance of digital finance and financial inclusion for poverty reduction and economic growth is attracting the attention of policy makers and academics, largely because of the number of issues that persist which if addressed can make digital finance work better for individuals, businesses, governments and the economy. Digital finance and financial inclusion have several benefits to financial services users, digital finance providers, governments and the economy such as increasing access to finance among poor individuals, reducing the cost of financial intermediation for banks and Fintech providers, and increasing aggregate expenditure for governments. Notwithstanding its benefits, digital finance and financial inclusion have not adequately permeated vast segments of the population (G20 Summit, 2013), which suggests an existing gap between the availability of finance, its accessibility and use. One area where the disparity is quite pervasive and is receiving increased attention particularly among Fintech providers is digital financial inclusion, financial data inclusion and digital finance. The relationship between these, and the issues they pose for financial inclusion have received very little attention in the literature. Also, Fintech providers can promote economic growth during good economic times by increasing the volume of financial transactions in the financial system, although, it is still unknown whether Fintech providers and their activities can exacerbate economic crises during bad economic times. This issue is also discussed in this article. The discussion in this article contributes to the on-going debate led by the World Bank in support of financial inclusion as an effective

solution for poverty reduction in developing and poverty-stricken countries. Insights from this article can provide national and global policy makers with an understanding of the issues associated with the rapid development of digital financial services, its delivery to the poor and the risks involved in digital financial inclusion. Two, for academics and researchers, the discussion in this article adds to the emerging financial inclusion literature that attempt to proffer solutions to achieve sustainable financial inclusion particularly in poor economies. The ideas in this article calls for more collaborative research to better understand the relationship 4 between digital finance, financial inclusion and digital financial inclusion as well as the risks and alternative models and perspectives in this area. The discussion in this article also contributes to the few and emerging studies that examine the role of financial innovation for banking and financial system stability. Insights from this article can improve our understanding of the functions of Fintech companies, and can also help regulators understand the link between Fintech, financial inclusion and financial system stability. The remainder of the article is structured as follows. Section 2 presents the conceptual framework or foundations for digital finance, Fintech and financial inclusion. Section 3 discusses the issues associated with digital finance.

Section 4 provides the summary of the pros and cons of digital finance. Section 5 concludes.

REVIEW OF LITERATURE

Geoghegan (2008) focused on financial inclusion of older people by suggesting that being poor is very expensive. The old maybe cash-poor by asset-rich and hence making them aware of the financial options available to them is crucial. About 10% of UK's population is financially excluded. The old may not be comfortable dealing with the new-age technology-enabled banks and so may prefer to stash cash in the house. He highlighted that adult financial education is imperative. Dr. Jasmine Gupta, International Journal of Research in Management, Economics and Commerce. This work is licensed under a Creative Commons Attribution 4.0 International License Chima (2010) observed that the sub-prime crisis that hit US and UK showed how FI measures can fail when not backed by strong policy and regulatory measures. The sub-prime crisis brought to fore the fact that inclusion at higher than normal rates and indebtedness arising out of it, cannot be sustainable. Appleyard (2011) studied the role of Community Development Finance institutions (CDFIs) in certain geographical areas of US and UK in providing enterprise finance to SMEs. CDFIs help overcome financial exclusion by providing local sources of loan finance to micro, small-and-medium-sized enterprises and social enterprises. According to Appleyard, inspite of laudable work done by CDFIs, due to policy initiatives, significant gaps in the market and uneven geographical coverage got created that has led to financial exclusion.

Cohen and Nelson (2011) presented the various facets of financial literacy. Determining the type of delivery channel –whether it will be a classroom face-to-face training or through print, mass media or digital technology, whether it should be undertaken by financial institutions or informal institutions and their scope of coverage are important to building a financial literacy model. How to evaluate the success of the model, whether by the incremental number of accounts opened, or by the increased savings rate in accounts or by improved financial condition is also explained in their research work. According to Demirgüç-Kunt and Klapper (2012) who attempted to study FI in Africa using Global Findex 2011 data to understand the usage of formal account and credit, less than a quarter of adults use formal account. World Bank Enterprise Survey data was also analysed by them to understand the usage of financial services in Africa by SMEs as compared to other developing countries. According to Kunt and Klapper, bank financing to SMEs is less than 8%.

OBJECTIVE

- Financial inclusion intends to help people secure financial services and products at economical prices such as deposits, fund transfer services, loans, insurance, payment services, etc.
- It aims to establish proper financial institutions to cater to the needs of the poor people. These institutions should have clear-cut regulations and should maintain high standards that are existent in the financial industry.
- Financial inclusion aims to build and maintain financial sustainability so that the less fortunate people have a certainty of funds which they struggle to have.
- Financial inclusion intends to increase awareness about the benefits of financial services among the economically underprivileged sections of the society.

RESEARCH METHODOLOGY

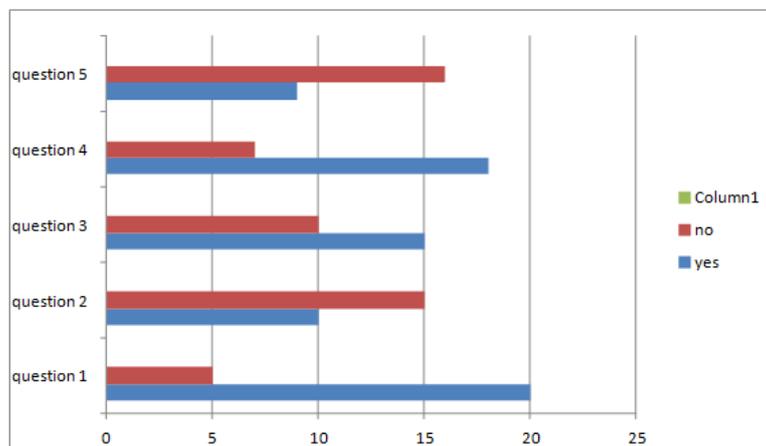
- Methodology is the systematic, theoretical analysis of the methods applied to a field of study it comprises the theoretical analysis of the body of methods and principles associated with the branch of knowledge. The research methodology helps us to collect data through two forms i.e. Primary data and secondary data .The research methodology used in this research is through use of both primary and secondary data collection

method. Primary data was collected by framing questionnaires on the respective topic and in order to collect data from respondents online form through Google docs was utilized . Secondary data was collected from various published sources like reports, articles, magazines, journals, internet by surfing on multiple sites.

QUESTIONNAIRE

1. Is your household having one bank account?
 - Yes
 - No
2. Are you aware that banks are opening zero minimum balance account for everyone?
 - Yes
 - No
3. Do you have any grievances in your no frills account?
 - Yes
 - No
4. Have your household borrowed or taken a loan?
 - Yes
 - No
5. In past three years have you refused a loan or credit?
 - Yes
 - No

DATA ANALYSIS



Question No	Option 1	Option 2
1	20	5
2	10	15
3	15	10
4	18	7
5	9	16

SUGGESTION

- Number of commercial bank may be increased in India, though maximum population in India are using the banking services, if the banking sectors opened banks in the remote and rural areas all the people can utilize the services of the banking sectors at the level best for the improvement of the life standard of the themselves.

- The banking sectors have to liberalized the security level of the borrower to borrow money from the bank in an easiest way, they banking sectors have to announce the new schemes offered by them to all the citizen of India for the proper utilization of the fund.
- Though many of the banks are providing the technical services to the customers, most of the customers are not aware of the services provided by them, hence the banking sectors have to create the awareness to the members and the customers about the services provided by them, hence the banking populations can use all the financial and non-financial services of the all the banks in India.
- All the banks are installing the ATMs in all the places, but some time the RBI is changing the policies and instructions for the using of the ATMs, many of the ATMs are not in good conditions for immediate use, some time it says that, sorry the operations are failed, many 208 ATMs some time it is giving the receipts rather money, there may be a high technical implementations for the smooth use of the ATMs and proper training to the guardian of the ATMs center and to give the practical knowledge to the rural and remote customers regarding the usages and the services available in the banking sectors.

CONCLUSION

Strong and strenuous financial institutions are the pillars of economic growth, progress and success of modern economies. Lack of accessible, affordable and appropriate financial services has always been a global. According to the global financial development report only half the adults of world population has access to formal financial sector which means still fifty percent of total world population is financially excluded from the purview of formal financial system. In case of India also which is said to live in villages, it is estimated that significant proportion of more than 6 lakh villages do not have even a single bank branch which strongly implies that financial inclusion is a big necessity not only for India but is required at global basis. The present study has concluded that distribution pattern of savings and borrowings among adults of different developing nations including India is similar however level of income, age, gender profile, level 212 of education and locality plays an important role in accessing the formal financial sector to fulfil their financial needs. Also the study reveals that even if people are aware about various financial services still they are not using those services. This issue needs to be addressed. RBI vision for 2020 is to open nearly 600 million new customers' accounts and service them through a variety of channels by leveraging an information technology. However as concluded by the study the improper repayment, need for additional workforce, time consumption, high cost and illiteracy are continuing to be a road block to financial inclusion in many areas. Consequently many financial institutions are not adopting fully fledged financial inclusion plan. In developing countries both market and government as institutions have their limitations but it is necessary to design government policies that are attentive to those limitations. For achieving complete financial inclusion and inclusive growth the RBI, NABARD, Government and the implementing agencies will have to work together so that financial inclusion can be taken forward. There should be proper financial inclusion regulations in our country and access to financial services should be made through SHGs and MFIs. Thus financial inclusion is a big road which India needs to travel to make it completely successful in order to achieve inclusive growth in coming years. Financial Inclusion has not yielded the desired results and there is long road ahead but no doubt it is playing a significant role and is working on the positive side.

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LEARNING BY THE LEARNERS IN THE DIGITAL WORLD ISSUES AND CHALLENGES

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ABSTRACT

Digital techniques are transmitting into human beings everyday life and all other factors that are related with grasping knowledge that may be linked with learners, various forms of learning & knowledge, and sources or ambience. Knowledge in digitisation world is a spontaneous and productive procedure instead of a indirect and constructive procedure; much concrete, 'data driven', authentic and substantial; and the concentration has now moved on 'knowledge building' rather than on 'knowledge gaining'. Researches, articles, reports, and etc. shows that in modern era 'informal education' is more engaging and effective than 'formal education'. Requirements of learner have also changed dynamically in digitisation era if we talk about social context – social values, social contacts, norms due to interference of new ideas, belongings and social psychologies, pressure and impact of media, communication technology and new creations. Learner is gaining knowledge through new ways of intellectual ideas, social networking and social communication. Innovation practices of learners such as ways of gaining knowledge; mode of learning; method of applying ideas and learning; and ways of linking knowledge has transformed drastically.

With this digital transformation in modern era, some issues and challenges like issue of skills; challenge of social responsibilities, educator & learner; challenge of data storing; issue of accessibility (anywhere and anytime); and issue of relevance and authentication of data. These problems need to be early improved, otherwise they will become giant issues which may go beyond control and make havoc in the atmosphere. In this paper the researcher tries to explain all these issues and challenges.

Keywords: Digitization, Flexible Approach, Digital Divide, Half-Life of Knowledge, Digital Vellum, Digital Dark Age.

INTRODUCTION

'Single class, single educator, single source, 1 subject and 1 topic in a stipulated time duration' - does works for a student in the modern digital era? The answer is of course – 'NOT'. Technology changes the pattern, how people live, how they exchange their thoughts with each other, intellect with other people, play, learn, gain knowledge, and exchange ideas. It has also changes the reference of learner i.e. how they get themselves educated?

Digitisation also means Computer age or Industrial Revolution. E- Kranti has begun in India from National e-Governance Plan (NeGP) in 2006 by (DeitY) Department of Electronics and Information Technology under (MeitY) Ministry of Electronics and Information Technology It gave more emphasis internet facilities ; e-Governance; e-services for government activities; digital lockers in banks; e-Education; e- Health etc. Government has also launched an umbrella programme i.e. Digital India Programme on July 01, 2015 for converting India into digitally prone society and knowledgeable economy. Some of the importance of this programme is as follows:

- Digital infrastructure and atmosphere created.
- E-Governance and digitals services
- Emphasis to digital education – for digital knowledge given to Indians
- (NOFN) National Optical Fibre Network Development and in rural areas Bharat Net is connected with quite high internet speed.
- Wide range of domains are covered

FACTORS AFFECTING LEARNING

Learning is affected by various factors – that may be related with learner; types of knowledge & experiences; and resources. Factors which are related to learners includes physical and mental health of the learner; his acceptance, willingness & determination to learn; capabilities; interests in new technology, attitudes & aptitude; aspiration level and motivation; and self-goals setting. Factors related with the various forms of learning and experiences includes nature of information, subject material or content for information, methods and techniques adopted for learning; till what extent the procedure of interrelation, and practice includes; feedback in proper level and at required schedules; and also taken the idea of 'what has been learned till now'. Factors affecting the

resources are availability, qualitative and appropriate management of human and capital resources related with learning like educators, teaching learning aids like ICT and other new digital techniques, ambience including institution as well as classroom and home environment etc.

CONCEPT OF 'LEARNING' TRANSFORMED TOTALLY IN DIGITAL ERA

The three basic and broadly recognised theories of learning are 'behaviour', 'cognitive' and 'constructive' which were developed when learning was not imparted by digitisation. Digital technologies are converting our day to day life into more easy and digital manner. In present digital world grasping knowledge has become the most prompt, needed and productive procedure instead of an indirect and constructive manner. Emphasis is now on 'knowledge creation' rather on 'knowledge acquisition' and learning is more 'data-driven', up to the mark. Most of the learning is now a day's related to informal learning. Idea of Learner has also transformed drastically in this digital world in terms of:

- Social behaviour – social rules, ethics, intellect etc.
- Interference of new ideas, thinking and social psychologies
- Determinants of media, innovations and technology: Technology is a continuous mental process, behaviour and approaches towards learning.
- Impact of information and communication technology: Learner is learning from new ways of communications, and information.
- Knowledge gaining practice of learner has changed very much – methods of gaining knowledge; various ideas of learning; methods of applying skills and knowledge; and techniques of correlating and linking knowledge has changed.

'DIGITIZATION' – BREAKING THE MONOTONY UNDER LEARNING & LEARNER'S POINT OF VIEW

The argument in favour of this digital world is that 'learner' is the centre of attention, and he is very much self-directed and self-motivated. Digitization provides the very 'Flexible Approach' in learning the new things. The monotony and limitations of single classrooms in terms of fixed rules, fixed duties of learner and the educator, strict norms, prior set behaviours and thinking manner are now relaxed or being made flexible in this world of digitization.

Now, the idea of learning to the learner is,

- Anywhere
- Anytime
- At his own terms and conditions
- Through his own ways and styles
- At his own speed

in this digital era.

LEARNING BY LEARNER IN DIGITAL ERA: ISSUES AND CHALLENGES

With this digital conversion of learner and learning, certain issues have also evolved and challenges have also acknowledged which needs to be early redressed. Few of the important and major issues and challenges in this context are as follows:

1. Issue of motivation and skills required
2. Onus of pursuing social ethics responsibilities
 - On the part of the community
 - On part of all teachers
 - On the part of all related learners
3. Argument on challenge of data storage
4. Issues of using the resources
5. Issue of reliability and authenticity of data

1. ISSUE OF MOTIVATION AND SKILLS REQUIRED

In this world of digitization a learner know his learning objectives through appropriate learning through proper utilization of the learning tools and facilities, if he is in possession of some skills that are important of this era and is a minimum requirement for all learners. No learner can exist in this world without gaining necessary skills and efficiency. These skills are generally related to 21st Century Skills or New Formation of Skills. Technological enhancement itself injected in people the motivation to think differently or in creative aspect in order to identify the new types of issues.

The major challenge of this world of digitization in for learners and learning is to make sure the promotion of 21st Century Skills or New Types of Skills in learners that also includes digital education and basic skills through ICT; skill required for access as well as appropriate and intelligent use of digital resources, search engines (i.e. GOOGLE), gazettes related to information technology, artificial intelligence methods etc; skills of arranging, managing and processing of data or information. These skills will further strengthen by introduction of transformed and different thinking process, problem solving ideas, innovation and scientific belt also. And acquisition of these skills facilitates the development of knowledge and skills required at 'Reflective Level of Learning' and the skills needed in 'Knowledge Creation' through technology. Later the skills of collaboration, relativity and communication are also required for learning and learner. There is also required for the development of a sense of knowledge, so that they should give such manners that they become techno-friendly or techno-savvy for grasping socio-cultural and ethical context.

2. Onus of pursuing social ethics responsibilities

Rights of information, accessibility, privacy, self motivation and self-control are the fundamental expectations from grasping information and human capital on which the base of informational society must be dependable rather privileged, powered and special interested; and it is the onus of all the stake owners who are included in the planning, developments and implementations of such information systems that facilitates the social transmission, that they have to understand the social responsibilities and acts likely for the advantage of social environment and all. This conversion of social culture may go to either empowering or else make humans as slave to the digital technology and it all is dependent on the dedication, sincere efforts and honesty of stake owners in doing their duties and responsibilities.

Responsibilities for communities in terms of learners and learning skills in digital era is that, the community has to ensure the equality in terms of allocation of resources and devices required for gaining knowledge by the learner in the phase of digitization or else it may result in forming of 'digital division'. Community should take the onus of creating supportive environment and facilitates the conversion as per the requirement of the digitization. A better understanding of society norms and ethical issues as per changing environment has to be backed by the community and it must be brought up and cultivated in a proper manner.

Onus of teachers in relation of learner and learning in digital era is that the educators themselves needed to be in the possession of 21st Century Skills; they have to be digitally sharp and efficient and must be aware of intelligent, crucial and rationale use of skills. They must absorb such skills that provide the desired teaching-learning atmosphere and make information more precise and focussed by removing the distractions. There is also a requirement of learning of such judgemental skills for teachers that are efficient and employable in digital phase. Educators should also transmit their nature and understanding towards technology and digitization that – how to learn and use technologies in more supportive learning instead distracting it.

Onus on part of learning in the form of learning in digital phase is that the learner should learn and use efficiently the so much needed 21st Century Skills and must get acquaint themselves with appropriate, judgemental and intelligent use of these skills, digital allocation resources and services. They must learn the digital ethics, so they must respect the privacy of people. The learners should understand the importance of equity and learning cooperation and they must follow it with real enthuse from the bottom of the heart. They should be self-motivated and self-directed but no techno-driven and should follow a techno-savvy approach by avoiding distractions.

3. ARGUMENT ON CHALLENGE OF DATA STORAGE:

Digitisation is related to production of learning and providing information at a wide rate. The turnover of knowledge is so fast that it may go out of human control in coming future and it will become difficult to manage for humans. Life of knowledge is depleting at a very high rate.

According to BBC News on (27 April, 2015), Data specialist of EMC estimated that the world is contained with 4.4 zettabytes (4.4 trillion gigabytes) of data till 2013 and it is expected to rise till tenfold by 2020. So much of informational data is generated every day that a scarcity of data storage is being felt around the world. Method

to preserve the digital data or information for more periods is another challenge which requires early solution; and the need of forming '**Digital Vellum**' is demanded by many stake owners in this regard.

Another important issue is the easy loss of data that may be because of removal by chance or by mistake, willingly or unwillingly, corruption, theft, obsolescence or any other sort of incident, disasters – may be natural or man-made, or any other sort of cyber warfare. It may lead the present civilization into a '**Digital Dark Age**'.

4. ISSUES OF USING THE RESOURCES

Appropriate and non-intervened accessibility of network is a huge issue which needs to be acknowledged because of the learning may not get interfered. It requires a proper understanding and involvement in this issue like the cost factor (in browsing or online subscription), transform or advancement in operation systems, upgraded modern browsers and upgraded versions of writing, creating or editing etc. Another issue is that such cases may be well preserved but not readable due to the loss of expecting keys or dropping compatibility or some other problem.

5. ISSUE OF RELIABILITY AND AUTHENTICITY OF DATA

As the information is generated in bulk daily, so, large data or information is available to the learners now days. It is the need of time that the learner should understand that it is his responsibility to ensure the authenticity, reliability and validity of the data before using it. Distractions and issues like – hacking and tempering etc. need to be pointed out properly and time to time for providing better learning atmosphere.

These issues and challenges need early attention otherwise they will become so difficult that they may go beyond control and create havoc in the environment. For that collaborative effort is needed from all stake owners. The challenges marked through this paper must be accepted & countered with real spirit and the required and important steps should be taken as soon as possible.

Collaborative learning that includes a proper joint efforts of 'Virtual Space' (physical space, technology & tools etc.), 'Social Space' (collaborative learning activities and responsibilities), and 'Mental Space' (personal learning activities) may show a substantial and effective results in this context.

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DIGITAL TECHNOLOGY AND ITS IMPACT ON STUDENTS' COGNITIVE DEVELOPMENT

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ABSTRACT

Technological innovations have given boon to the cognitive development students. Societal interactions are done more with the digital methods due to the use of smart phones. The growth of technology is effecting the students to a great extent. Almost every activity of our life is controlled by electronic media like TVs, computers, smartphones, tablets etc. The televisions have now become smart, computers are updated with the technology every now and then, smartphones have adopted the technology of 5th generation. The day is not far when the technology will be so powerful that we will not be able to do anything without technology. With the help of social media many of the things have become easy. People can interact with each other very easily. Lot of exchange is possible through it. Digital technology is the use of computer and internet for the purpose of exchanging information, learning and understanding various things electronically. Young children are not the exception for this. They use the technology not only for educational purpose but for getting in touch with others, gaming, exchanging photographs and other information etc. thus the technology have positive as well as negative impact on their life. It is generally seen that computers increase the number of self-self interactions. If these computer related trends continue, and if technology makes it possible for children to engage in self-self interactions, mental growth will be heightened. This paper highlights the utilization of Digital technology on student's cognitive development. This paper studies the transformation of teaching learning process due to introduction of digital technology and its impact on Student's Cognitive development.

Keywords: Digital Technology, Cognitive development, learning, smart phones, laptops, Computers.

INTRODUCTION

Education now adays is on the edge of being changed with digital technologies, even so, it has been on that edge for some decades. The line I want to make develop in this composition is that it was great demand for the digital technologies for the progress of teaching learning processes and the development of the capabilities of learning methodologies. It is time when we moved education beyond the threshold of being transformed, and make it digital and to let it become what it desires to be in future.

Digital technology is generating new learning opportunities for students, professionals, business persons and for everyone who is engaged online, digital environment is faculty change educational practice through the use of hybrid courses, personalized instruction, new collaboration models and a wide array of innovative, engaging learning strategies.

Due to so much of exposure to Digital Technology, even now so many primary and secondary school students are given different projects based on using technology, which they compete with utmost ease as they are open to use of technology in Smart phones.

DEFINITION**Digital Technology**

“Digital technologies are electronic tools, **systems**, devices and resources that generate, store or process data. Well known examples include social media, online games, multimedia and mobile phones. Digital learning is any type of learning that utilizes technology. It can take place across all curriculum learning areas.”

Cognitive development

“Cognitive development is the construction of thought processes, including remembering, problem solving, and decision-making, from childhood through adolescence to maturity”

OBJECTIVES OF STUDY

- 1) To study the transformation of teaching, learning from traditional to Modern methods.
- 2) To analyze the different medium used by students to learn through technology.
- 3) To understand the changing cognitive capacity of the students through digital technology.

LITERATURE REVIEW

- According to journal THE CONVERSION, Young children learn through play. That's why it's the basis for early education in the UK, the US, Canada, Australia and many other countries around the world. Data

shows British three- and four-year-olds spend around four hours a day on screen time – including at least one hour on games.

- According to an article in ECONOMIC TIMES Brick-and-mortar retailers such as Lifestyle International, Shoppers Stop and Arvind Fashions are tweaking their merchandise mix or using technology to attract younger consumers who shop online.
- According to an article in Indian EXPRESS Younger readers may have never heard of it. The middle-aged may dimly recall it, though it was one of the most influential business books of the 20th century, with 95 predictions about how the internet would disrupt business models and power relations.

THE PURPOSE OF USING DIGITAL TECHNOLOGIES

- To Facilitate the discovery, preservation and sharing of knowledge
- To Expand the range and effectiveness of scholarly communications;
- To, Enhance teaching and research through effective use of digital technologies and information
- To, Empower staff and students through the provision of digital skills training;
- To, Develop outreach, online learning, educational resources and student support;
- To, Sharing and implementation of best practice through the creation of a university-wide dialogue on digital innovation.

Digitization has also got a new meaning after the introduction of smart phone which is comparatively less heavy as another type of equipments used by students for using digital technology. Students learn from digital technology they have access to this technology especially in private schools and universities, However the **Jawahar Navodaya Vidyalayas** are on a mission to provide access to quality education through digital learnings across its 500 schools since year 2013.

IMPACT OF TECHNOLOGY ON COGNITIVE DEVELOPMENT

Today, India is an important destination for education among the world's top destinations. We have the best universities and colleges with excellent digital instruments which provide excellence in higher education and improved standards of digital education. Most interesting among this is that technology has developed to transform the way students in India use the educational content. Moreover, the use of internet-based smartphones are taking quality learning to students across topographies in India.

Today, small children use digital technology for seeing their favourite programmes like cartoons, poems, rhymes, drawings, and many other things through their smart phones, tablets, and digital smart TVs. Due to digital technology, education is imparted to the students through flexible formats. So the students of all age groups are learning with fun. And the perception of parents and teachers is also changing due to digital learning. Today, the educational institutions are making efforts to focus their attention from the traditional methods of teaching to the modern methods of digital world.

The ways of learning are as follows

Formal learning

e-learning

smart phone based learning

television based learning

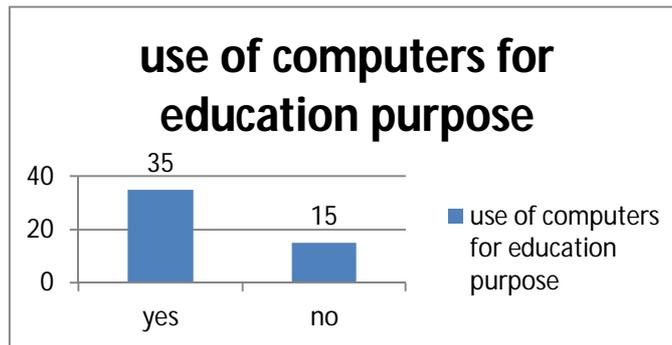
educational computer games

entertainment computer games etc.

RESEARCH METHODOLOGY

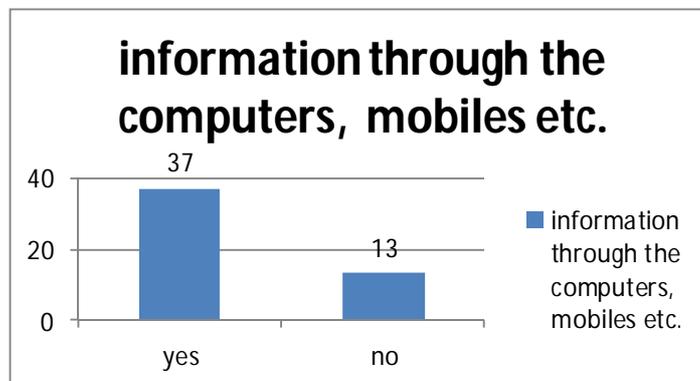
For primary data and to make the research more effective a questionnaire was prepared which was asked randomly from 50 students and the result was analysed to find out the effect of digital technology. for secondary data information was collected from books, journals and search engines.

**DATA COLLECTION AND DATA ANALYSIS
RESPONSE FOR USE OF COMPUTERS FOR THE EDUCATION PURPOSE**



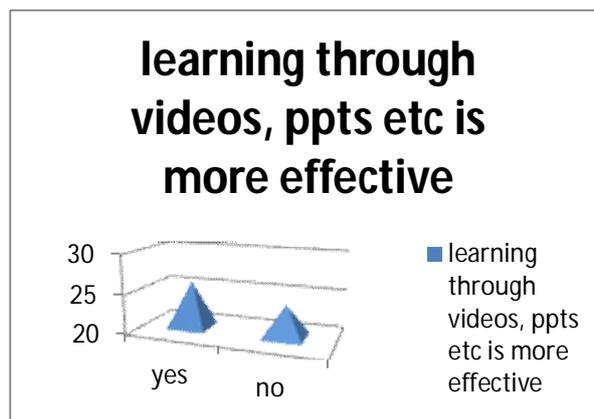
It was realized that 35 students feel that use computers for educational purpose is very effective that means 75% students are in favour of using computers for educational purpose.

INFORMATION THROUGH THE COMPUTERS, MOBILES ETC.



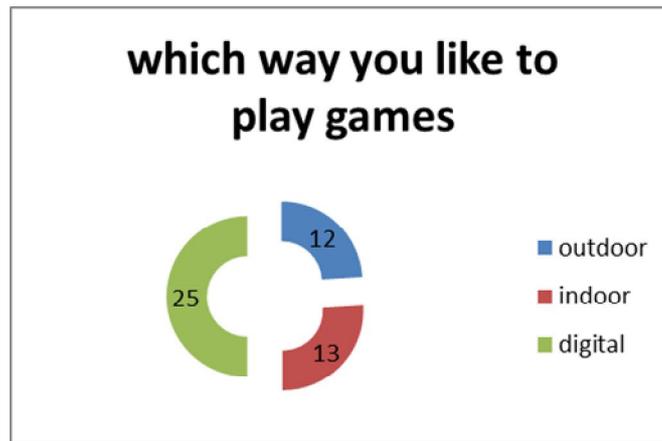
It shows that about 54% students find it easy to get information through computers, mobiles etc.

USING VIDEOS, PPTS ETC. FOR THE LEARNING PURPOSE IS MORE EFFECTIVE



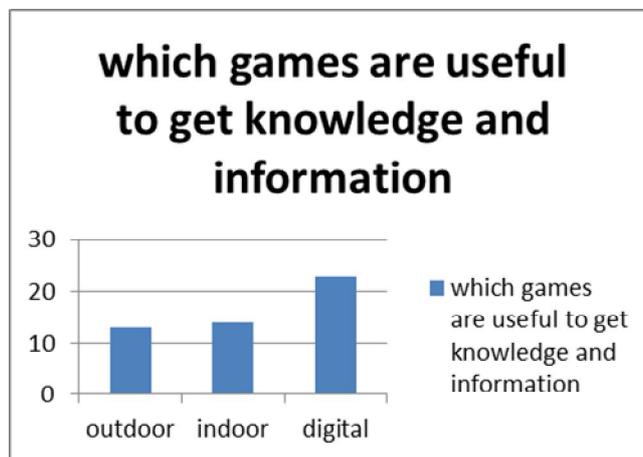
It shows that more than half of the students from the sample feels that learning through videos, ppts, etc is more effective that means again digital technology is very effective in formal teaching also.

WHICH WAY YOU LIKE TO PLAY GAMES



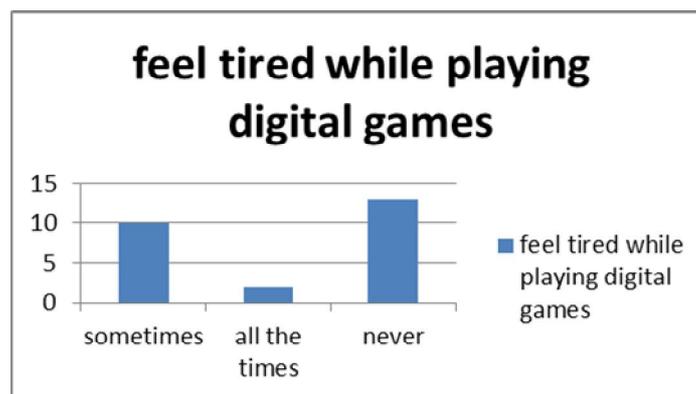
This shows that highest number of the sample agree that they like to play digital games over the physical games.

WHICH GAMES ARE USEFUL TO GET KNOWLEDGE AND INFORMATION



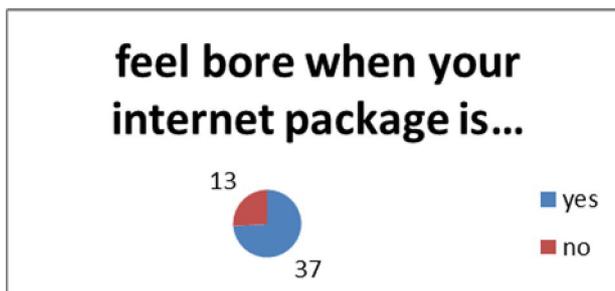
Highest number of Students feel that digital games give them more knowledge and information than the outdoor and indoor games.

FEEL TIRED WHILE PLAYING DIGITAL GAMES

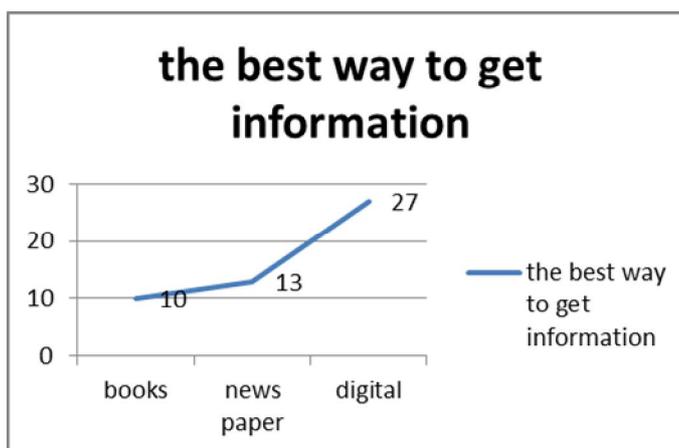


This shows that students are so much habitual of playing games that they are not even feeling tired, highest number of students never feel tired while playing digital games.

FEEL BORE WHEN YOUR INTERNET PACKAGE IS OVER AND YOU ARE NOT ABLE TO PLAY GAMES



THE BEST WAY TO GET INFORMATION



It shows that 54% of the students feel that the best way to get information is the digital medium only

From this it is realized that the digital technology is very useful to the students and it enhances their knowledge but on the other way it makes them dependent on it. And if they are used to and habitual of it they are not trying any other sources and they feel stucked in that only. so if the digital technology is used effectively and in control it will prove the boon.

CONCLUSION

Technology changes the way kids socialize and interact with others, which can have huge impacts on their mental and emotional well-being. It has now become common knowledge that high levels of social media use, in both kids and adults, can lower self-esteem and create negative moods. While cell phones which is the most common and advanced medium to use digital technology can be used as learning tools, it is a challenge to make sure students are using them for school-related tasks. ... Cell phones can be a helpful learning tool in class. But they can also be used by students to access information while taking a test, leading to cheating. More than 222 million active gamers have been spending an average of 42 minutes playing mobile games every day over five sessions in the country as of 2017[source Economic times] Considerable amount of students would be there in this active gamers as students are free consumers after their schools and are very attracted towards games.

Ninety-three percent of students access the Internet everyday and 73% of students use the mobile phone to access the Internet, according to a Student Online Behaviour Report by HT Digital and IMRB.[source Livemint] The best part to use and learn digital Technology as nowadays everything is available online, if a student wants to secure admission to any course, he/she have fill the form online and almost every school has computer lectures as part of their curriculum right from kindergarten till their Secondary School examination, and sometimes it is in the higher studies. The students who are well versed with technology find suitable jobs easily and cope up with the ongoing competition smoothly. Digital technology includes access the internet, and quickly gains information that will help them advance in any subject.

Technology use supports the flipped classroom and blended learning concepts being incorporated in most Foreign countries and slowly it will find a space in the Indian era of learning. The technology has a strong impact on the quality of life of the human: the exposition of the children in young age to digital gaming favors advantage of learning capability not only in terms of highly successful in educational path, but much more on the cognitive functionality by enhancing the verbal/visuoperceptual performance. The technology changes the life of the people improving the wellness in the social context and refining the learning process, enhancing the

cognitive performance and so favoring high adaptability in the elaboration information processing. Taking into account that, the learning processing reflects the changing, becoming ‘smart learning’ for improved cognition. Still their must be considerable care on using the digital technology especially which should not take toll on their mental health

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A POST ACQUISITION & JOINT VENTURE STUDY ON PHARMACEUTICAL COMPANIES IN INDIA**Shriram Adhishesha**Nirmala Memorial College of Commerce & Science

ABSTRACT

The objective of the study is to analyse and compare the pre and post-acquisition and joint venture financial performance of three pharmaceutical companies, namely Aurobindo Pharma Limited, Lupin Limited and Sun Pharmaceutical Industries Ltd through ratio analysis, with greater emphasis on ROA, RONW, EPS, DE and NPM as financial efficiency parameters. Data were collected from the published annual report and accounts of the selected companies and were subsequently analysed applying t-test through MS Excel. The data was being collected for three years after the acquisition and compared with the previous year's financials. The study concluded that acquisition and joint venture of the selected firms have resulted in no significant change in the financial performance of these firms. Our study recommended that companies should be aiming at more profitable and synergetic companies for enhanced financial performance to reap the benefit of M&A in the Indian pharmaceutical sector.

REVIEW OF LITERATURE

Momodou Sailou Jallow, Massirah Masazing, and Abdul Basit have examined the effect of merger & acquisitions on financial performance on United Kingdom firms. The research included 40 companies that are listed on the London Stock Exchange (LSE). The comparisons were made between 5-years premerger & 5-years post-merger & acquisition financial ratios. The independent variables of the study are Mergers and acquisition and meanwhile the dependent variables are Return on Assets, Return on Equity, Earning per Share, and Net Profit Margin. The outcome of the research showed that the net profit margin not affected by mergers while return on asset return on equity and earning per share affected by mergers and acquisition.

Muhammad Ahmed and Zahid Ahmed studied on the objectives of mergers and acquisitions, as to why organizations undertake the inorganic mode of expansion. This particular research is conducted to get the effect of mergers upon financial performance regarding acquiring firms in a variety of manufacturing industries of Pakistan. Sample of this research consists of twelve manufacturing companies involved in the process of merger during 2000-2009. Three years before and after-merger data is used to test the significance of study. The results of this study show that Pakistani companies are no different than the companies in other parts of the world. On the basis of findings, it is concluded that overall financial performance of acquiring manufacturing corporations insignificantly improved in after merger period. The liquidity, profitability and capital position insignificantly improved while the efficiency deteriorated in after- merger period. Finally it was concluded that merger impact on different industries of manufacturing sector differently.

Long Hoang Pham's study is based on analysing and comparing the pre and post-acquisitions financial performance of four banks, namely ČSOB, Komerční banka, Česká spořitelna and Hypoteční banka through ratio analysis, with greater emphasis on ROA, RONW, EPS, DE and NPM as financial efficiency parameters. The study concluded that M&A of the selected firms have resulted in no significant change in the financial performance of these firms. The study recommended that banks should be aiming more for profit for enhanced financial performance to reap the benefit of M&A in the Czech banking sector.

RESEARCH METHODOLOGY**Research Objectives**

To investigate effects of acquisitions and joint ventures on the liquidity, profitability, efficiency and capital performance indicators of pharmaceutical companies in India.

To examine and evaluate what extent mergers and business takeovers influences on liquidity, profitability, efficiency and capital position of the selected companies of different pharmaceutical companies in India.

Hypothesis

H₀: There is no significant difference in the company's performance before and after the acquisition and joint venture i.e. H₀: $\mu = 0$

H₁: There is a significant difference in the company's performance before and after the acquisition and joint venture i.e. H₁: $\mu \neq 0$

Type of Study

The study adopted causal research design which involves the investigation of cause-and-effect relationships. Causal research design shows the relationship between variables.

Data Collection Method

The whole data is collected through secondary research mainly from the company website, press releases and various research journals.

Sample Technique

The present study has been carried out at micro level study. The companies stated in the analysis were chosen based on the Net Sales during the year 2017-18. The deals of the companies considered were of the financial year 2011-2012.

Sample Size

The sample size of the research is 3 companies. The 3 companies have a market share of more than 10% in the Pharmaceutical Industry. The 3 companies considered are the top pharmaceutical companies in India on the basis of their Net Sales.

Data Analysis

The data was collected, cleaned, edited, coded and fed into excel for analysis. Descriptive statistics was used in terms of mean, standard deviation and percentages. Inferential statistics was also used to draw inferences about the cause effect relationship between mergers and acquisitions and financial performance of pharmaceutical companies in India through t-test.

Tools of Analysis

Financial Tools – Profitability and Liquidity Ratios

Ratio analysis is widely accepted and the most generally used financial tool. “Ratio is a numerical relationship between one to another”. Profitability and liquidity ratios are used for evaluating the profitability position, credit worthiness and efficiency of invested capital.

Statistical Tools

T-test: Used to test hypotheses. T- test has been conducted to assess the significant difference in post acquisitions and joint venture financial performance.

ANALYSIS

Changes in Net Profit Margin (NPM)

Table

Company Name	P(T<=t) one-tail
Aurobindo Pharma Limited	0.466052878
Lupin Limited	0.121403932
Sun Pharmaceutical Industries Ltd	0.03800635

Note: The above calculations are made with the help of Annexure 1, 2 and 3.

INTERPRETATION

The above table depicts the P value of the t-test one tail results of the three pharmaceutical companies chosen as samples to identify the significance of performance of the companies before and after the acquisition and joint venture. The significance level of the test was 0.05.

As the P value of t-test of company Aurobindo Pharma Limited and Lupin Limited is more than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected i.e. there was no significant difference in the performance of the companies after the acquisition and joint venture for NPM.

However, for the company Sun Pharmaceutical Industries Ltd, the P value of the t-test was below 0.05, hence showing that the null hypothesis is rejected and the alternate hypothesis is accepted i.e. there was significant difference in the performance of the companies after the acquisition and joint venture for NPM.

Changes in Return on Net Worth (RONW)**Table**

Company Name	P(T<=t) one-tail
Aurobindo Pharma Limited	0.356079734
Lupin Limited	0.180617172
Sun Pharmaceutical Industries Ltd	0.434011148

Note: The above calculations are made with the help of Annexure [1](#), [2](#) and [3](#).

INTERPRETATION

The above table depicts the P value of the t-test one tail results of the three pharmaceutical companies chosen as samples to identify the significance of performance of the companies before and after the acquisition and joint venture. The significance level of the test was 0.05.

As all the P value of t-test values of all the companies for RONW was more than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected i.e. there was no significant difference in the performance of the companies after the acquisition for RONW.

Changes in Earning Per Share (EPS)**Table**

Company Name	P(T<=t) one-tail
Aurobindo Pharma Limited	0.35307067
Lupin Limited	0.283075272
Sun Pharmaceutical Industries Ltd	0.082305225

Note: The above calculations are made with the help of Annexure [1](#), [2](#) and [3](#).

INTERPRETATION

The above table depicts the P value of the t-test one tail results of the three pharmaceutical companies chosen as samples to identify the significance of performance of the companies before and after the acquisition and joint venture. The significance level of the test was 0.05.

As all the P value of t-test values of all the companies for EPS was more than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected i.e. there was no significant difference in the performance of the companies after the acquisition for EPS.

Changes in Return on Assets (ROA)**Table**

Company Name	P(T<=t) one-tail
Aurobindo Pharma Limited	0.351629812
Lupin Limited	0.028531592
Sun Pharmaceutical Industries Ltd	0.124571921

Note: The above calculations are made with the help of Annexure [1](#), [2](#) and [3](#).

INTERPRETATION

The above table depicts the P value of the t-test one tail results of the three pharmaceutical companies chosen as samples to identify the significance of performance of the companies before and after the acquisition and joint venture. The significance level of the test was 0.05.

As the P value of t-test of company Aurobindo Pharma Limited and Sun Pharmaceutical Industries Ltd is more than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected i.e. there was no significant difference in the performance of the companies after the acquisition and joint venture for ROA.

However, for the company Lupin Limited, the P value of the t-test was below 0.05, hence showing that the null hypothesis is rejected and the alternate hypothesis is accepted i.e. there was significant difference in the performance of the companies after the acquisition and joint venture for ROA.

Changes in Debt Equity Ratio (DER)

Table

Company Name	P(T<=t) one-tail
Aurobindo Pharma Limited	0.168766314
Lupin Limited	0.025068281
Sun Pharmaceutical Industries Ltd	0.113736816

Note: The above calculations are made with the help of Annexure [1](#), [2](#) and [3](#).

INTERPRETATION

The above table depicts the P value of the t-test one tail results of the three pharmaceutical companies chosen as samples to identify the significance of performance of the companies before and after the acquisition and joint venture. The significance level of the test was 0.05.

As the P value of t-test of company Aurobindo Pharma Limited and Sun Pharmaceutical Industries Ltd is more than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected i.e. there was no significant difference in the performance of the companies after the acquisition and joint venture for DER.

However, for the company Lupin Limited, the P value of the t-test was below 0.05, hence showing that the null hypothesis is rejected and the alternate hypothesis is accepted i.e. there was significant difference in the performance of the companies after the acquisition and joint venture for DER.

CONCLUSION**Overview Analysis – Financial Ratio (t-test)**

Table

Financial Ratios	Null Hypothesis	Alternate Hypothesis
Net Profit Margin (NPM)	2	1
Return on Net Worth (RONW)	3	0
Earnings Per Share (EPS)	3	0
Return on Average Assets (ROA)	2	1
Debt Equity Ratio (DER)	2	1
Total	12	3

Note: The above calculations are made with the help of Annexure [4](#).

ANALYSIS

From the above table we can interpret that 80% of the results recorded are accepting the Null Hypothesis. Therefore, we can state that there is no significant difference regarding the performance of the company from the acquisition or joint venture activity in the next three years.

ANNEXURE**Annexure 1: Aurobindo Pharma Limited Financial Ratio Values**

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Net Profit Margin	3.24%	15.14%	12.65%	-2.65%	4.99%	14.44%	12.86%
Return on Net Worth	8.08%	30.80%	23.05%	-5.28%	11.28%	31.27%	30.47%
Earnings Per Share	18.65	104.04	19.57	4.24	10.09	40.27	54.05
Return on Average Assets	2.37%	11.76%	9.59%	-1.98%	4.04%	12.36%	12.17%
Debt Equity Ratio	187.95%	117.79%	98.75%	109.97%	129.88%	96.90%	74.93%

Annexure 2: Lupin Limited Financial Ratio Values

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Net Profit Margin	13.45%	13.95%	14.77%	12.23%	13.59%	16.10%	18.47%
Return on Net Worth	35.64%	26.54%	26.29%	21.62%	25.25%	26.49%	27.08%
Earnings Per Share	60.84	79.48	19.36	19.43	29.39	40.99	53.54

Return on Average Assets	12.28 %	14.30 %	14.08 %	10.94 %	14.74 %	17.99 %	18.29 %
Debt Equity Ratio	85.85 %	44.39 %	35.43 %	40.87 %	18.71 %	7.98 %	5.31 %

Annexure 3: Sun Pharmaceutical Industries Ltd Financial Ratio Values

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Net Profit Margin	41.91%	31.27%	31.84%	35.83%	29.68%	23.32%	19.61%
Return on Net Worth	26.66%	17.21%	20.11%	24.86%	23.14%	20.94%	21.42%
Earnings Per Share	87.8	65.2	17.5	25.7	28.8	15.2	18.9
Return on Average Assets	22.73%	14.85%	15.49%	18.47%	16.61%	13.21%	11.19%
Debt Equity Ratio	2.54%	2.19%	4.49%	2.17%	1.32%	13.44%	29.65%

Annexure 4: Overall Hypothesis Acceptance or Rejection

		Aurobindo Pharma Limited	Lupin Limited	Sun Pharmaceutical Industries Ltd
NPM	Null Hypothesis	Accepted	Accepted	Rejected
	Alternate Hypothesis	Rejected	Rejected	Accepted
RONW	Null Hypothesis	Accepted	Accepted	Accepted
	Alternate Hypothesis	Rejected	Rejected	Rejected
EPS	Null Hypothesis	Accepted	Accepted	Accepted
	Alternate Hypothesis	Rejected	Rejected	Rejected
ROA	Null Hypothesis	Accepted	Rejected	Accepted
	Alternate Hypothesis	Rejected	Accepted	Rejected
DER	Null Hypothesis	Accepted	Rejected	Accepted
	Alternate Hypothesis	Rejected	Accepted	Rejected

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CRITICAL ANALYSIS: EFFECTIVENESS OF CRM INITIATIVES ON CUSTOMER LOYALTY**Rakshita Data**

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ABSTRACT

Purpose : The Purpose of this research paper is to understand the Effectiveness of CRM initiatives on the customer loyalty and retention.

Research Implications : This paper provides a preliminary understanding of the CRM marketing initiatives on the customer loyalty in the long run. Future research should use alternative methods, and verify and elaborate the findings.

Findings: "In the past, many companies took their customers for granted. Customers often did not have any alternative suppliers, or the other supplies were just as poor in a quality and services, or the market was growing so fast that the company did not worry about fully satisfying its customers. A company could loses 100 customers a week, but gain another 1000 customers and consider its sales to be satisfactory. Such a company, operating on a 'leaky bucket' theory of business, believes that there will always be enough customers to replace the defecting ones."

"Customer retention programs can be a powerful tool in the arsenal of CRM. Customer retention is important to most companies because the cost of acquiring a new customer is far greater than the cost of maintaining a relationship with a current customer."

"For many firms, customer profitability is skewed in such a way that losing the most profitable customers has a very serious effect. In many banks, for example, the top 30 percent of customers (when ranked by profitability) can make up 100–150 percent of total customer profitability. That's right the bottom eighty percent of customers may provide no profitability or, worse yet, destroy 50 percent of profitability."

Originality/Value : This paper talks about how the Customer Relationship affect the customer base and leads to customer loyalty and retention.

Keywords: Customer loyalty; customers' retention; automobile sector; customer preference; customer satisfaction.

INTRODUCTION

"Because of recent changes in a business environment, that is; increases in customer turnover and decrease in profitability, the company in all branches have come to understanding that the relations with customer are one of the most important assets which they possess. As a result they pass from focused on a product and a brand - the focused marketing approaches to the approach focused on the client . Really, retention of customers and restorative of their loyalty is very effective, but difficult method for increase in success of the company. Also, in medium-term competitive fight it is necessary to support and increase customer loyalty. Loyalty as a behavioral fact arises due to the fact that the customer perceives all the benefits that the product provides him.

On the road to profitability, companies are looking for a better marketing strategy. There are many marketing strategies. Some companies have transactional relations with consumers: they are focused on single purchases, don't keep in contact with the clients and try to reach a big flow of consumers. Other companies argue that the grade of the attitude between buyers and sellers is much more important than the net number of contacts. This strategic route relates to the concept of customer relationship management (CRM). Basically, CRM is an "integrated approach to relationship management, focusing on customer retention and relationship development". As a business strategy, it began to emerge in 1999. Customer relationship management (CRM) is the process of contraction and maintains of the favourable relations with customers, by affording products which are valuable to customer and build satisfied customers. CRM is the way that companies create relationships with customers in order to maintain customer loyalty . CRM emphasizes the significance of long-term relations with customers and increasing their loyalty and allegiance to a company. It offers various storage strategies and recommendations for creating customer loyalty.

The correlation between customer satisfaction and CRM is not from simple. Enlarged customer satisfaction is one of the CRM's faiths. Customer satisfaction has become the declared goal of all business areas. In the settings of the service, customer satisfaction reports desirable result of the service encounters, which includes an assessment of whether the service meets customer needs and expectations. The importance of the concept of

satisfaction is manifested in its alignment with customer loyalty, retention and profitability of the company. Increased customer satisfaction can lead to increased consumer loyalty and lead to an increase in the company's market share.

Development of relationships with customer

- Relationship Management.

CRM, along with the launch of the product and service policy, are the programs of long-term cooperation of the company with customers. Within the framework of the organization, the fulfillment of this task includes the elaboration of two components: "external" and "internal". Within the external component, the company develops loyalty programs and sales promotion. Under the loyalty program, it is necessary to understand the long-term client project, which is aimed at increasing the client's attachment to the company for account tangible material and emotional values, as well as to increase the profitability of the company. It is proposed to distinguish two groups' loyalty programs:

- bonus programs: rewarding customers for profitable behavior for the company (use of additional services, intensity of treatment, recommendations, etc.);
- additional services: a set of services focused on individual customers or specific segments.

Customer retention

- Motivation for mutually beneficial relationships.

The motivation of customer consists in the presentation of informing the customer on them so that the last had had a desire in transaction on maintenance in his receiving. Motivation helps the customer to feel the difference between the present and the desired state to realize the need to complete the transaction. Particularly relevant is the time to make a positive impression on the customer, to inspire confidence and to place him to himself.

- Stimulating mutually beneficial relationships.

For each subsequent request for assistance in obtaining a service to the company, the client may be provided with various types of additional services, or provision of services for obtaining a product at a discount, or granting other privileges to such a customer.

Customer service

"Great service is about attitude. And a service attitude leads to a richer quality of life, not only in the commercial sector" (Leonard Berry).

Customer service is one of the important component of customer relationship management. Companies only know the strength and drawbacks with the results of provided customer services. Different service company promote the mantra TLC; think like customer while designing their service interactions. Due to mishandling on how customer think, many service company results miss opportunities to become truly excel-lent. Understanding customer psychology at a deeper level can help company to provide excellent services.

Loyalty Programs

Customer loyalty program seek to set customers bond to a company by offering additional encouragements. In a small business informal loyalty programmers may take in from of giving treat as a way of thanking to a regular customers periodically. Consumers are loyal to several brand while rejecting others, sometimes describes as polygamous loyalty. In such instant the marketing goal becomes one of the strengthening the customer preference for brand x over brand y. Marketers need to check three psychological effects to assess the potential of loyalty programme to alter patterns of behavior; brand loyalty verses deal loyalty where marketer should focus on loyalty programmers that directly supports the value of the product instead of creating difference between brand loyalty versus deal loyalty, several elements combine to determine a loyalty programs to value customer should analysed and marketers should focus on solution to send customer indicating progress towards reaching particular milestone and promoting the rewards that might be forth coming when that point is reach on time. Customer loyalty programs reinforce loyalty by rewarding frequent users.

Obviously, in order to successfully implement a strategy that is aimed at the customer, it is necessary for the company to carry out interrelated organizational transformations that include changes in the structure of the company, a review of its business processes, service and the transformation of the corporate culture. All this activity must be subject to a single goal of the company.

Benefits of customer relationship management

The reasons that companies have adopted customer relationship management because it can improve productivity across the perfect range of key marketing functions: detecting prospects, acquiring customers,

developing customers through cross selling and up selling, managing customer migration, serving, retaining, and increasing customer loyalty and win back defectors. Many organizations have realised the benefits of customer relationship management as retaining and pleasing the right kind of customers, gaining repeatedly purchasing customers and increasing profitability.

CRM is a technology or software that helps track data and information about the customers to enable better service. Customer relationship management help to acquire profitable customers, to be focus on enterprise customers as a key to competitive advantage. It helps to retain profitable customers longer, win back profitable customers and eliminate unprofitable customers. Companies can upsell additional products in a solution, cross sell other products to customers, referrals and word of mouth benefits and reduce service and operational cost.

Customer retention as a key to business performance

Customer retention has more impact on profit than market share, economies of scale and other variables that are considered to provide complete advantages for a firm. While acquisition strategies are necessary to fill the pipeline with customers to counter inevitable attrition, it should be remembered that customer equity is more dependent on customer retention than customer acquisition. For most firms, improving customer retention can lead to very significant increases in profitability. Customer retention strategies work best when industry retention levels are high and there is a significant step in the Company's customer base. Only five percent increase in retention can increase a company's profitability to over 85percent. Customer retention strategies are profitable not only because of the increased revenue from loyal customers but also, because of the reduced costs of serving long-time customers.

Research Objectives

- To study the impact of CRM initiatives on customer loyalty
- To analyse the factors which positively and negatively influence customer loyalty
- To suggest measures to enhance CRM initiatives

Review of Literature

- Impact of customer relationship management (CRM) on customer satisfaction and loyalty: A systematic review(2015)

In this study, we review literature on Customer Relationship Management (CRM), focusing specifically on the impact of the CRM on customer satisfaction and customer loyalty. CRM is a set of practices that organizations adopt to maintain and increase their customer base.

- Customer Relationship Management and Customer Retention in the Amica Restaurant at Valmet Oy Ltd. (2003)

The aim of the thesis was to increase the understanding of customer retention by investigating a service company able to improve their customer retention through customer relationship management. Companies may choose to apply different parts of customer relationship management to their businesses through technology and other means of communication with their customers, various training programs and other resources devoted towards the employees of the company.

Evaluating the past and present behaviour makes it possible for the company to adopt the most effective business strategy.

Significance and Importance

CRM, Nowadays is considered as an important business strategy, in the changing marketing trends and high edge competitions. Customer Loyalty is directly proportional to high profitability and Market power of the organisation. Various strategies are used by the organisation to retain their customers via loyalty programs, club systems, preferential customers etc.

Many companies are increasingly adopting customer relationship management as means to take their competitive advantages. The firms are under a tremendous pressure to adjust quickly to rapid changes in a marketplace with re-goods to customer, technology and market function. Customers are not only becoming more value conscious but also less loyal and less service level oriented and less tolerant. Consequently, markets are becoming more fragmented, making differentiation more difficult and completion instant. This change is driving companies to become customer centric and shifting their marketing function from product based to customer based.”

Limitation of the Study

The study is not exploratory as it relies only on secondary sources like online journals, articles, websites, et cetera.

CONCLUSION

Loyalty of consumers provides the company with many advantages. First, the loyal consumer is less sensitive to the actions of competitors, so it is not so easy to entice. Secondly, a loyal consumer is inclined to recommend a company to which it is loyal or, at least, to speak positively about it when asked. Thirdly, such a consumer will always forgive the company some inaccuracies in the work and remain its client. Thus, it is really necessary to develop customer loyalty. Several years ago, marketing strategies were focused on attracting new customers, but recently the focus has shifted to preserving the existing ones, forming their loyalty and loyalty to the enterprise. The reason for these changes is the recognition that long-term relationships with customers are economically viable; because they guarantee regular purchases, they require less marketing costs for each customer and, because of the recommendations of loyal customers, their number increases. This document examines the impact of CRM on customer loyalty through mediating satisfaction customer factor. The concepts of satisfaction and loyalty and ways of their influence were studied, as well as its elements and sources. According to the research results, customer loyalty is determined by a high level of satisfaction. The customer perceives all the advantages provided by the company. The CMR significantly impact on the satisfaction and as we now satisfaction creates the loyalty of customers. When the companies have the stronger CRM strategy, it means that they have the higher satisfaction and loyalty.

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A STUDY ON IMPACT OF SIBLING RELATIONSHIP ON BEHAVIOUR OF AN INDIVIDUAL WITH REFERENCE TO MUMBAI SUBURBAN

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ABSTRACT

The focus of this study involves the study of sibling relationship and its impact on individual behaviour. Sibling relationships are authentic and makes a huge difference and change in the behaviour and attitude of people. The main objective behind the research was to understand their bond and relationship among them. To know how they treat each other hand to know which sibling relationship combination (two brothers, two sisters, one brother and one sister, or a single child) they think are the best in a family.

INTRODUCTION

Each of two or more children having one or both parents in common are stated to siblings. Then they can in any term like two brothers, two sisters or a brother or a sister. Sibling relationships are authentic. As suggested by Voor postel and Vander Lippe (2007), sibling relationships can be one of the most long lasting and enduring relationships of an individual. Often siblings grow up in the same environment; they share the same parents and also share common memories and similar experience. At very initial stage of their life enduring their childhood they are guided and guarded by their parents and so most of the parents want nothing more than their children to get along and have a secure life.

As they spend too much time with each other throughout their childhood, it helps in the child's development, it also benefits them in having healthy sibling relationship which then makes them first supportive friend to each other. The relationship or bond between siblings is different during different stages of their life (Different in childhood different among adults, different among teenage, etc). They might get too close to each other by sharing their private life, helping each other in solving the problems and motivating each other to do better. They might have clashes, disagreement or arguments with each other due to difference in opinion, perspective, standard of living of each other.

Their relationship also gets different when they have their partner, their own house, their children or sometimes due to transfer due to job. So let us see how an adult in today's world handles his/her sibling relationship. Siblings are a fixture in the family lives of children and adolescents, and a body of work documents their role in one another's everyday experiences as companions, confidantes, combatants, and as the focus of social comparisons.

REVIEW OF LITERATURE

Cole, A. K., & Kearns, K. A. (2001) were of the opinion that the quantity of research on the quality of sibling relationships was inadequate. Therefore, it could be recommended that sibling relationships should be examined in terms of various age groups and different variables, and their psycho social consequences should be subject to research. Moreover, developmental results of sibling relationships could be examined through longitudinal studies. Studies on the relation between sibling relationships and family relationships under various parenthood styles could be recommended.

Widmer, E. D., & Weiss, C. C. (2000) identifies in the research that female students who were first in birth order had lower life satisfaction, less positive attitude toward sibling relationships, and higher levels of loneliness than female students who were second in birth order. As for male students, no significant difference was observed between them in terms of the effect of birth order on life satisfaction and attitude toward sibling relationships.

OBJECTIVES OF THE STUDY

Following are the objectives of the study:

1. To know the relationship between siblings from adult.
2. To understand the impact of sibling relationship on an individual behaviour.
3. To identify the behavioural change in individual due to sibling relationship.
4. To suggest and conclude with the relationship and the bonding among siblings.

HYPOTHESES

1. There is a strong bond among siblings.
2. Parents treat siblings differently.

LIMITATIONS OF THE STUDY

1. Due to lack of time a research was done with a small sample size and a limited area of Mumbai city was covered.

RESEARCH METHODOLOGY

The research is descriptive and qualitative in nature. The researcher has used primary and secondary data where primary data includes questionnaire and secondary method includes books, websites and journals. A questionnaire consists of 12 questions covering demographics and views of individual to understand the bond among siblings. There were 60 respondents all together. The sampling method used was judgemental and percentage method is used analysis and interpretation of data. A percentage method and graphs are used to analysis and interpret the data.

SIBLING REALTIONSHIP

Sibling plays a vital role in everyone’s life. Sibling is the one on whom one can vouch upon and thus simulates a different bond altogether. Every individual has a unique relationship with their sibling. Some of them are very comfortable just like pals and some are not that close but still they have concern and connection with each other. Although, siblings grow up in the same environment, share the same parents, and share common memories and similar experiences but the behaviour and attitude may vary with each other. Today children have started staying in isolation because of increase in nuclear family.

Sibling relationships are an integral part of the family system. Parents may influence their children’s interpersonal relationships directly by giving them advice and intervening in their interactions and disputes or indirectly by modelling social behaviour of their children’s emotions and behaviours. With the advent of adulthood, relationships with the family undergo transformations. Emerging adults, at least in Western cultures, are expected to develop higher levels of individuation, displayed in the capacity to rely on oneself and to make independent decisions and follow through with them. Thus, a positive family atmosphere is likely to be related to warm sibling relationships, whereas a distressed atmosphere will probably be related to negative sibling relationships. In contrast, parental assertion of power was related to a higher frequency of conflict between siblings.

DATA ANALYSIS AND INTERPRETATION:

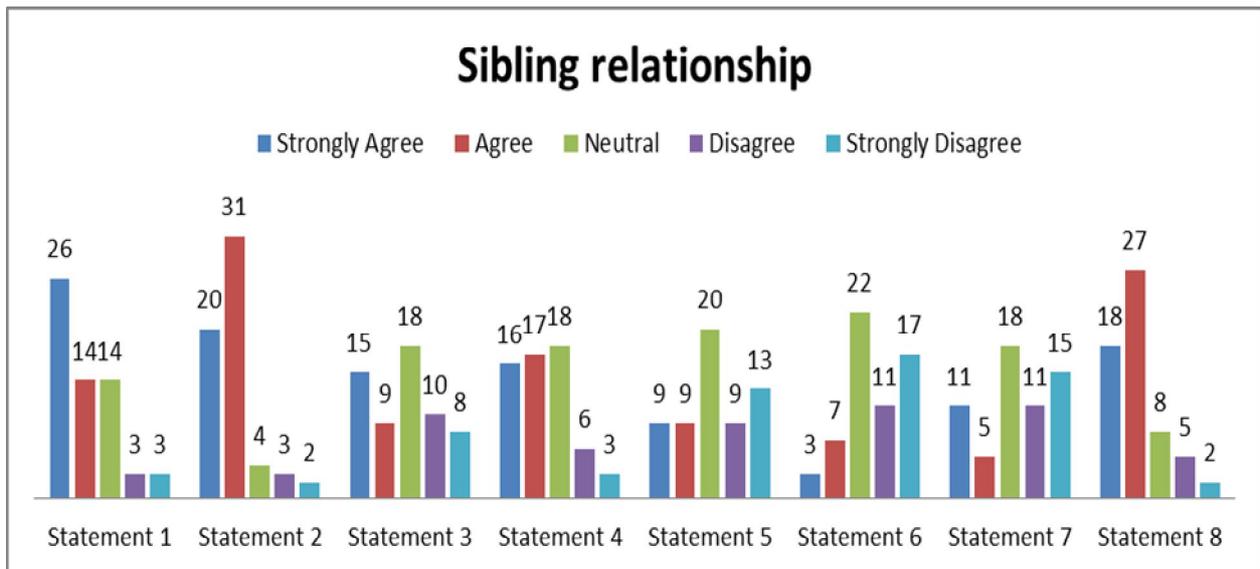


Chart 1: Sibling relationship

Table 1: Sibling relationship

1	You often fight with your sibling
2	Sibling is the one who help you at the time of crisis.
3	Often you are compared with your siblings performance

4	You share almost everything with your sibling
5	You regret having sibling as you have to share everything with him/her
6	You feel jealous when your sibling achieves more than you
7	Your parents treat you and your sibling differently
8	You often miss the presence of your sibling when he/she is not around

A set of eight statements were given to respondents in likert like questionnaire form and above is the graph for the same. The majority i.e. 26 of the respondents strongly agree to the statement that they fight (jovial manner) with their siblings. Again the individual find their sibling as their first helping hand at the time of crisis and around 31 respondents agree to it. Around 24 respondents are of the opinion that their performance is been compared with their siblings whereas, 18 of the respondents preferred to be neutral as they would not have noticed it.

About 33 respondents were of the view that they share almost everything with their sibling and thus they have good bond with each other. Approximately 22 respondents were of the opinion that they do not regret having a sibling, in fact it becomes a good tie up between them. Roughly, 28 respondents were of the belief that they do not experience jealousy with the achievement of their sibling. A group of 28 respondents believed that their parents treat all their children equally, irrespective of their gender and age gap. Majority i.e. 45 respondents opinioned that they will be missing the presence their sibling.

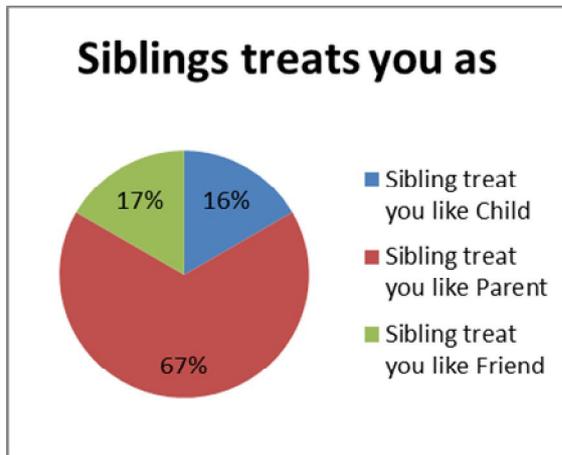


Chart 2: Treatment by siblings

Treatment by siblings		
Child	10	16%
Parent	40	67%
Friend	10	17%
Total	60	100

Table 2: Treatment by siblings

Every individual will have a different relationship with their sibling and thus a data was collected to know the relationship that siblings have with each other. The above chart shows that majority i.e. 67% of the siblings treat their other sibling as parent perhaps therefore they can share their secrets and get the guidance from them. Later, 16% of the respondents were of the opinion that they are been treated as a child whereas, 17% of the respondents believed that there is a friendly relationship between siblings.

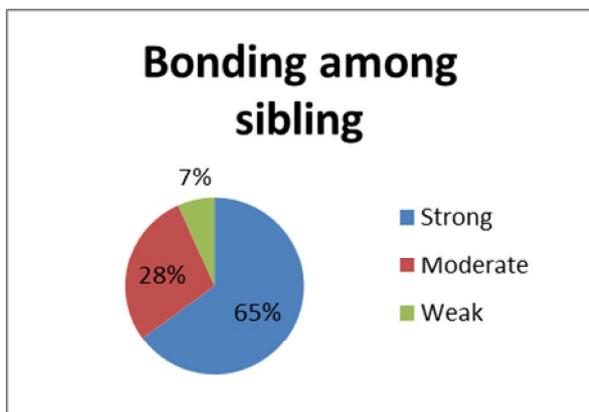


Chart 3: Bonding among sibling

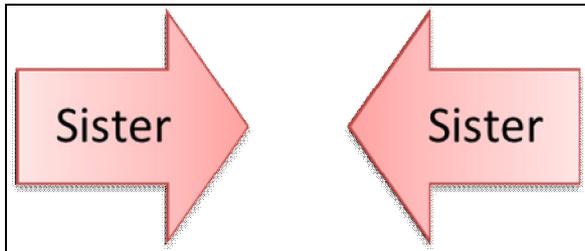
Bonding among siblings		
Strong	39	65%
Moderate	17	28%
Weak	04	7%
Total	60	100

Table 3: Bonding among sibling

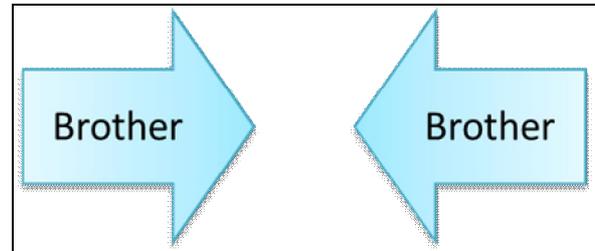
From the above data it is clear that, siblings have strong bonding with each other and 65% (39) respondents believe in it. Hardly 7% (04) of the respondents are of the view that they do not have strong bonding or attachment towards each other. Whereas, 28% (17) respondents think they have moderate bonding with each other. Majority of them have strong bond because they share maximum of their secrets and their difficulties with their siblings.

SUGGESTIONS

Based on the responses and one to one interactions that researcher had with respondents, following conclusion is framed in six different combinations:



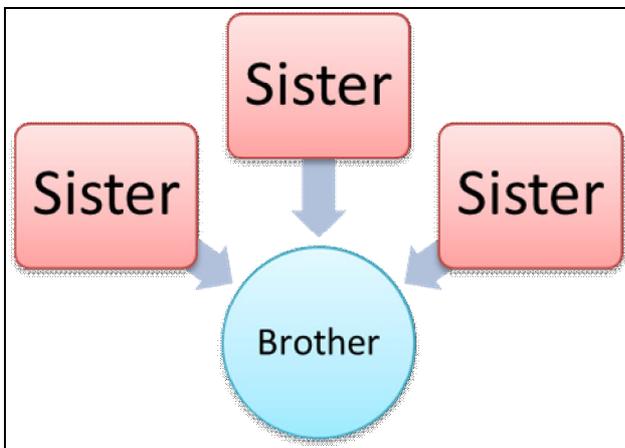
Insecurity



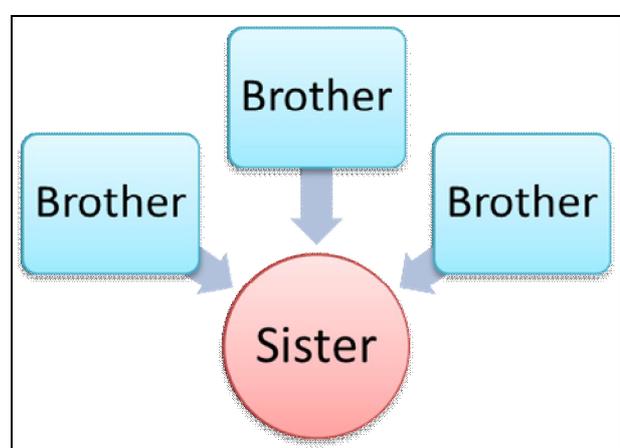
Internal conflicts

1. **Insecurity:** When siblings are of same gender, there is always a comparison between two. This may lead to “insecurity” between the sisters. Two sisters may share their secrets with each other but somewhere they may also have the feeling of jealousy with each other. As they grow, insecurity may also lead to conflict.

2. **Internal conflicts:** It is considered to have a proud feeling for every parents to have sons but as and when they grow they start competing with each other. Therefore, they may have internal conflicts with each other. Most of boys are concerned about their family but they do not show. Hence, even there is a spark of conflict at the childhood stage, they may not solve it but it turns into “Internal Conflict”.



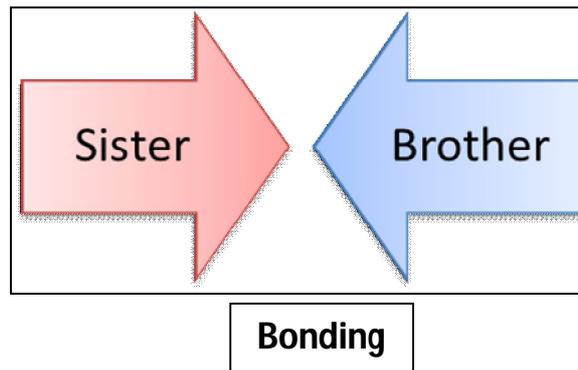
Mental Obligation



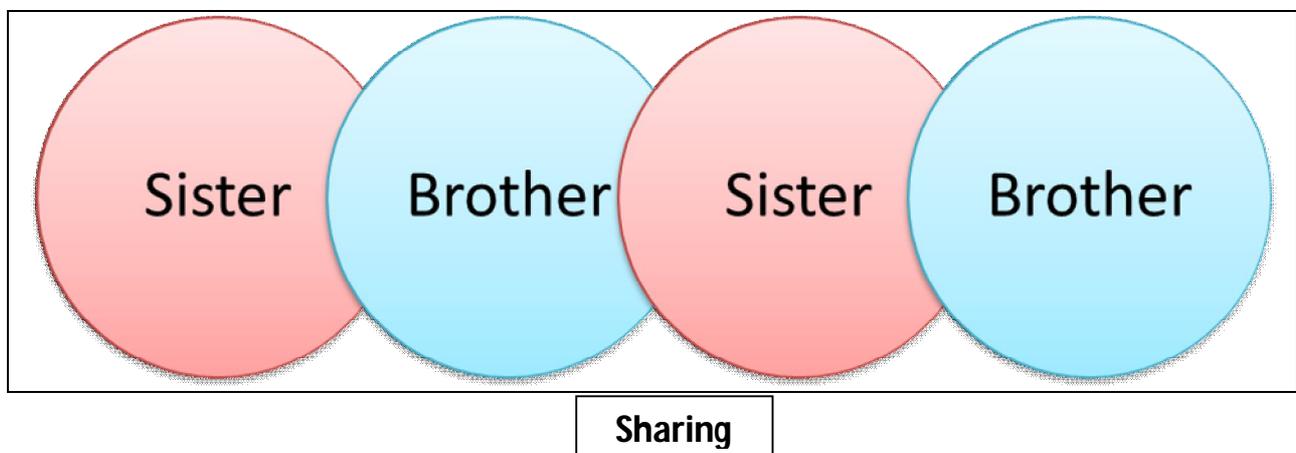
Protective nature

3. **Mental obligation:** When there is a combination of one brother and many sisters there is a feeling of mental obligation towards their family and especially towards sisters. Though today scenario is changed, girls can take their own responsibility but still a brother has to fulfil his responsibility towards his sister and family. The boy may be pampered by his parents but they cannot forget to fulfil their duties towards their daughter.

4. **Protective:** When there are more than 2 brothers and a single sister, brothers act protective towards their sister. There are chances that the girl can be pampered and therefore may not be given lot of freedom. Among brothers there can be understanding or internal conflicts depending upon the attitude and behaviours of boys.



5. **Bonding:** It is observed that there is a good bonding between brother and sister. They can understand each other well and discuss their secrets, consult each other at the time of taking important decisions. This mainly happens because there is no comparison between two separate genders. Hence, parents also prefer to have a combination of brother and sister.



6. **Sharing:** Although there is a good bonding between brother and sister but when the number is more they believe in sharing too. Around, 15 to 20 years ago every couple use to have 3 to 4 children and they had a habit of sharing their things like books, clothes etc. Alongwith, materialistic things sharing of secrets were very common. Exceptions to the above outcomes

1. It depends upon the age gap between siblings.
2. The upbringing of parents and the way children are treated by their parents.
3. The attitude, behaviour and maturity of an individual may vary.

SUGGESTIONS

1. The first step to establish a healthy sibling relationship is to heal the past or to release the baggage from childhood. Although there could be some small fights during childhood but later it must get converted into memories.
2. Have a discussion regarding the problems or difficult of day to day life. A transparency in the relationship plays an important role to build a healthy relationship and understanding among siblings.
3. The habit of sharing and caring must be inculcated among siblings for each other from childhood itself.
4. One must try and avoid controversial issues among siblings. It is easily possible when a older sibling shows the maturity to understand younger one and the younger one obeys or follows older one. Though it is not professional it is always a give and take in relationship.
5. Appreciating each other's performance and taking criticism positively will help them to have a long term relationship and perform well in their life.

CONCLUSION

1. As the respondents are adults and the age gap between them is maximum 4 years. Out of the total respondents the combination of one brother and one sister sibling relationship is higher as compare to other two combinations. The trend is changing as the families are getting converted into nuclear rather than joint.

2. It is been observed through the study that 86% of the respondents stay with their siblings and 17% of the respondents are been treated like a friend by their siblings.
3. Through the sources it is been observed that siblings always protect them from parents and keep their secrets or private life safe. Some of the respondents staying away from their sibling do contact their siblings on daily basis.
4. It is been revealed that 75% of the respondents fight a lot with their siblings and still they have a strong bond with their siblings. Around 70% of the respondents miss the presence if their siblings very much when their sibling (he/she) is not around.
5. The study indicates that 65% of the respondents get the amount of respect they deserve from their siblings. In spite of having fight or disagreement adults still manages to stay together, respect each other, have a daily conversation and maintain their bond strongly.

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INFORMATION AND COMMUNICATIONS TECHNOLOGY: RELEVANCE IN EDUCATION

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INTRODUCTION

Information and Communication Technology (ICT) plays an important role in the field of education. ICT is highly effective in this specific field or activity. Student's knowledge can be increased by using technology. Adding ICT makes education highly effective and valuable. It adds multiple hitherto unknown dimensions to learning. Students find technology driven curriculum more engaging than conventional teaching. Apart from this, digital literacy also highly changes the way we live. Those less familiar with technology risk being left behind in the race for excellence. Digital literacy are widely considered to change the face of modern education.

Conformance to global teaching standards are a high priority in order to sustain quality of education. Advancements in the field of ICT are significant in improving how knowledge is imparted to young minds. ICT eliminates the various constraints of travel, space availability and time limitations by making education easily accessible via convenient and state-of-the-art software and hardware infrastructure set-up. As an aggressively expanding learning base, implementation of ICT is an absolute essential for the growth of Indian education system.

ICT as information, communication, and technology, provides three key aspects for influencing the education sector to develop the capacity for improving the influx of data that comprises one's learning curve. This provides alternative solutions to the obstacles encountered in the conventional educational system.

ICT initiatives on the educational sector primarily address the following needs: access to education, quality learning, quality teaching and educational planning and management. Interventions almost always include the provision of computers, necessary software and internet connection, and curriculum development, industrial design, content creation and literacy training and capacity building on the use of technologies, establishment of information systems (HR, Management and Financial

Information and Communications Technology for Education or ICT4E as sector of ICT4D is an initiative that addresses issues and challenges regarding education of children and adults, especially in the developing countries. Projects under the ICT4E aims to make an impact on student learning and learning opportunities using information and communication technology - hardware, software, networks, and media for collection, storage, processing, transmission and presentation of information (voice, data, text, images).

Because of the advancement in ICT, UNESCO, the UN's leading agency for Education recognizes ICT as a powerful tool to achieve progress towards the Sustainable Development Goals 4: Quality Education which has particular targets by 2030: achieve primary education, promote gender equality, empower women by disparity at all education levels.

The use of Information and Communication Technologies (ICTs) play a vital role in promoting and making developments in terms of enhancing and ensuring the quality of education that the students receive and acquire. ICT in education allows learning to become student-centered rather than teacher-dominated, such as in the case of distance-learning programs. It has multiple impacts on student achievements and motivations, including but not limited to: confidence in computer usage, increased autonomy when learning, improved development in language and communication skills.

The purpose of ICT in education is to bridge the gap and promote online learning and interactive experience to students regardless of location in sharing ideas and information using different platforms of communication. As education is a key factor in socio-economic development, the education system of developing countries must be aligned with modern technology. ICT can improve the quality of education and bring better outcomes by making information easily accessible to students, helping to gain knowledge and skill easily and making training more available for teachers. However, it is not without its flaws – ICTs can easily become the focus of a program, in which the technology is given and provided before much thought is given to the application of it.

SCOPE AND OBJECTIVES

To understand the perception of students and teachers towards use of ICT in teaching

To understand the various trends observed with respect to application of ICT in the field of education

To identify scope for improvement in ICT application, if any loophole.

To clearly identify and enhance advantages of applying communications technology in the field of education.

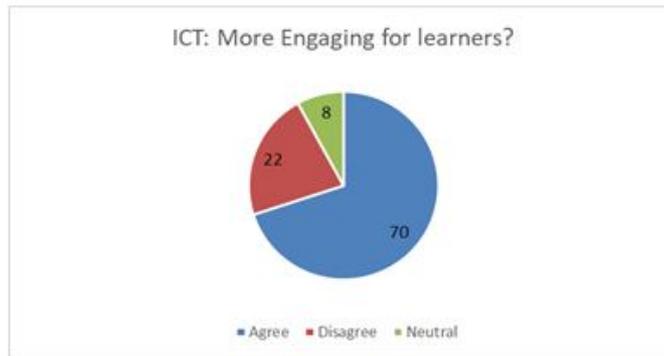
RESEARCH METHODOLOGY

This research heavily involves primary data analysis. It is an exploratory research and so information regarding opinion of general public regarding their perceptions and choices related to introduction of Information and Communications Technology in the field of education was conducted through a questionnaire survey. Further to carry out the study journals, research papers, magazines and newspapers were also referred.

Sample size and sample composition : Convenient Sampling was used for conducting survey. The sample size consists of 50 individuals of different age groups living in various areas in Mumbai city.

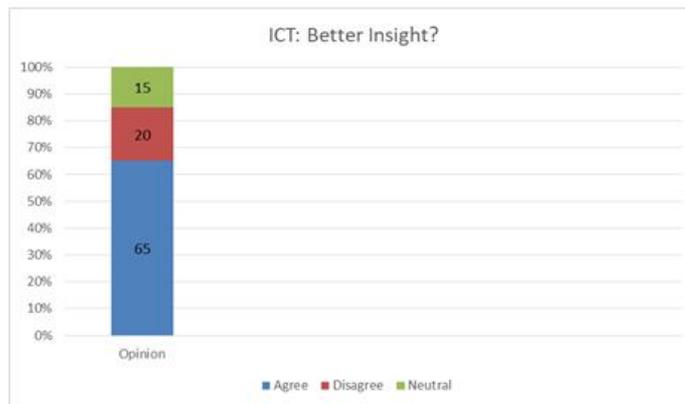
DATA ANALYSIS:

1) ICT helps make the syllabus lively and engaging



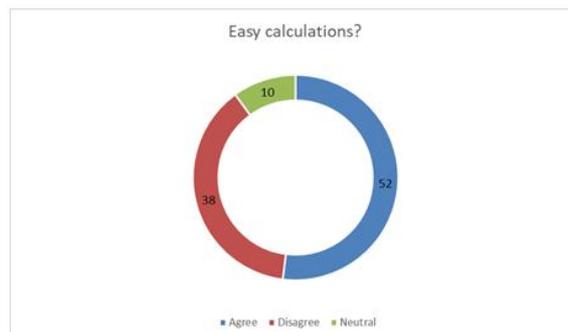
Interpretation: Through the above pie, we can clearly see that a large number of individuals (70%) believe that introduction of modern com-tech in teaching methods would make the experience more immersive for the learners.

2) ICT helps in better learning and insight in learners.



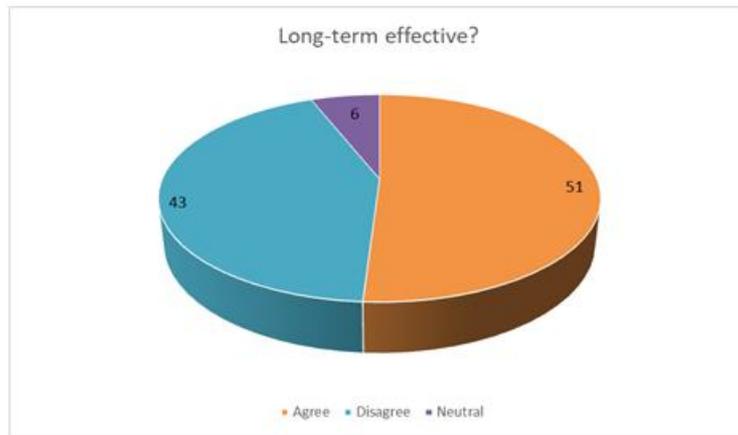
Interpretation: The majority of subjects concur with the idea that having ICT included in the teaching scheme of things would increase a logical viewpoint in students.

3) ICT makes calculations easier



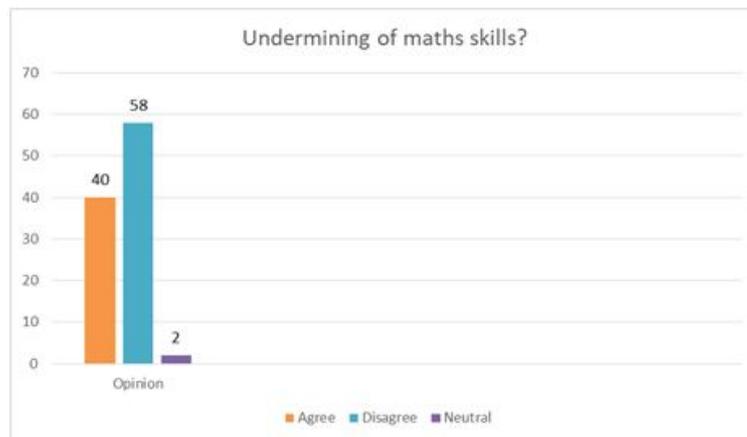
Interpretation: As per our analysis, introduction of modern information Technology in arithmetic problems and solutions would make operations more efficient for students.

4) The effects of ICT are visible in the long-term



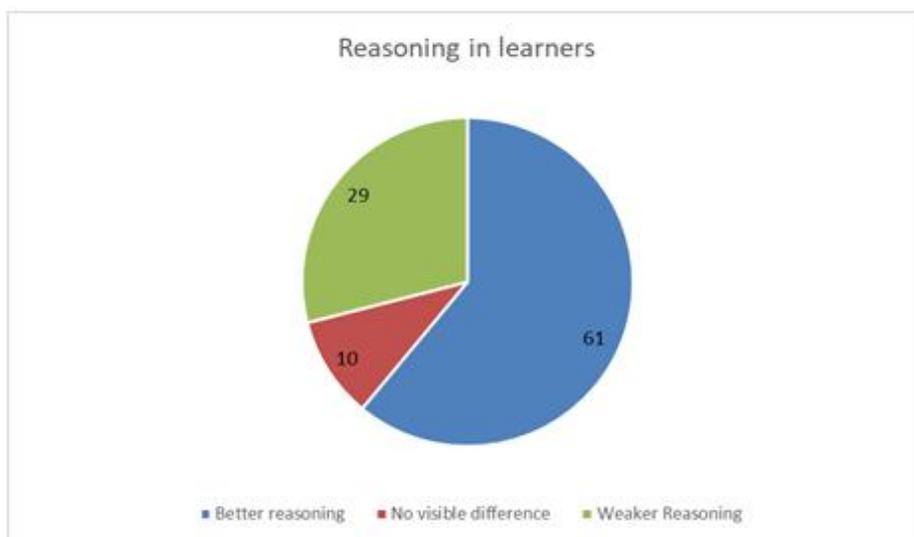
Interpretation: A majority of sample subjects agreed that, although the set-up of ICT in education would be costly to execute, it would bear fruit in the long haul.

5) ICT utilisation undermines basic mathematical skills



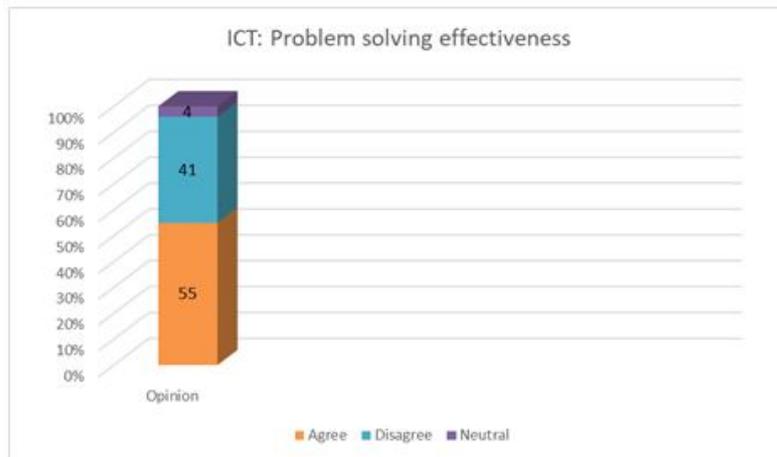
Interpretation: As clearly visible from the above graph, the majority of individuals sampled believed that introduction of IT communications in the educational field would have no significant impact on the mathematical ability of learners.

6) In terms of logical reasoning, ICT helps in:



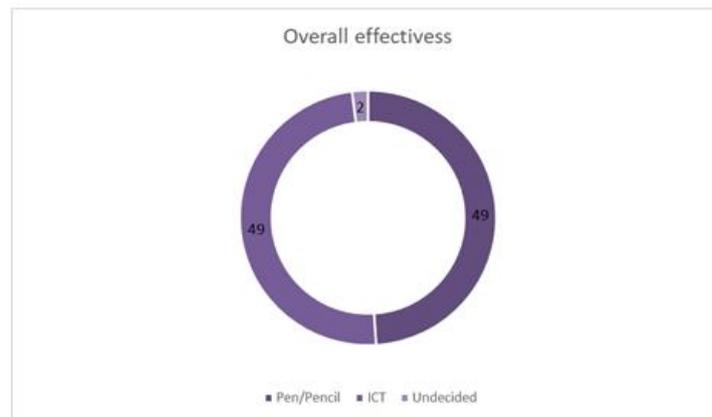
Interpretation: Our analysis established that introduction of ICT in the educational spectrum would increase the analytical reasoning ability in young minds.

7) ICT develops problem-solving attitude



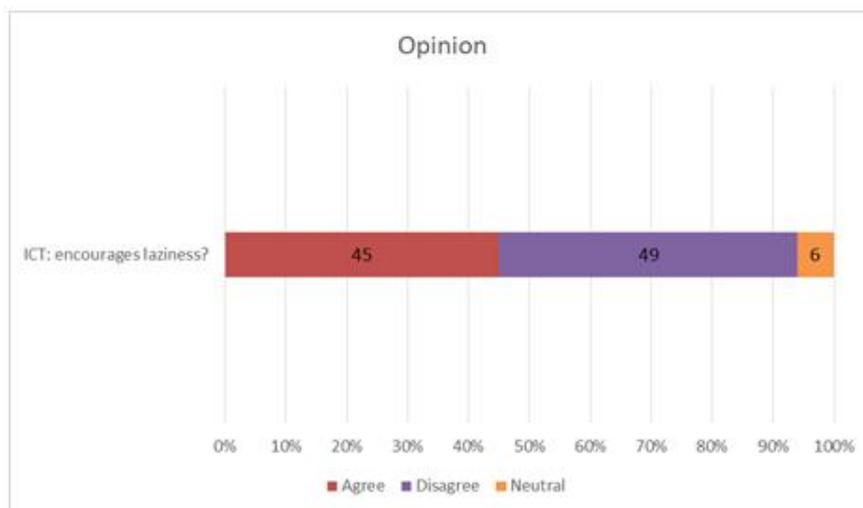
Interpretation: Our analysis of the subject’s opinion clearly reflect that they agree to the fact that having Information technology and communication applied in teaching helps develop problem solving skills in kids.

8) ICT is more effective as compared to pen-and-pencil learning.



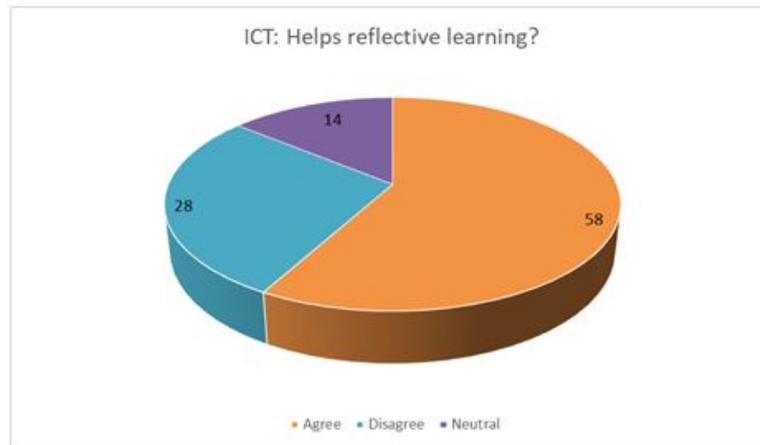
Interpretation: An equal number of people had their preferences divided over traditional pen-and-pencil teaching methods and more modern ones like ICT enhanced teaching, while a small minority were undecided.

9) ICT makes students lazy



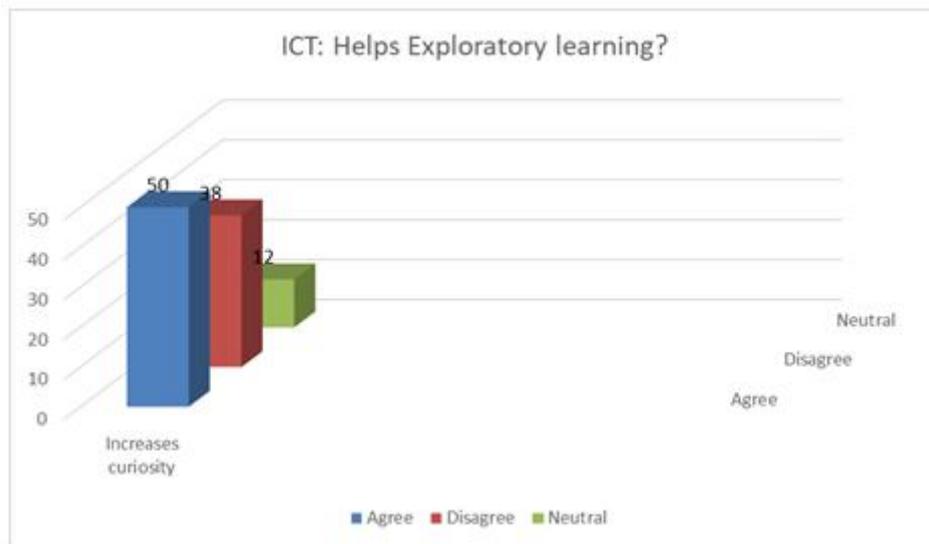
Interpretation: Majority of our subjects disagreed with the popular notion that having latest information technology accessible on-command makes students less inclined to work hard towards their goals.

10) ICT develops reflection on what a learner has learned



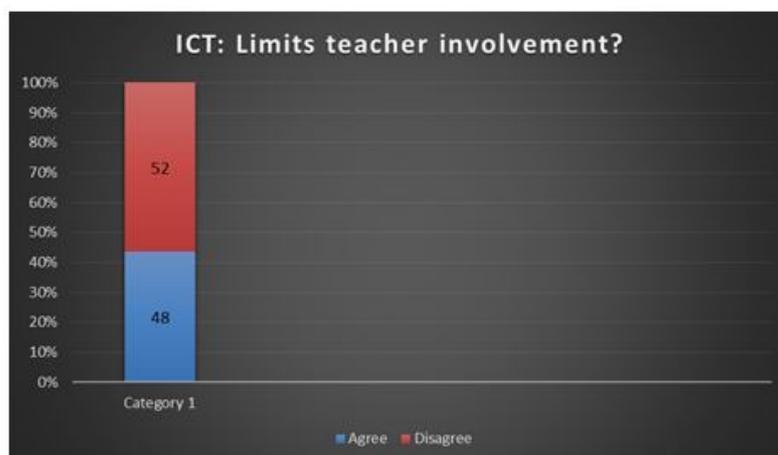
Interpretation: A large number of sample subjects agreed on the points that students reflect more on their work and become self-critics when exposed through learning by technology.

11) ICT helps build curiosity, thus facilitating explorative learning



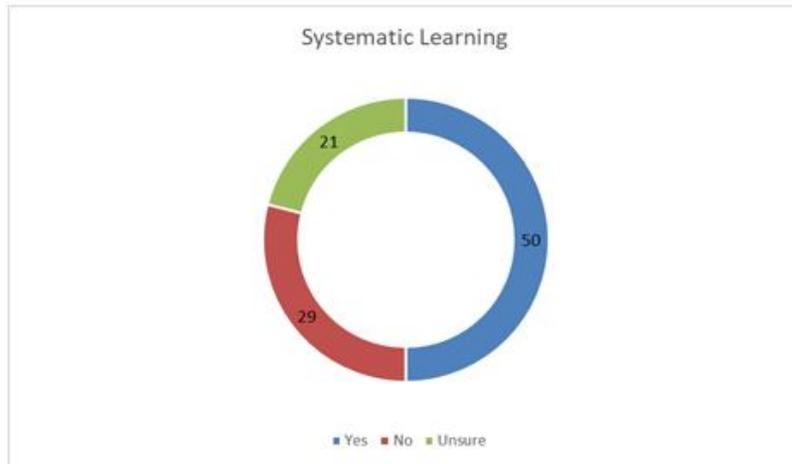
Interpretation: It's a known fact that introduction of ICT helps students be more curious and inquisitive in their learning behaviour and our studies verified that point emphatically.

12) ICT limits involvement of teachers



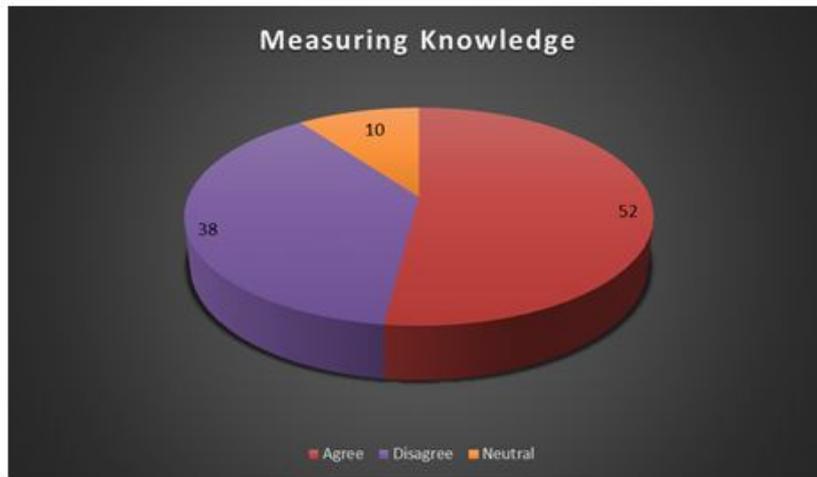
Interpretation: Almost half of our subjects agreed that ICT may limit teacher's involvement in real-world application while the remaining slight majority disagreed with this opinion.

13) ICT promotes systematic efforts from students



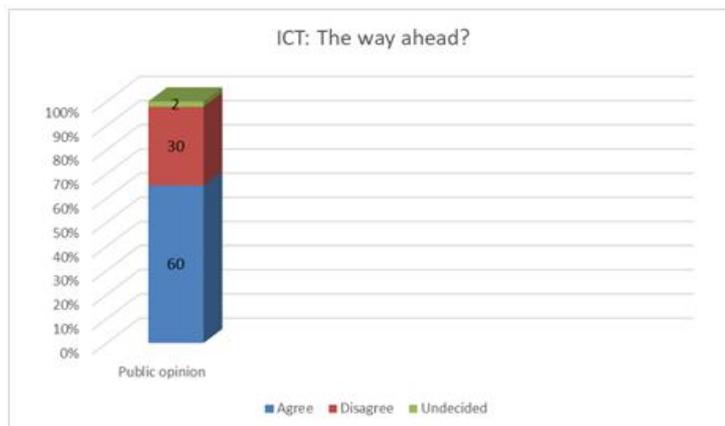
Interpretation: One of the more emphatic inferences drawn was that introducing ICT in educational field would make students more systematic in their quest for perfection

14) Teachers can't measure the knowledge grasped in ICT system



Interpretation: In what can be considered one of the disadvantages of ICT in education, it was found out that a good majority think that teachers would find it challenging to measure students performances and their personality improvements if technology was given a bigger hand in education.

15) ICT should be implemented across all educational institutions



Interpretation: It was crystal clear from our data analysis that a large number of individuals strongly believe that ICT was what would be the future of Indian education system.

DISCUSSION

Digital literacy increases through application of ICT in field of education, in the following ways :

Less expensive laptops have been designed for use in school on a 1:1 basis with features like lower power consumption, a low cost operating system, and special re-programming and mesh network functions. Despite efforts to reduce costs, however, providing one laptop per child may be too costly for some developing countries.

Tablets are small personal computers with a touch screen, allowing input without a keyboard or mouse. Inexpensive learning software (“apps”) can be downloaded onto tablets, making them a versatile tool for learning. The most effective apps develop higher order thinking skills and provide creative and individualized options for students to express their understandings.

Interactive white boards allow projected computer images to be displayed, manipulated, dragged, clicked, or copied. Simultaneously, handwritten notes can be taken on the board and saved for later use. Interactive white boards are associated with whole-class instruction rather than student-centred activities. Student engagement is generally higher when ICT is available for student use throughout the classroom.

E-readers are electronic devices that can hold hundreds of books in digital form, and they are increasingly utilized in the delivery of reading material. Students—both skilled readers and reluctant readers—have had positive responses to the use of e-readers for independent reading. Features of e-readers that can contribute to positive use include their portability and long battery life, response to text, and the ability to define unknown words. Additionally, many classic book titles are available for free in e-book form.

The flipped classroom model, involving lecture and practice at home via computer-guided instruction and interactive learning activities in class, can allow for an expanded curriculum. There is little investigation on the student learning outcomes of flipped classrooms. Student perceptions about flipped classrooms are mixed, but generally positive, as they prefer the cooperative learning activities in class over lecture.

University of the Philippines Open University (UPOU) coined ODeL to refer to an education that uses various technologies for both synchronous and asynchronous communication for learners and instructors virtually. UPOU is an example of an education transformation that empowers the potential of ICT in the Philippines' education system. By maximizing the use of technology to create a wide range of learning, UPOU promotes lifelong learning in a more convenient way.

In the Philippines, there are keynotes that have been forwarded to expand the definition of ICT4E from an exclusive high-end technology to include low-end technology; that is, both digital and analog. As a leading mobile technology user, the Philippines can take advantage of this for student learning. One project that serves as an example is Project Mind, a collaboration of the Molave Development Foundation, Health Sciences University of Mongolia, ESP Foundation, and the University of the Philippines Open University (UPOU) which focuses on the viability of Short Message System (SMS) for distance learning. Pedagogy, Teacher Training, and Personnel Management are some of the subgroups of ICT4E.

Further, ICT4E in the Philippines does not only focus on students but also on the development of Filipino teachers and computer laboratory managers. Alexander Flor cites the Commission on Higher Education's Revised Policies and Standards for Undergraduate Teacher Education requires the inclusion of two three-unit courses of education technology, mainly ICT, in teacher education. In addition, are training initiatives for computer laboratory managers on a Web-based learning management system.

HYPOTHESIS:

Null Hypothesis: Application of ICT in teaching has no major positive discernible effect on the quality of education

Alternate hypothesis: ICT application in teaching methods have major positive effects that enhance the quality of education.

LITERATURE REVIEW

1 International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)

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Application of ICTs in Teaching-Learning Process Sudipta Deb Roy Librarian, Vivekananda College of Education, Karimganj, Assam, India

The main thrust of this article is how ICT tools are helpful in classroom transaction. Use of various Web 2.0 technologies for making teaching–learning process more interactive and interesting are also discussed in this article

2 International Education Journal, 2005, 6(5), 635-650. ISSN 1443-1475 © 2005 Shannon Research Press. <http://iej.cjb.net> 635 The impact of ICT on learning: A review of research Ting Seng Eng National Institute of Education, Singapore ;

seting@nie.edu.sg

Findings from these research studies have indicated small positive effects and consequently a need for more in-depth and longitudinal studies into the impact of ICT on learning in the future

OUTCOME AND REFERENCES:

We have clearly drawn a few inferences from our analysis and interpretation. Introduction of Information and Communications technology in the field of education would be a welcome change to the current system that needs a major overhaul. Our studies have clearly shown that, our subjects believe that introduction of ICT would have long term benefits and help make learning more interesting for learners, while also increasing their inquisitiveness, insight and reflectivity towards the curriculum. Our studies also show that ICT in education makes it easier for students to carry out calculations, and in no way make students lazier or undermine their arithmetical skills. Also, students develop problem-solving attitudes and their analytical reasoning powers increase considerably. While technology is costly to implement and many still prefer the traditional methods as that maintains a high involvement of teachers, it is not stretching the fact to say that implementation of ICT in education would improve learner’s personality in every way and would lead to more well- rounder citizens in the society in the foreseeable future and hence our education system needs it more than ever. Thus the alternate hypothesis is selected and null hypothesis is rejected.

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I & C TECHNOLOGY HAS ASSISTED IN THE EVOLUTION OF EDUCATION SECTOR

Prof. Gunjan Dhanjal SidhuNirmala Memorial Foundation College of Commerce & Science

INTRODUCTION

“I&C TECHNOLOGY in education is pervasive and is likely to support a student centric effective teaching learning mechanism beyond the classrooms”.

I&C TECHNOLOGY stands for “Information and Communication Technology”. I&C TECHNOLOGY denotes all devices such as projectors, computers, networking equipments such as Wi-Fi devices that are used in the digital world. Worldwide research has shown that I&C TECHNOLOGY can lead to an improved student learning and better teaching methods. A report made by the National Institute of Multimedia Education in Japan, proved that an increase in the use of I&C TECHNOLOGY in education with integrating technology to the curriculum has a significant and positive impact on students’ achievements. The results specifically showed that the students who are continuously exposed to technology through education has better ‘knowledge’, presentation skills, innovative capabilities, and are ready to take more efforts into learning as compared to their counterparts.

CONVENTIONAL USAGE OF I&C TECHNOLOGY

Traditionally, education sector in India has been averse to the usage of I&C TECHNOLOGY. Part of the reason attributes to the average age of qualified faculties. Most of the decision makers in the educational institutions belong to ‘generation X’ and they are not familiar with the usage of computers, internet or emails.

CHANGE IN SITUATION

With the induction of faculties belonging to ‘millennial generation’ the situation did change a bit. They are used to computers and find it easier to develop content using digital technologies. There are number of software applications made affordable to develop e-contents for teaching learning. I&C TECHNOLOGY usage has marginally improved many institutions in tier 1 and tier II cities and towns. Information and communication technologies are currently being used in education to assist students to learn more effectively by providing teachers with access to a wide range of new pedagogy. These technologies are also being used to enable teachers to do administrative tasks more efficiently.

Does I & C TECHNOLOGY improve the quality of education?

It is an important teaching aid for delivering quality lectures around in various ways. For example, a practical illustration along with the theoretical details always makes it easy for the students to understand the subject. There are videos and animations available in the internet. Power points and notes can be uploaded on *Institutional learning management system (LMS)* and referred to by the students as and when they require. Laboratory procedures may be recorded as videos and may be uploaded to the institutional LMS.

SCOPE OF STUDY

The study has been undertaken to cover a sizable population spread across demographics within Mumbai suburbs in order to understand the role, preference, tools, challenges and new trends in I&C TECHNOLOGY applied in educational sector. Some trends are discussed below:

1. LCD projectors can be used for effective teaching.
2. Problems like shortage of manpower, manual assessment and calculation mistakes can be avoided by adopting techniques of online assessment and evaluation.
3. Lecture notes developed in power point can be uploaded in institutional learning management system (LMS) and referred by students as and when required.
4. Apps like EDMODO, WIX, JEOPARDYLABS, MINDMAPPING, LUCIDCHARTS, SCREEN CASTOMATIC, ACTIVE PRESENTER and MOODLE are the new trends in Information and Communication Technology in education industry.
5. Concept of flipped classroom should be adopted.

OBJECTIVES

1. To understand the conventional usage of I&C TECHNOLOGY.
2. To examine the change in situation, challenges and acceptance of I&C TECHNOLOGY in education sector.

3. To analyze how I&C TECHNOLOGY improves the quality of education in various ways.

4. To explore the new trends in I&C TECHNOLOGY to be applied in education sector.

RESEARCH METHODOLOGY

The research methodology adopted for the study is as follow:

SPECIFYING THE OBJECTIVES OF THE SURVEY:

To study and understand I&C TECHNOLOGY and its role in providing quality education in various ways.

Designing the method of data collection:

The required data for the study has been collected from primary and secondary sources. The primary data was collected through personal discussions and survey undertaken with teachers and learners. Observation was yet another source of primary data. The secondary source of data involves study material, internet and workshops attended on use of I&C TECHNOLOGY in education and flipped classroom learning.

SAMPLE FOR THE STUDY

In order to understand the impact of I&C TECHNOLOGY in education sector more effectively and keeping in view the objectives of the study, the researcher has worked on a requirement of 60 teachers and 20 learners for the survey and interview.

TOOLS FOR DATA COLLECTION

Primary data was collected in the following ways:

- Questionnaire
- Keen observation
- Personal interview with teachers and learners

Secondary data was collected through various sources like:

- Attending workshops on I&C TECHNOLOGY and its use in education
- Study material related to Information and communication technology
- Internet

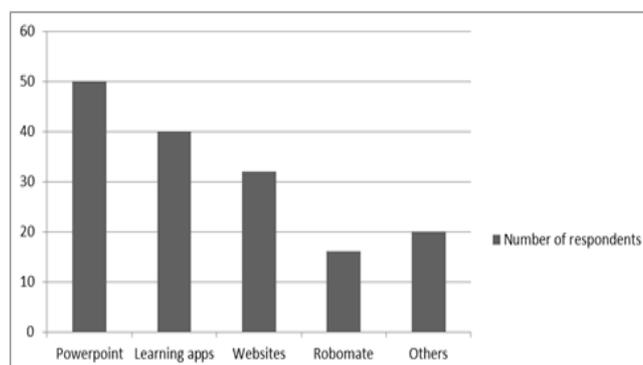
DATA ANALYSIS AND INTERPRETATION

Most of the respondents with whom a survey has been conducted are in the age between 25 to 45 years and are familiar with Information and Communication technology tools used in education sector. Also most of them prefer using these tools as a teaching learning mechanism.

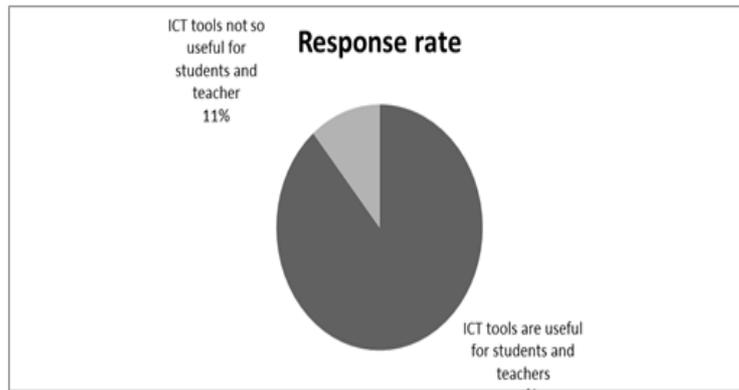
A table representing the data collected on preferred I&C TECHNOLOGY tools:

Number of respondents	Tools of I&C TECHNOLOGY
5-15	Robomate
15-25	Others
25-35	Websites
35-45	Learning apps
45-55	Power point

A bar graph representing the data collected on preferred I&C TECHNOLOGY tools:

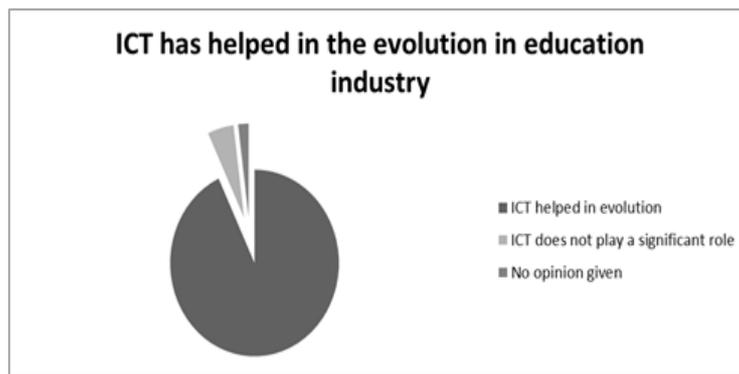


A pie chart showing preference level of respondents towards using various I&C TECHNOLOGY tools as teaching learning mechanism.



The data collected by survey has been reviewed for the purpose of arriving at an informed conclusion. Interpretation of data assigns a meaning to the information analyzed and determines its signification and implementation. The sample selected for the survey belongs to an age group between 25 to 45 years and is familiar with Information and Communication technology tools used in education sector.

A pie chart representing role of I&C TECHNOLOGY in the evolution in education industry:



According to the analysis and interpretation of data, I&C TECHNOLOGY plays a very important role in the evolution in education industry. I&C TECHNOLOGY tools and techniques are interesting and informative. Teachers and learners in this modern era prefer I&C TECHNOLOGY tools as teaching learning mechanism. It allows teachers and students to produce, share, connect, and comment on their own knowledge and that of others. Research has indicated that the use of I&C TECHNOLOGY can support new instructional approaches and make hard-to-implement instructional methods such as simulation or cooperative learning more feasible. Moreover, educators commonly agree that I&C TECHNOLOGY has the potential to improve student learning outcomes and effectiveness.

DISCUSSIONS

Explanation of the result

The main role of I&C TECHNOLOGY in education:

Shifting from acquisition mode of learning to one that engages higher order thinking like application and evaluation. The Internet, email, videoconferencing and power point are the most popular tools among teachers and learners.

I&C TECHNOLOGY involves everything from information receiving to information processing and knowledge creation. Integration of I&C TECHNOLOGY into the curriculum and leveraging I&C TECHNOLOGY for formative assessment and summative assessment are among the implementing tools which are been practiced by some of the institutes in the particular demographic area selected for the survey.

The research aims to find out integration of I&C TECHNOLOGY right from the planning of curriculum and assessment, and calls for teachers to consider pedagogical applications of I&C TECHNOLOGY starting from lesson design and planning stage.

Reference to previous research

The direct link between I&C TECHNOLOGY use and students' academic performance has been the focus of extensive literature during the last two decades. I&C TECHNOLOGY assists students to their learning by improving the communication between them and the instructors (Valasidou and Bousiou, 2005). The analysis of the effects of the methodological and technological innovations on the students' attitude towards the learning process and on students' performance seems to be evolving towards a consensus, according to which an appropriate use of digital technologies in education can have significant positive effects both on students' attitude and their achievement. Research has shown that the appropriate use of I&C TECHNOLOGY can catalyze the paradigmatic shift in both content and pedagogy that is at the heart of education reform in the 21st century. Kulik's (1994) meta-analysis study revealed that, on average, students who used I&C TECHNOLOGY-based instruction scored higher than students without computers. The students also learned more in less time and liked their classes more when I&C TECHNOLOGY-based instruction was included. Fuchs and Woessman (2004) used international data from the Programme for International Student Assessment (PISA), they showed that while the bivariate correlation between the availability of I&C TECHNOLOGY and students' performance is strongly and significantly positive, the correlation becomes small and insignificant when other student environment characteristics are taken into consideration.

RECOMMENDATION

It seems, thus far in the research, that for *I&C TECHNOLOGY* to be effective in *education*, *I&C TECHNOLOGY* programs require the support of the national government. A coherent national policy on *I&C TECHNOLOGY in education* is a necessity in order for successful *I&C TECHNOLOGY* integration and capacity building.

HYPOTHESIS

- Special consideration should be given to I&C TECHNOLOGY connectivity and accessibility for educational purposes. Planning for connectivity infrastructure and regulations should promote and facilitate educational use of I&C TECHNOLOGY.
- I&C TECHNOLOGY is a potentially powerful tool for offering educational opportunities. It is difficult and maybe even impossible to imagine future learning environments that are not supported, in one way or another, by Information and Communication Technologies (I&C TECHNOLOGY).
- When looking at the current widespread diffusion and use of I&C TECHNOLOGY in modern societies, especially by the young the so-called digital generation then it should be clear that I&C TECHNOLOGY will affect the complete learning process today and in the future.
- Effectiveness of I&C TECHNOLOGY tools depend from student to student, but in majority of schools colleges and other educational institutes I&C TECHNOLOGY tools are preferred and suggested to teachers and learners.
- I&C TECHNOLOGY has assisted in evolution in education industry as it provides audio video feel and learners can relate it better. It is necessary to focus on training teachers and instructors to use I&C TECHNOLOGY to develop their own teaching support materials.
- Challenge is there before teachers to convert mobile phones into classroom.
- EDMODO, WIX, JEOPARDYLABS, MINDMAPPING, LUCIDCHARTS, SCREEN CASTOMATIC, ACTIVE PRESENTER and MOODLE are the new tools of Information and Communication Technology in education industry and teachers should take an initiative to learn it and further provide training to the students for better understanding of every subject.

OUTCOME AND REFERENCES**Outcome**

I&C TECHNOLOGY assists in the professional development of teaching and learning. It can be infused in the learning process so as to acquire the knowledge and skill efficiently. I&C TECHNOLOGY provides access to resources so that teachers can apply new knowledge and skills they have learnt. Communication technology helps to develop the capacity of the teacher at the same time and can strengthen the capacity of teacher which is the fundamental requirement of effective transactional strategy. The proliferation of technologies has complicated the teaching learning process and finding the best ways of integrating technology into classroom practice is one of the challenges the 21st century teachers face. Effectively integrating I&C TECHNOLOGY into learning system is a complicated task. It is a fact that teachers play an important role to deal with the

current demands of society and economy. They should model the new pedagogies and tools for learning with the aim of enhancing the teaching learning process. Hence, building the capacity of teachers in the utilization of I&C TECHNOLOGY for education requires long term continuous development of the lead trainers, sharing of knowledge among teachers, partnerships and collaboration among educators and organizations, and support from principals and administrators. These factors must be available in order to create changes in the classroom. Therefore both teachers and trainers require ongoing support and opportunities to experiment with new skills and strategies over time. It is an important teaching aid for delivering quality lectures around in various ways.

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A STUDY ON FACTORS INFLUENCING STUDY HABITS OF STUDENTS IN SUBURBAN COLLEGES OF MUMBAI**Dr. Alpa Prashant Upadhyay**

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INTRODUCTION

Study is an art and matter of practice. Academic achievement is given lot of importance today due to competition in the world. Success of a student depends upon his own study habits. Success of each student depends upon ability, intelligence and effort put in by him or her. There is no doubt that regular studies help in better academic performance. Study habits refer to the activities carried out by learners during the learning process of improving learning. Variables such as methods of study, family background, peer group, self concept and course of study enables the researcher to find out their influence academic performance.

REVIEW OF LITERATURE

1. Gudaganavar Nagaraj V. and Halayannavar Rajashekhar B. are of the opinion that study habits play a very important role in the life of students. Success or failure of each student depends on his own study habits. Study habits are the behavior of an individual related to studies.
2. Anwar Ehtesham has studied the degree of relationship between study habits and academic achievement of senior secondary students. He has studied the good and poor study habits of students and has suggested certain measures to improve academic performance of the learners.

OBJECTIVES OF THE STUDY

1. To examine the factors influencing study habits of students.
2. To examine the relationship between academic achievement and study habits of college students.

HYPOTHESES OF THE STUDY

1. Study habits are influenced by the attitude of students towards studies.

Research Methodology: The research is empirical and descriptive in nature.

(a) Sources of data collection: In order to conduct research inquiry, primary and secondary data is collected by the researcher. The sources to be used are explained below:

I Primary Sources

Responses from students of Commerce College in Mumbai Suburban.

II Secondary Sources

4. Newspapers and Magazines.
5. Internet Sources.

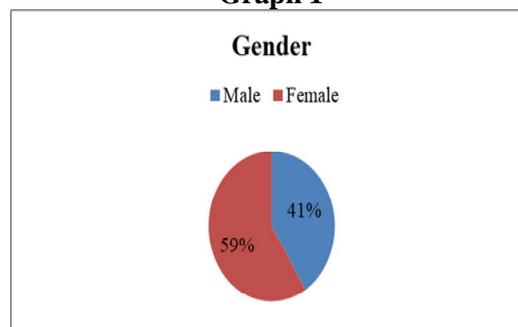
(b) Techniques of data collection:

For the purpose of present research, questionnaire is prepared to collect primary data. Questionnaire contained 13 questions which would give bird's eye to the research undertaken.

(c) Sample size of the study: The sample size of the study is 100 which are selected using judgment sampling method.

Data Analysis and Interpretation:

The researcher has collected data from 100 students and the interpretations are as under.

Graph 1

From the above Graph 1 it is observed that 59% of the respondents are females and 41% respondents are males. This is due to the more enrolment of females than males. This is because in the smart city like Mumbai girl child is now given proper education in order to make her competent in the job market.

Table 1
Program selection by the respondents

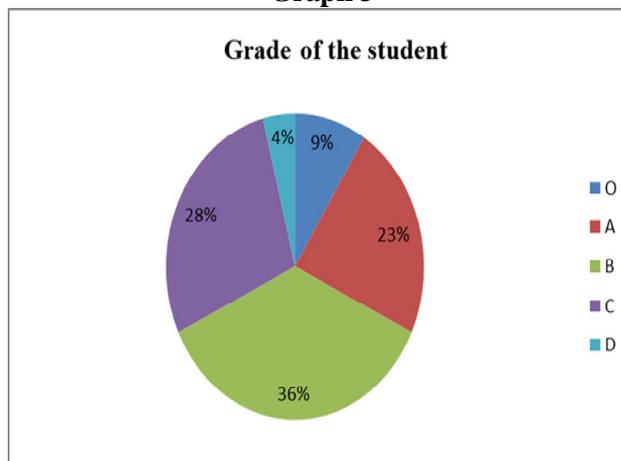
Count of Gender	Column Labels		Grand Total
Row Labels	Female	Male	
BAF	4.00%	0.00%	4.00%
BBI	2.00%	1.00%	3.00%
BCOM	24.00%	12.00%	36.00%
BMM	1.00%	1.00%	2.00%
BMS	1.00%	5.00%	6.00%
BSC (IT)	0.00%	2.00%	2.00%
M.COM	22.00%	12.00%	34.00%
M.Sc	4.00%	9.00%	13.00%
Grand Total	58.00%	42.00%	100.00%

Source: Statistical analysis of responses of students.

Table 1 reveals that the responses of students towards selection of program offered by University of Mumbai. It is found that 24% female students opt for B.Com as compared to the 12% of male students. Moreover, it is observed that male students opt more self-financing programs like BMS, BAF, BMM and so on. It is also seen that M.Com program is opted more by females as compared to male respondents.

The researcher further asked for the grades obtained by the students in the last examination and their opinion on the question, good study habits are an important key to get high scores.

Graph 3



Graph 3 shows that students who have good study habits have secured O and A grades as compared to those who do not have good study habits. It is also observed that students do understand that good study habits are essential but are unable to develop them at college level, if it is not imbibed since the school level. Efforts are put in by most of them and those have managed to secure B and C grades. The maximum grade achieved is B grade by an average student.

The researcher further asked questions in order to know the attitude of the student towards studies. It was asked to make student reveal the truth of his/her study habits and his/her liking and disliking towards a particular course or a subject.

Table 2
Attitude of the student towards studies

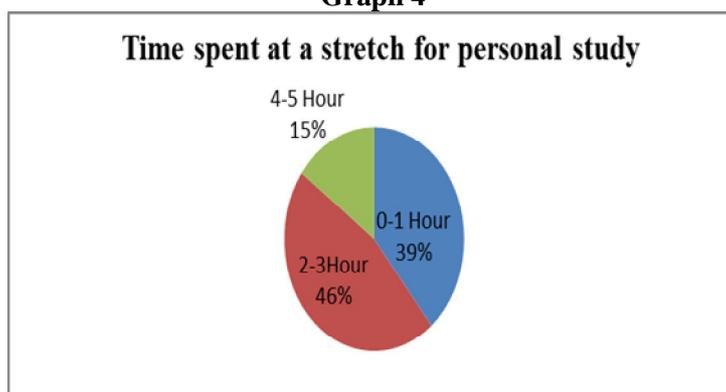
Question	Untrue of me	Somewhat untrue of me	Neutral	Somewhat true of me	True of me	Total
You are able to study subjects that you don't really like	13%	12%	34%	30%	11%	100%
Do you attend lectures regularly?	12%	5%	27%	16%	40%	100%
Do you take down notes in class, keep up with teacher and understand the concepts at the same time?	11%	5%	18%	20%	46%	100%
Do you review your notes after each class preferably right after class?	22%	10%	27%	26%	15%	100%
Do you use internet or library resources when needed?	7%	2%	23%	15%	53%	100%

Source: Statistical analysis of responses of students.

The above Table 2 shows the percentile methods of data analysis. It is observed that 30% of the students are able to study the subjects which they really don't like. This is because to move to next semester, clearing previous courses is essential so the student has to study the subject he doesn't like much. It is also observed that 40% students attend lectures and these are the students who take down the notes and keep updated with what teacher teachers and understand the concepts clearly. But at the same time it is found that even after taking down notes only 15% review it after class rest keep it for exam preparation only. 53% students use library resources and internet, this is because library helps them prepare for exams in better way by updating them and internet anyways provides latest information to the students.

Along with the attitude of students towards the studies, researcher has tried to find out the number of hours spent by the students on studying the various courses. Number of hours put in by the student indicates how much justice is does to the study schedule prepared by him/her. It was usually observed that the student may prepare a study schedule but is unable to spend the number of study hours required due to other distractions or lot of time spent on travelling and other activities.

Graph 4



For the purpose of the study the count of male and female respondents is taken into consideration. It is depicted that 46.30% male students and 33.90% female students give 0 to 1 hours to study the various courses at the under-graduate and post-graduate levels. It is found that few students give 4 to 5 hours to study the courses. 46.00% students denote only 2 to 3 hours for studies.

Along with the attitude of students towards the studies, researcher has tried to find out the number of hours spent by the students on studying the various courses. Number of hours put in by the student indicates how much justice is does to the study schedule prepared by him/her. It was usually observed that the student may prepare a study schedule but is unable to spend the number of study hours required due to other distractions or lot of time spent on travelling and other activities.

Further when the question was probed on calmness during examination, respondents have agreed that they remain calm during examination time to give their best in the paper. The response to the question on confidence while giving presentation in classroom was average as sometimes many students find it difficult to give presentations effectively in classroom.

Table 3
Exam Preparation and Exam Writing

Questions	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Total
You are aware what to study for an exam	2%	5%	21%	25%	47%	100%
You are confident and practice writing answers to questions	10%	6%	37%	22%	25%	100%
You refer your notes before exams	3%	2%	15%	22%	58%	100%
You are able to finish your exam in the allotted time	1%	7%	26%	25%	41%	100%
Enough time is taken by you to understand the problem asks	4%	12%	42%	18%	24%	100%
Exam performance is important for you	1%	5%	16%	10%	68%	100%

Source: Statistical analysis of responses of students.

Table 3 depicts that when it comes to practicing writing answers, only sometimes they undertake it. This is one reason why most of the respondents have secured B grade in their examination. It is also seen that majority of the students refer the notes before examination in order to prepare for examination. All the respondents are able to complete their examination paper in allotted time. When it comes to solving practical problems based on Accountancy or Mathematics many are taking more time to understand the problem asked in the question papers. 68.00% students do agree that exam performance is important for them.

From the above it can be seen that student's attitude towards studies is important to secure good grades. Hypothesis 1 is accepted as if the student prepares well with a positive attitude, he or she can secure good grades. Moreover, good study habits are developed over a period of time and not when the child grows up.

CONCLUSION

The above analysis shows that formation of effective study habits at home and the nurturing of these habits at school and college is vital for academic achievement of the student. Students who are well guided and counseled are result oriented, thus participating in all tests and examinations. The formation of effective study habit will create the awareness for regular and steady learning and would therefore improve academic performance.

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THE FUTURE OF ARTIFICIAL INTELLIGENCE INDUSTRY IN INDIA WITH REFERENCE TO TALENT MANAGEMENT**Dr. Vijaya Jacqueline**Nirmala Memorial Foundation College of Commerce & Science

INTRODUCTION**AI Industry in India – The Current Position**

According to a report in The Economic Times in the month of October, “Start-ups is having a spectator 108% growth in funding in India in 2018.” The news report further stated that it is Artificial Intelligence that is creating huge difference in India. Today we could see about 600 start-ups working on AI and machine learning domains. There has been a huge investment in India’s AI sector by private players alone and this number has been increasing day in day out. Though there has been growth, but still India lags far behind other developed countries in terms of investment. With a bountiful pool of talent and with growing population of youngsters, India will be banking on AI for its economic growth and improvement in quality of life of its citizens.

In India it has been seen that there are several upcoming start-ups that are based in cities such as Bengaluru, New Delhi, Mumbai and Hyderabad that are uniquely working with a setup of artificial intelligence principles that are serving the consumers in a better and exceptional way. Their range includes chat bots online shopping assistance and automated consumer data analysis. The companies have been working in areas such as e-commerce, healthcare, edtech, fintech etc. Though in their blossoming stage, the performance of these companies has been exceptionally promising for the future.

Artificial intelligence (AI) is the talk of the town today it is all prevailing in our organisations and these technologies have, therefore, made our work and personal lives easier. But what exactly is it? The English Oxford dictionary defines it as “The philosophy, progress and technologies of computer systems that are able to perform tasks that generally require human intelligence, such as visual perception, speech identification, decision-making, and conversion between languages.”

The modern concept of AI dates back at least as far as Alan Turing, the English mathematician who proposed the universal Turing machine in 1937. It became the basis for today’s programmable computer. He also introduced the famous “Turing Test” as a way of gauging intelligent behavior in computers.

Today the success of the organization depends on the implementation of Artificial Intelligence technology in order to recruit, retain and inspire the effective and efficient manpower this further helps in the growth of proprietor and worker. It is seen that almost every new companies today are implementing AI for conscripting activity which can reduce the inclusion time, reduces also cost and can find out and place the right talent at the right position.

Artificial Intelligence is a study in the field of computer science with concentrates on learning, reasoning, and self-correction therefore it is all about fast thinking with proportion of knowledge, leading to efficiency in problem solving by giving solutions.

Artificial Intelligence – The Road Ahead

The government of India with the introduction of National Strategy for Artificial Intelligence through NITI Aayog, has stated a sets the blueprint on how to develop AI in the country. According to the report it stated on how the AI can change the scenario in India also by analysing the strengths and the challenges that will come across on the way. In this process the government has identified few areas that it thinks AI will play an important and crucial role.

OBJECTIVES OF THE STUDY

- To observe how artificial intelligence is used currently in Human Resource Development recruiting process.
- To understand the importance of artificial intelligence in current and future scenario.

RESEARCH METHODOLOGY

For understanding this study, the data has been collected from both primary and secondary sources. The primary data collected through the investigation of various organizations with a structured questionnaire. The sample size chosen for the study is 100 respondents and they were selected through simple random sampling method. The organisations and the employers were requested to provide the information that are related to the presence

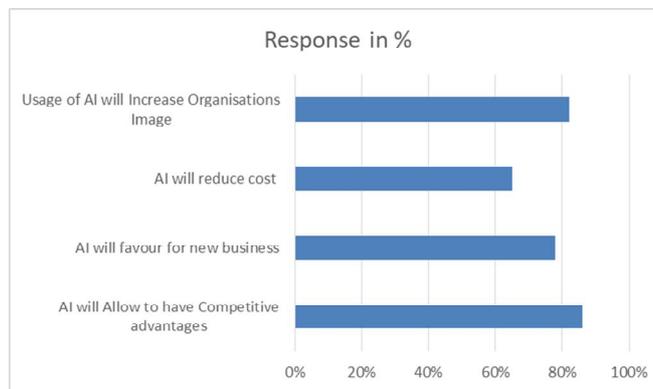
of AI in their organisations and its effect on Talent Management. The analyzed data have been represented in a table and interpreted

DATA ANALYSIS

Here are some of the attributes and parameters which have been used for the study as reference.

Table - 1: Reasons for Adopting AI

S.No	Particulars	Response in %
1	AI will Allow to have Competitive advantages	86%
2	AI will favour for new business	78%
3	AI will reduce cost	65%
4	Usage of AI will Increase Organisations Image	82%

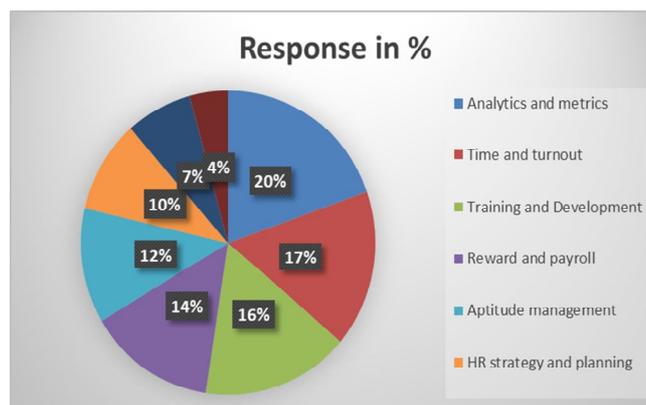


Based on the research, a majority of the respondents preferred automated services via AI assistants in place of human. 86% felt that usage of AI will give them competitive advantages over others, while 78% felt this will boost their new business inception a boost and further 65% felt that this will reduce the cost and will lead to profits

Table – 2: Analytical areas considered for identifying highest HR potential

S.No	Particulars	Response in %
1	Analytics and metrics	88%
2	Time and turnout	75%
3	Training and Development	73%
4	Reward and payroll	63%
5	Aptitude management	55%
6	HR strategy and planning	44%
7	Appreciation and appointment	33%
8	Wellness Diversity and inclusiveness Leadership	19%

Source: Primary data



INTERPRETATION

HR professionals are most interested in AI’s ability to analyze, predict and personalize

When asked participants about the feature they’d most like to see in an AI powered application, their top response with (88%) was the “ability to analyze” further there were 75% who focused on the ability to predict and 73% felt AI helps in nurturing the ability to personalize and only 18% felt that emotions can be managed by AI.

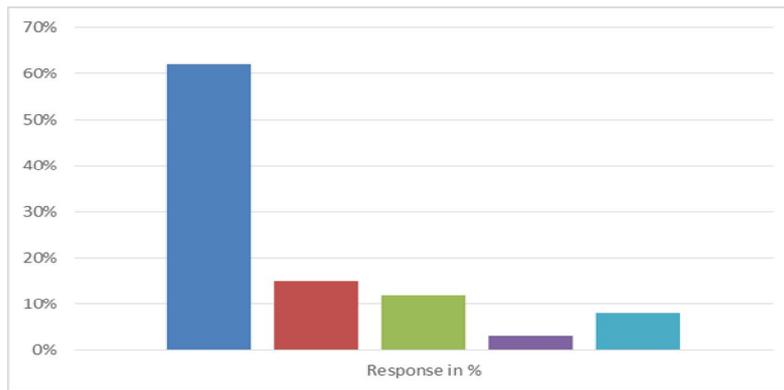
This therefore specifies that:

1. Artificial Intelligence, especially in the area of machine learning, is analytical in nature and based on computers’ ability to count the numbers much faster than any human being.
2. AI-based analytical tools have been many and it has been considered to be the first tool which has been adopted by HR.

Table – 3: Is ability prediction and talent acquisition linked

S.No	Particulars	Response in %
1	STRONG Acceptance	62%
2	Acceptance	15%
3	NEITHER Accept NOR DISAGREE	12%
4	STRONGLY DISAGREE	3%
5	DISAGREE	8%

Source: Primary data



AI algorithms and techniques are widely used to check the prevailing work samples, the scanning of CVs and other materials of employees like experience of employees and then predict which technique will be the most suitable for hiring and placing them in the job. Moreover, AI can potentially be used to analyze and predict based on a range of other types of data, from online candidate profiles to word choice and even facial expressions.

Based on this a survey was done to find the prevailing scenario and the response was that 62% strongly agreed that AI is essential for talent acquisition and grooming and further the organizations who disagreed were only 8%.

Therefore, it is observed that in future or HR development requires the presence of AI and its influence would be beneficial to the success of the organization.

FINDINGS

Nevertheless, of these problems’ trials and hazards, the issues are many and mammoth. Companies are spending huge revenue on workforce and much of this expense is driven by management decisions to the ultimate. As AI systems in HR get smarter, there will be huge change and shift with more proven, and more focused on specific problems, and this will results in a drastic and dramatic improvement in productivity, performance, and employee welfare wellbeing. It’s just that people have to be patient, vigilant, and willing to invest.

CONCLUSION

Understanding the impact of AI in TM Presently and in the Future

The usage of AI-based techniques and algorithms to streamline and scan work issues, the resumes, and other materials submitted and presented by applicants and further it will improve the Talent incepted and regular streamlining it.

ARTIFICIAL INTELLIGENCE – ACTION PLAN INDIA

The growth success and establishment of any sector depends on various variables and out of which two pillars are considered they are Capital and qualified manpower. There has been drastic changes in the curriculum and further there is also more changes expected in the future, India is home to a large talent pool of Science, Technology, Engineering and Math graduates. Companies such as Google, Intel and Microsoft who have been offering many long and short term training programs to the developers dealing in computer program this further helps them upgrades them in polishing their knowledge with respect in the area of AI programming. Further AICTE, the government body that governs and regulates professional education in India, has started adding AI, IoT, Machine Learning and few other subjects as compulsory subjects in its curriculum of B.Tech programs.

The start-ups have been working towards developing various AI based products and services. With conglomerates having a lion's share in India's market, there is huge scope for AI based enterprise solutions in the country.

iNurture, a leading enabler has started introducing programs that are making people industry-ready. Therefore the UG and PG education in India, has identified AI as a next-gen technologies that can and will shape the future of the India and can further will create plenty of job opportunities. To make this realistic iNurture is offering UG programs with specializing in Artificial Intelligence domain in collaboration through various universities in India. Therefore these programs are designed keeping the needs of current and future industry.

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PREFERENCE OF AIRBNB HOME-STAY OVER REGULAR HOTELS AND ITS AWARENESS IN INDIAN MARKET

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ABSTRACT

Purpose: The purpose of this research paper is to increase the understanding of Indian market with reference to home stays in Airbnb.

Research Implications: This paper provides the customers awareness and the preference between Airbnb home stays and regular hotels with regards to the Indian market.

Findings: The travel industry is developing at a high rate. People shell out high amounts on tourism. The tariff rates of hotels are rising and the travelers are compromising quality over cost. In this case, home stay model of airbnb has provided a possible alternative to the regular hotels. Hence, before referring it as most feasible alternative, some important aspects about travel and stay need to be assessed like safety, privacy, comfort.

This research paper focuses on customer preference between airbnb home stays and regular hotels. Most of the respondents are seem to be interested in home stay idea even though many of them are not aware about the same. Airbnb has made home stay model into best of both deal that is making it more successful in Indian market.

Originality/Value: This research paper presents the Study on Airbnb Working Model and consumer’s attitude towards Airbnb Home stay and regular hotels. It also shows whether the consumers in Indian Market are open minded for accepting such new alternative like Airbnb home stay

Keywords: awareness, preference, airbnb, home stay, hotel, location, travelers, safety, privacy, comfort, design, structure, hosts

INTRODUCTION

Airbnb, Inc. Is a privately held global company headquartered in San Francisco that operates an online market place and hospitality service which is accessible via its websites and mobile applications. Members can use the service to arrange or offer lodging, primarily home stays, or tourism experience. The company does not own any of the real estate listings, nor does it host events; as broker, it receives commissions from every booking.

Airbnb entered the Indian market in 2012 and since then has grown on an exponential rate. The main purpose of this research is to find out the awareness about the Airbnb model in the Indian customers and whether people prefer home stays over regular hotels or not. This review consists of various parameters like safety, privacy, comfort, location, culture differences etc. And the surveys were focused on finding out the impact of these factors on the preference of travelers.

HISTORY

DATE	EVENTS
October 2007	Idea Creation
August 2008	Launched AirBedandBreakfast.com
August – November 2008	Sold cereal boxes and earned \$30000
January 2009	Accepted into Y Combinator Received \$ 20000 as funding
March 2009	Website name becomes airbnb.com
November 2010	Received funding of \$7.2 Million
February 2011	Reaches 1 Millionth booking mark
July 2011	Received funding of \$112 Million
January 2012	Reaches 5 Millionth booking mark
June 2012	Reaches 10Millionth booking
August 2014	Received of \$475 Million
October 2014	A law named Airbnb Law is made in San Francisco
June 2015	Received funding of \$1.5 Billion

November 2015	Private Equity Funding of \$100 Million
December 2015	Received funding of \$1.5 Billion
September 2016	Received funding of \$555.5 Million
March 2017	Received funding of \$447.8 Million

OBJECTIVES

- To understand the scope of airbnb in Indian market
- To find out the impact of Airbnb on regular hotels
- To determine the level of awareness about the services provided by Airbnb in Indian market
- To suggest and recommend airbnb to improve and grow their reach in Indian market

HYPOTHESIS

H₀: people are not aware about Airbnb and so do not prefer it over regular hotels

H₁: people have basic awareness but they do not prefer it over regular hotels

H₂: people are aware about Airbnb and prefer over regular hotels

RESEARCH METHODOLOGY

Universe	Maharashtra State
Sampling method	Simple Random Sampling Convenience Sampling
Sample Size	150
Method of collection of data:	
a) Primary	Questionnaire and observation
b) Secondary	Article, Books, Blogs and Journals
Representation of data	Pie charts, bar graphs, tabular information

• **Sample**

Sample means a small portion of the population taken up for intensive study purpose. Sample acts as the representative of the whole universe.

Sample of respondents for this research are 150 which were selected randomly.

• **Sample Design**

A sample design is a finite plan for obtaining a sample from a given population. There are two types of sample design used while doing this research-

a) Simple Random Sampling Method

In simple random sampling method, the complete list of the universe is taken but the selection is made at random from the list. This method is free from human bias. Random selection means not haphazard selection. Here the universe has an equal chance of being selected.

b) Convenience Sampling Method

In convenience sampling method, the convenience of the researcher is given importance while selecting the sample. Sample is selected as per the convenience of the researcher. Human bias is likely to occur. Here the population does not get an equal chance of being selected.

• **Universe**

Maharashtra State - Mumbai, Nagpur, Pune

• **Sample Size**

150 respondents

• **Sampling Procedure**

➤ **Probability method**

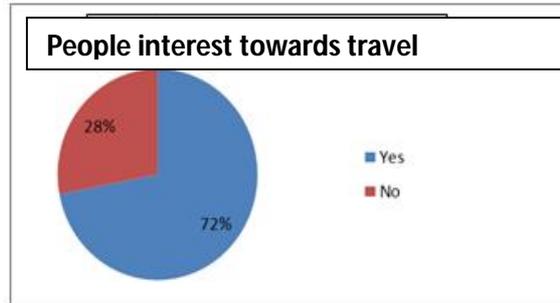
In the Probability sampling method, the sample units are selected at random. Every member in the universe has an equal chance of being selected as the representation. This information is unbiased. This method is time consuming and expensive.

LIMITATIONS OF THE STUDY

- 1) Services of Airbnb have wide coverage and therefore, it is difficult to accurately calculate the level of awareness.
- 2) Sometimes some people may have positive or negative bias due to their single experience.
- 3) As it is more opinion based, this research does not include direct quantitative comparison.

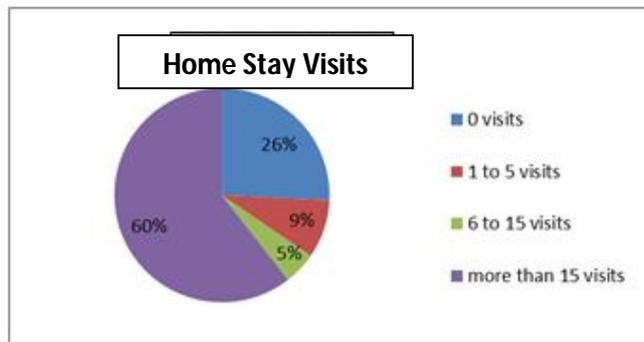
DATA ANALYSIS AND INTERPRETATION

1. Are you interested in travelling?



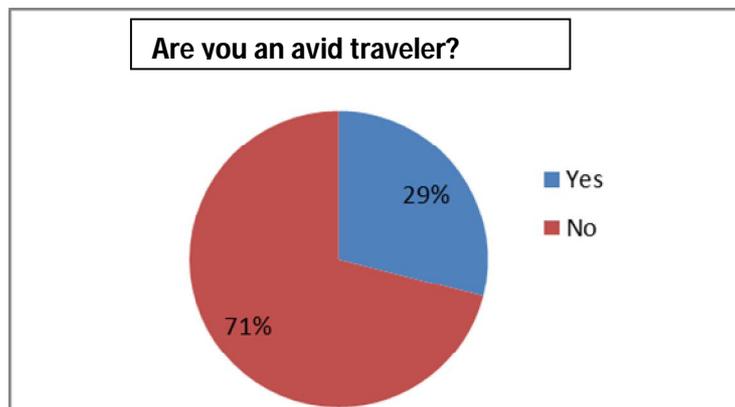
From the above figure, we can see home stay visit frequency of people who like to explore and travel. From 150 responses, about 72% people showed interest in travelling while 28% people showed less interest in travelling. Hence, we can say that large number of people are exploring different staying options and are aware of various choices.

2. Home stay visit frequency



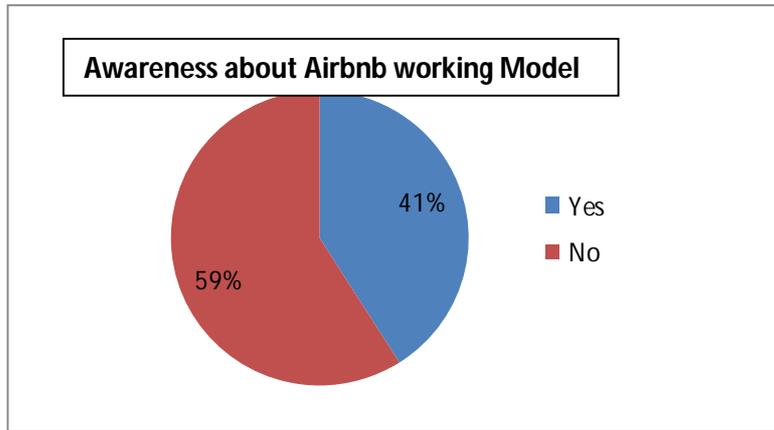
From the above figure, we can see the Frequency of home stay visits by the customers. 60% of the total respondents have visited home stays more than 15 times while 26% of the total respondents have not visited home stays even a single time. Around 9% people visited the home stay for about 1 to 5 visits and only 5% of the total respondents visited home stays for about 6-15 times.

3. Are you an avid traveler?



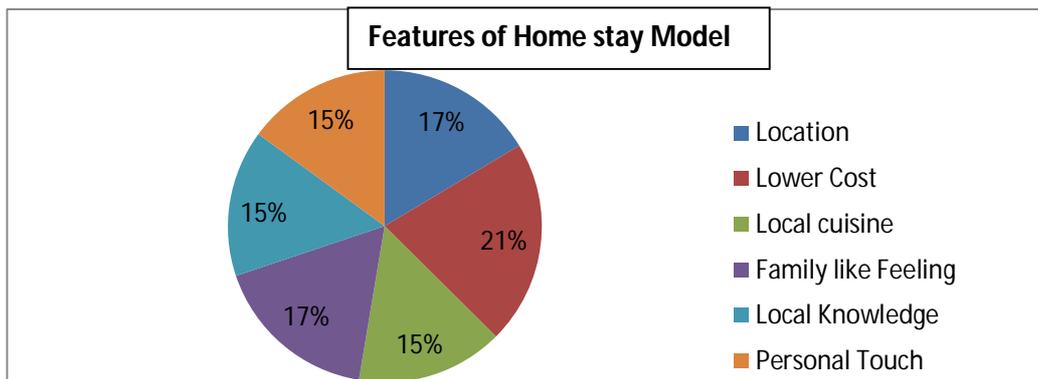
The above figure shows whether the respondents are avid traveler or not. Out of 150 responses, 29% of respondents said they love travelling and are avid traveler while 71% said they are not that passionate about travelling. However, respondents are still critical about safety, privacy, comforts at home stays.

4. Are you aware about Airbnb working model?



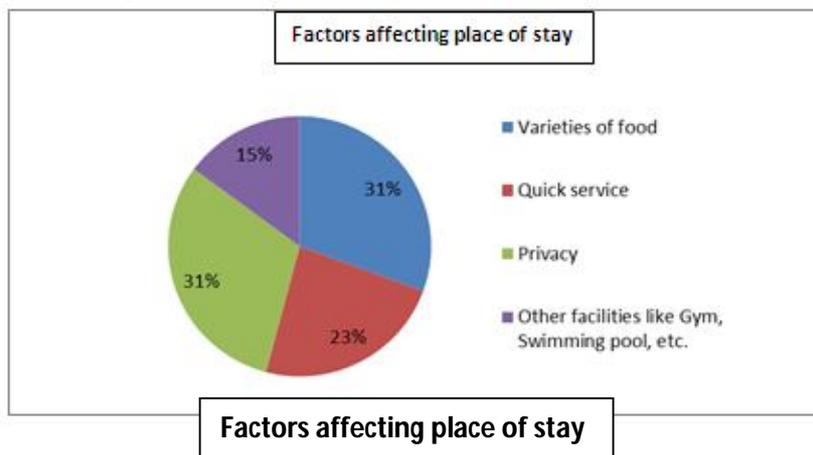
Airbnb Working Model defines the process it follows in order to ensure safety and comfort to its customers and has implemented the rating system in their model which shows the ratings of the host to the customers. According to the survey conducted, 59% of the respondents are not aware about the Airbnb model and the rest 41% are aware about the working model of Airbnb.

5. Features of Home Stay Model



There are many features of the Home Stay Model as mentioned in above figure. From the above figure, we can say that most preferred features of home stay are lower cost, location and family like feeling. Travelers who are budget conscious opt for lower cost as it is shown in the above figure that 21% of total respondents opt for lower cost feature in home stay. However, Home stay offers a better alternative with high comfort level the fair pricing strategy to the traveler. Also, 17% of total respondents said that they get to stay with a local family that gives family like feeling.

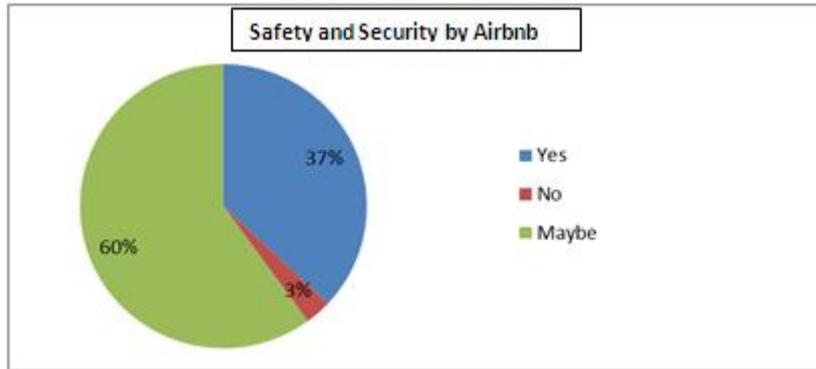
6. Factors that affects at the place of stay



According to the survey, Privacy is the most required feature provided by regular hotels, but the home stay lack in. Privacy during stay is the most important factor for everyone as it is shown in the above figure that 31% prefer privacy during their stay. Also, Food loving travelers look out for high variety of food at their place of stay. However, Home stay being a small establishment cannot provide a huge variety of food as compared to regular hotels. Hotel staff is highly trained in hospitality and can offer around the clock service.

On the other side, Home stay provides the taste of local cuisine which the regular hotel fails to provide and also home stay offers a homely feeling.

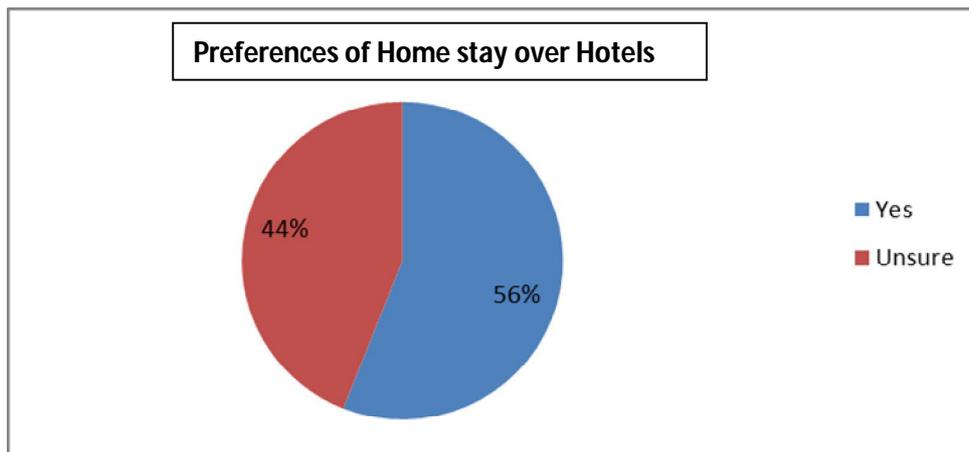
7. Safety and Security provided by Airbnb at their home Stays



From the above Figure, we can say that majority that is 60% of respondents are not sure about the Airbnb safety and security procedures or else they don't trust that system completely. Referring to the Awareness about Airbnb working Model above, 59% of total respondents are still not aware about Airbnb model that makes them doubt the security and safety feature of Airbnb.

Airbnb ensures that the home stays are safe and comfortable for its guest and also provides local guardians in case of emergency. As compared to regular hotels, home stays cannot provide high security to its guest. This may infer that guests with high level of importance may be reluctant to at this home stay in concern for their security.

8. Preferences of home stay over regular hotels



From the above figure, we can clearly see that 56% of total respondents are willing to prefer home stay over regular hotels and around 44% of total respondents are unsure about their preferences. Most of the respondents are seem to be interested in home stay idea even though many of them are not aware about the same. This might be because of typical type of regular hotels, expensive tariff rates and very less local differentiation.

Peoples are always in search of something innovative and home stays are turning out to be great innovative to regular hotels. Airbnb has made home stay model into best of both deal that is making it more successful in Indian market.

CONCLUSION

After analyzing the responses given by the respondents, Most of the respondents are seem to be interested in home stay idea even though many of them are not aware about the same. Peoples are always in search of something innovative and home stays are turning out to be great innovative to regular hotels. The Airbnb model has considered offering privacy to its guests by segregating various hosts. There are also special super host which offer many upgrades to the traditional home stay model. Because of these restructure, airbnb home stays are getting an edge over other home stays and regular hotels being the best of both. Airbnb has made home stay model into best of both deal that is making it more successful in Indian market.

RECOMMENDATION

1. Airbnb must increase its marketing strategies to acquire their potential customers as not many are aware of the working model of Airbnb.
2. Airbnb must properly explain their safety and security policies to the customer which will help the customers to understand their model more clearly.
3. Safety checks for the host are in place. However, guest background must be incorporated to motivate more people to put up their properties on Airbnb.

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- <https://jungleworks.co/airbnb-business-model-revenue-insights/>
- <https://goo.gle/images/NwzytN>

Books

- The Airbnb Story by Leigh Gallagher
- Optimize your Airbnb by Daniel V. Rusteen

A STUDY ON CONSUMER PERCEPTION TOWARDS FAST MOVING CONSUMER GOODS IN MUMBAI

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ABSTRACT

Green marketing in both academic and business sense is crucial to developing countries. This phenomenon has to develop its economic and social agenda. In the past two decades, the concept of green marketing has achieved an exponential growth, making imperative impact both on the market and environment across the globe. In the field of ethics and social responsibility, environmental and green marketing themes are the core areas related to environmental safety and human wellbeing.

INTRODUCTION

In the modern era of globalization, it has become a challenge to keep the customers as well as consumers in fold and even keep our natural environment safe and that is the biggest need of the time. Environmental pollution is a buzz word in today's business environment. Consumers are also aware of the environmental issues like; global warming and the impact of environmental pollution. Green marketing is a phenomenon which has developed particular important in the modern market and has emerged as an important concept in India as in other parts of the developing and developed world, and is seen as an important strategy of facilitating sustainable development.

MEANING OF GREEN MARKETING

Green marketing focuses upon the philosophy of "Reduce, Reuse and Recycle"-Reducing the environmental deterioration and energy consumption, increasing the repeated use of a product and recycling the product for the development of a new product. Green marketing uses the advertising and promotion of the product which is durable, non-toxic, and recyclable and is often made from recycled materials.

Thus "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, non-biodegradable solid waste, harmful impact of pollutants etc. Both marketers and consumers are becoming increasingly sensitive to the need for switch in to green products and services. While the shift to "green" may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous, cost-wise too, in the long run.

Consumer Perception

Perception is an influential phenomenon as people usually act upon their perceptions. Perception eventually transforms into reality. **Customer perception** refers to the process by which a customer selects, organizes, and interprets information/stimuli inputs to create a meaningful picture of the brand or the product. **Customer perception** plays a vital role in a company's ability to attract new **customers** and to retain existing **customers**. The good news is that companies have the ability to control many of the factors that build an individual's **perception** of the company/brand.

FAST MOVING CONSUMER GOODS (FMCG)

Fast-moving consumer goods (FMCG) sector is the 4th largest sector in the Indian economy with Household and Personal Care accounting for 50 per cent of FMCG sales in India. Growing awareness, easier access and changing lifestyles have been the key growth drivers for the sector. The urban segment (accounts for a revenue share of around 55 per cent) is the largest contributor to the overall revenue generated by the FMCG sector in India. However, in the last few years, the FMCG market has grown at a faster pace in rural India compared with urban India. Semi-urban and rural segments are growing at a rapid pace and FMCG products account for 50 per cent of total rural spending.

LITERATURE REVIEW

1. **Philip Kotler & Kevin Lane Keller (2011)**: Companies that moud "green programs" can face two main problems: consumers may believe that product is of inferior quality of being green and consumers feel the product is not really that green to begin with.
2. Shailesh Shukla has conducted a study to focused segments which are higher qualified or higher income group. In India two types of consumer are more aware towards green products one is higher qualified and

other higher income group people. Higher income group people always use the products which reflect their image in the society with better performance, high quality and durability (Shailesh Shukla et al, 1998).

3. W.M.C.B. Wanninayake et al in their research they have identified that the demographical variables are the main influencing factors to decide level of awareness for green products. Demographical variables are the major influencing factor for consumer level of awareness, these variables like age, gender, education (W.M.C.B.Wanninayake et al, 2008).
4. According to the BCG Survey they observe that customers becoming aware with the name of green products and they are not only buy but also adopting the green habits in their daily life. Customer are having positive image for companies which involved in green marketing (BCG Survey, 2011).

OBJECTIVE OF THE STUDY

1. To identify the consumer’s awareness level differences on the basis of their education.
2. To understand consumer’s perception towards green Fast Moving Consumer Goods.

METHODOLOGY

To investigate the research objectives primary and secondary data have been collected and analyzed. The first part of the research of the extensive review of the researches already had been done in the field of consumer’s awareness level, and consumer’s perceptions for the green products and service. Primary data has been collected through the structured questionnaire.

HYPOTHESIS

The hypothesis was formed that is:

H1: There is significant difference in various demographic factors and consumer perception towards green fast moving consumer goods.

RESEARCH DESIGN

The design of present research is diagnostic in nature. The main purpose of the study is to make an evaluation regarding the perception of consumers and demographic factor that influencing their perception.

For the purpose of research place selected was Kandivali, Mumbai. Chi square test tried to find whether significant difference exists within the group. Results were presented in tabulated form.

SAMPLING PROCEDURE

The study incorporates the consumers of the age group of above 20 years located mainly in Mumbai city.

STATISTICAL TOOLS USED

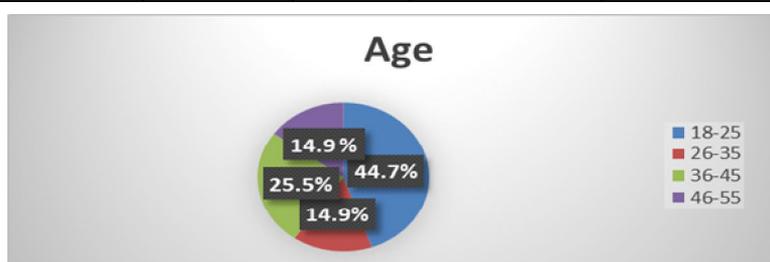
Chi Square Test have been used for the analyzing the data.

ANALYSIS AND FINDINGS

GRAPHICAL REPRESENTATION

1. Age

Age	Frequenc y	Percen t	Valid Percent	Cumulative Percent
18-25	21	44.7	44.7	44.7
26-35	7	14.9	14.9	59.6
36-45	12	25.5	25.5	85.1
46-55	7	14.9	14.9	100.0
Total	47	100.0	100.0	

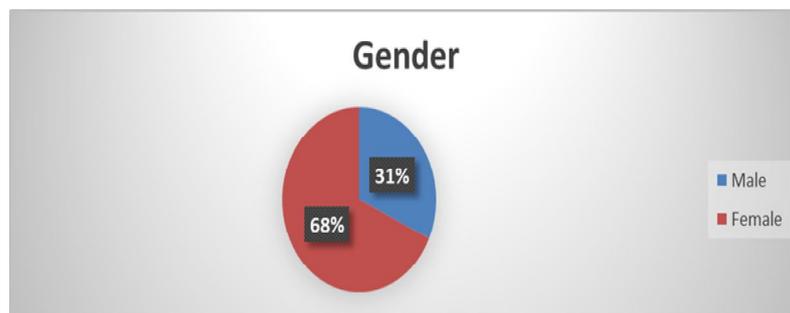


Interpretation

Above table gives the age-group wise distribution.

2. Gender

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	15	31.9	31.9	31.9
Female	32	68.1	68.1	100.0
Total	47	100.0	100.0	

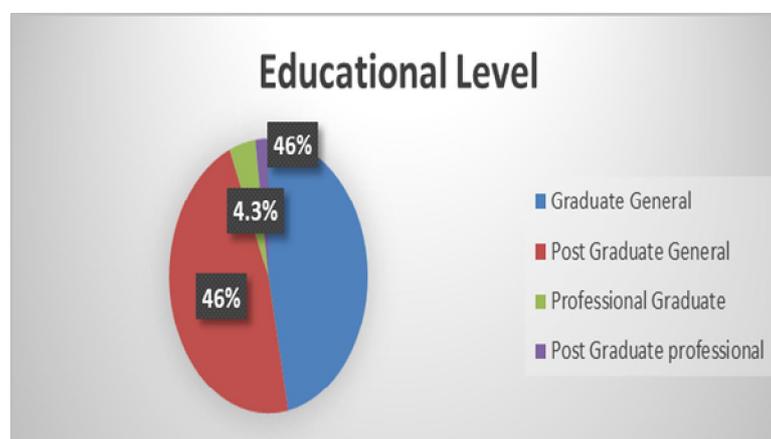


• **Interpretation**

The maximum respondents are Female (68.1%) as compared to Male (31.9%).

3. Educational Level

Educational Level				
	Frequency	Percent	Valid Percent	Cumulative Percent
Graduate General	22	46.8	46.8	46.8
Post Graduate General	22	46.8	46.8	93.6
Professional Graduate	2	4.3	4.3	97.9
Post Graduate professional	1	2.1	2.1	100.0
Total	47	100.0	100.0	

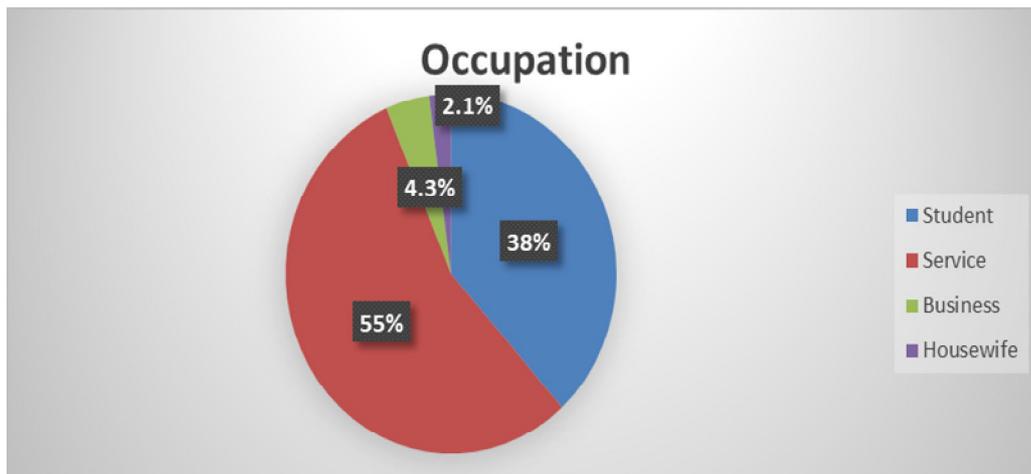


• **Interpretation**

Around 46.8 % are Graduates and equal number of respondents(46.8%) have pursued Post Graduate.

4. Occupation

Occupation				
	Frequency	Percent	Valid Percent	Cumulative Percent
Student	18	38.3	38.3	38.3
Service	26	55.3	55.3	93.6
Business	2	4.3	4.3	97.9
Housewife	1	2.1	2.1	100.0
Total	47	100.0	100.0	



• Interpretation

Maximum of 55.3% of respondent's occupation is Service.

5. Are you environment friendly? (Environmental friendly means who has care and concern for environment)

Are you Environment Friendly?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	46	97.9	97.9	97.9
No	1	2.1	2.1	100.0
Total	47	100.0	100.0	

Interpretation

Almost all the respondents say that they are Environment Friendly.

6. Are you aware about eco-friendly products? (eg. Organic products , herbal products, products produced without using chemicals)

Are you aware about eco-friendly products?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	40	85.1	85.1	85.1
No	5	10.6	10.6	95.7
Somewhat	2	4.3	4.3	100.0
Total	47	100.0	100.0	

• Interpretation

Maximum respondents around 85.1% says that they are aware of eco-friendly products.

7. If Yes, do you buy eco-friendly products?

If Yes, do you buy eco-friendly products?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	39	83.0	83.0	83.0
No	1	2.1	2.1	85.1
Somewhat	2	4.3	4.3	89.4
NA	5	10.6	10.6	100.0
Total	47	100.0	100.0	

• Interpretation

From among the respondents who are aware about Eco-friendly products, Maximum of 83% respondents say they buy eco-friendly products.

8. If Yes, how often you purchase eco-friendly products over other products?

If Yes, how often you purchase eco-friendly products over other products?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Always	4	8.5	8.5	8.5
Mostly	13	27.7	27.7	36.2
Sometimes	22	46.8	46.8	83.0
Rarely	2	4.3	4.3	87.2
NA	6	12.8	12.8	100.0
Total	47	100.0	100.0	

• Interpretation

46.8% of respondents say that they buy eco-friendly products sometimes over other products.

Type of Fast Moving Consumer Goods (FMCG) and Eco-friendly products you purchased and used.

Type of Fast Moving Consumer Goods(FMCG) and Eco-friendly FMCG products you purchase and used		
	FMCG	Eco-friendly FMCG
Cosmetics	23.6%	25.8%
Toiletries	18.0%	11.8%
Detergents	9.9%	14.0%
Electronic Goods	10.6%	9.7%
Home Utilities	6.8%	5.4%
Food and Drinks	23.0%	26.9%
Apparels	6.2%	2.2%
Others	1.9%	4.3%

• Interpretation

Most of the FMCG and FMCG Eco-friendly products purchased and used are Cosmetics and Food and Drinks. For these 2 products basically, customers prefer FMCG eco-friendly products more over FMCG products.

From where do you purchase eco friendly products?

From where do you purchase eco friendly products?			
	Responses		Percent of Cases
	N	Percent	
Internet/Online	30	41.7%	63.8%

Retail shops	36	50.0%	76.6%
Placing orders to the concern person having membership of a certain company	5	6.9%	10.6%
Others	1	1.4%	2.1%
Total	72	100.0%	153.2%

• Interpretation

Mostly the eco friendly products are purchase from Retail shops and Internet/Online

According to you why consumer prefer non -eco friendly products over eco friendly products?

According to you why consumer prefer non eco-friendly products over eco friendly products?			
	Responses		Percent of Cases
	N	Percent	
Not easily available	36	44.4%	76.6%
Expensive	15	18.5%	31.9%
Limited choices	22	27.2%	46.8%
Not aware about the benefits of eco friendly products	8	9.9%	17.0%
Total	81	100.0%	172.3%

• Interpretation

Most of the customers say that they prefer non eco friendly products over eco friendly products because eco friendly are not easily available and in that they have limited choices.

CONCLUSION

There is strong relationship between educational level, occupation income and perception towards green marketing.

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THE IMPORTANCE OF MARKETING INNOVATION IN NEW ECONOMY

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ABSTRACT

Marketing innovation is identified as a search for creative and new solutions to problems and needs. For businesses to become more competitive and improving their performances, they must constantly develop their strategies. The new economy is greatly determined by the globalization process, frequent changes as well as the growing importance of knowledge application through the successful implementation of innovation. In the new economy, organizations that have the ability to develop and adopt the inventions in a short period of time and profitably apply it in all areas of business reach competitive advantage over the competition in time. Researchers expressed that innovation plays a critical role on the effectiveness of organizations and enhances their potential to innovate and grow. Nowadays, the term innovation means not only a significant improvement in process and product technology, but it refers more to the innovation process in the field of human resources, especially in marketing management. For the above mentioned reasons, the paper pays special attention to the marketing innovation analysis and the increasingly significant impact it has on the process of achieving sustainable competitive advantage.

Keywords: Marketing, Innovation, New economy, digital marketing

METHODOLOGY

The present study is based on the secondary data published by various agencies and organizations. The present study makes use of data and information provided by IBEF, Ministry of Statistics and Programme Implementation, Newspapers, Magazines, Books, journals and Internet etc.

INTRODUCTION**What is innovation marketing?**

What does marketing have to do with innovation? Much, much more than most people can see or show in their organization! On the one hand, innovation can only be successful with marketing; on the other hand, marketing needs innovation for product success.

Innovation marketing as a discipline encompasses marketing activities in the innovation process. This includes, for example, research into customer needs, concept and prototype tests with customers and the marketing of new products. These are all key tasks in innovation management and innovation marketing plays a very important role in securing and increasing the success of innovation.

Marketing and innovation - an inseparable couple.

Peter Drucker already said "Business has only two functions - marketing and innovation". He considered marketing and innovation to be the important basis for the company's success.

Definition of innovation marketing

Innovation marketing covers all innovation management activities that contribute to the promotion of the market success of new products and services. If one considers that the actual task and mission of innovation is market success, it becomes clear that innovation marketing plays an extremely important role in the innovation process.

Innovation marketing thus includes a very wide range of tasks, specifically all activities that are related to customer and market orientation and that enable a successful marketing of a new product or service.

OBJECTIVE

1. To find the impact of innovative marketing strategies on consumer buying.
2. To understand the importance of innovative marketing strategy.

IMPORTANCE OF MARKETING INNOVATION

Innovation marketing plays a role in all phases and thus ensures customer and market orientation, an important lever to avoid the failure of an innovation.

However, if innovation marketing is not enforced and pursued with priority, there are many risks and dangers that must be avoided in an innovation project.

- If there is a lack of information about the market, customers, users and their needs or if they are inadequate (e. g. not representative or incomplete), wrong decisions are made with regard to the product or the target market, which can drive a project in the wrong direction and, as a result, drive it to the wall. For example, the product is misplaced, the wrong target market is chosen or irrelevant needs are addressed.
- The product does not sell. This does not necessarily mean that the product is bad. There are mediocre products that are marketed perfectly and are therefore more successful than those that are top of the line but are badly marketed. Marketing is therefore an important success factor, both internally and externally. Develops global economy.
- Improves traditional trading.
- Introduces new technologies.
- It gives better results to meet new necessities , incoherent needs, existing marketing requirements etc..

These points make it clear that innovation marketing is an important lever for the success of innovation. Around 60 to 80 percent of new products fail and many of the reasons are based on a lack of customer orientation and marketing. That's why innovation managers and project managers have to deal with innovation marketing and work closely with marketing and sales.

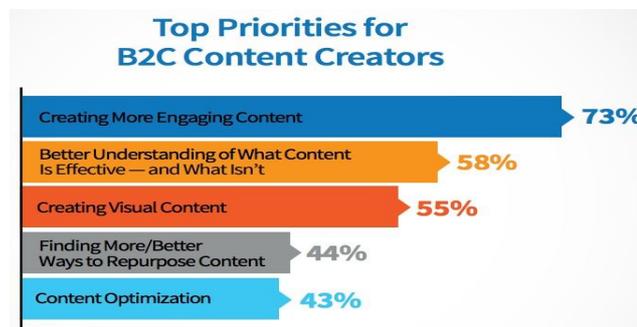
Facts and analysis

In the year 2018, we've seen the continued importance of visual content emphasized by the changes that occurred across almost every major social network, including Facebook, Snapchat, Instagram, and Twitter. At the same time, videos have become powerful tools for brands looking to communicate more easily with their readers, and virtual reality (VR) is finding its place as a marketing tool in numerous businesses.

let's take a look at some visual content marketing statistics that demonstrate the impact visual content has on reach, engagement, and sales.

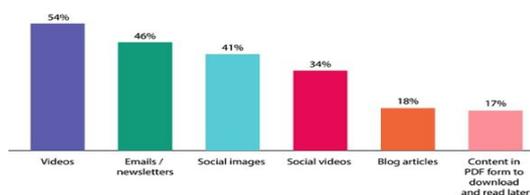
General Visual Content Statistics

1. 32% of marketers say visual images are the most important form of content for their business, with blogging in second (27%).
2. 80% of marketers use visual assets in their social media marketing. Video (63%), alone, has also surpassed blogging (60%) in usage as a social media marketing asset.
3. When people hear information, they're likely to remember only 10% of that information three days later. However, if a relevant image is paired with that same information, people retained 65% of the information three days later.
4. 11% more B2C marketers than B2B marketers say visual content is the most important type of content today.
5. 51% of B2B marketers prioritize creating visual assets as part of their content marketing strategy.



For brands, video content is preferred

What kind of content do you want to see from a brand or business you support?



Video Marketing Statistics

- 1 Mobile video usage has increased by nearly 10 million daily viewing minutes in the last two years.
- 2. 43% of B2C marketers say pre-produced video is the most successful type of content for marketing purposes.
- 3. Globally, YouTube is consumers' leading source of video content, at 83% (Facebook is second, at 67%).
- 4. 62% of B2B marketers have rated video as an effective content marketing tactic.
- 5. Using the word "video" in an email subject line boosts open rates by 19% and click through rates by 65%.

EMERGING VISUAL MARKETING TRENDS

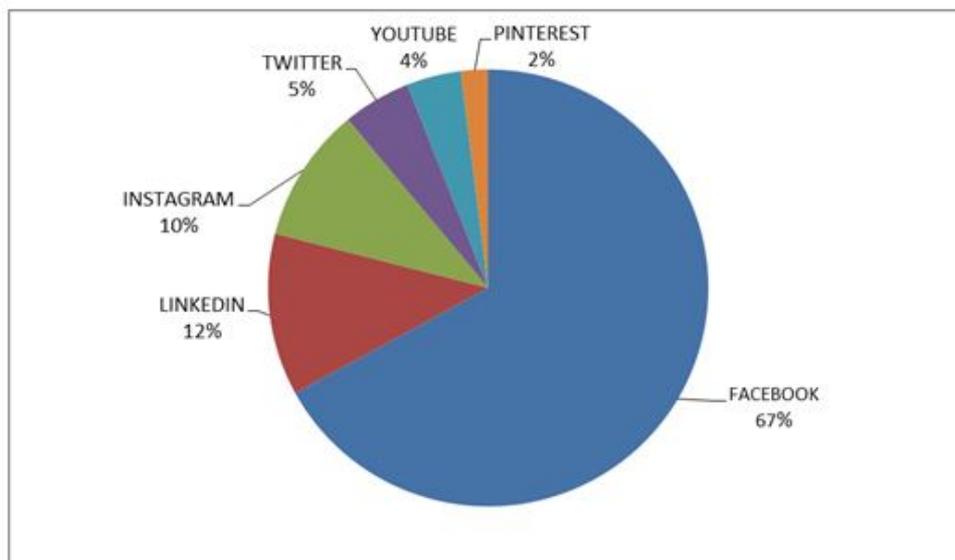
- 1. As of 2018, 35% of marketers use live video.
- 2. Live videos on Facebook have an engagement rate of 4.3% compared to 2.2% for non-live videos.
- 3. According to a 2018 survey, 82% of respondents expect people to focus on developing augmented reality (AR) experiences for smartphones.
- 4. Magnifyre found that 29% more people viewed a 360-degree video than the same video in traditional format.
- 5. Gaming, education, and healthcare are the top three industries expected to invest the most in VR technology for business growth.

INFOGRAPHIC STATS

- 1. Eye-tracking studies show internet readers pay close attention to information-carrying images. In fact, when the images are relevant, readers spend more time looking at the images than they do reading text on the page.
- 2. Infographics can increase web traffic by up to 12%.
- 3. Infographics have had the biggest increase in usage among B2B marketers in the last four years -- now at 65%.
- 4. People following directions with text and illustrations do 323% better than people following directions without illustrations.

SOCIAL MEDIA STATS

- 1. Tweets with images receive 150% more retweets than tweets without images.
- 2. Facebook posts with images see 2.3X more engagement than those without images.
- 3. There are more than 500 million Instagram users active every day.
- 4. Snapchat users watch 10 billion videos per day.
- 5. 52% of marketers report seeing their organic reach on Facebook decline in the last year.
- 6. 67% of marketers consider Facebook their most important social media platform.



BENEFITS OF DIGITAL MARKETING OVER TRADITIONAL MARKETING**What is traditional marketing?**

Traditional marketing refers to the conventional methods of marketing used ever since the concept of advertisements or marketing came into existence. This primarily includes the following modes for brand promotion:

- Newspaper
- Flyers
- Radio
- Television
- Billboard advertising along roads and highways
- Magazine ads

What is digital marketing?

Digital marketing is the new age marketing method of the global realm. With internet finding its application and benefit in every aspect of life, marketing too has managed to not only create awareness or promote brands through it, but also give them a global platform to reach a wider customer base. It includes the following:

- Business networking sites such as LinkedIn
- Social media sites such as Facebook, Instagram and Twitter
- Email marketing
- Paid pop-up ads
- Blogs
- Click baiting URLs for viral content marketing

BENEFITS**1. Low Cost**

While newspaper, television and other such media ads cost a lot, advertising through the internet is quite affordable. This in turn means greater fraction of the budget to enhance business.

2. Real Time Result

Digital marketing has an edge over traditional marketing since it is able to give quick results, while the latter keeps you waiting for long before showing any results. With online marketing you can measure and view everything from number of visitors, conversion rate, busiest period of the day and bounce rate too with ease.

3. Brand Development

When the question of brand image arises among digital marketing vs traditional marketing, digital marketing has an added advantage. Due to the limitation of space and low frequency of advertisements as is the case with conventional marketing, it loses at the hands of the online marketing.

4. Non-intrusive

People do not purchase a newspaper to look at the ads or watch a television to be interrupted by commercials, hence usually advertisements featured through such media go ignored. However, with online ads, one has the power to choose to see an ad or not, participate in a social media discussion group or read or ignore a marketing email. Besides, you can also target a specific audience for these ads which. All of this makes these ads more wanted and far more likely to generate leads. Hence by being non-intrusive and non-annoying as opposed to the traditional marketing, digital marketing has more potential to give desirable results.

5. Greater Exposure

Any traditional form of marketing device, be it television commercials or a newspaper ad, can only cover a certain area or population sector of a region. As opposed to this, an online advertisement has the ability to reach out to a widespread population, even the whole of world.

6. Better Engagement

No traditional marketing mode, allows you to interact with your audience and really engage them with your brand. With such marketing channels you have to wait to gain response only after which can you take any further step. However, with digital marketing strategies, you can not only interact with your targeted audience in

the real time, but also make prompt and fruitful steps based on their quick feedbacks. You can also engage your audience in chats and discussions for registering better brand presence and gain passive advice to improve your product or service.

7. Quicker Publicity

Owing to real time results with digital marketing, you get instant publicity and even if you do not, you can instantly know which of your ad isn't working. The debate for traditional vs. Digital marketing is out of question here since the former falls way behind in this regard due to lack of such a scope. On the other hand, the latter works like a chain reaction giving you newer audience and earning you a newer customer with every passing nanosecond.

8. Works for Every Stage or Field

Digital marketing vs traditional marketing battle often falls in the winning hands of online marketing arena with certain benefits you cannot ignore with the former. Digital allows even small businesses with a handful of staff members to expand their brand presence and manage advertising and marketing front, which of course cannot be held true with traditional marketing methods which renders the small businesses and start ups at disadvantage marketing.

9. Easy Analytics

With digital marketing measuring the your marketing efforts becomes very easy and quick. You can instantly see which strategy is working and which isn't through Google Analytics, besides other aspects too such as general trend, inbound traffic, conversion rate, interested audience, bounce rate and profit. This all makes the digital marketing v/s traditional marketing debate, highly unfair by putting the former on the winning side by a wide margin.

CONCLUSION

Companies can gain sustainable competitive ad-vantage through differentiation based on creating A single common value concept for consumers and contributing to sustainable development. Sustainable development is an important aspect of marketing. Besides economic viability, company must achieve the goals of environmental sustainability. E companies preferred in the contemporary economic conditions are the ones managing to link innovation and marketing successfully. Innovation can be seen as an asset of the company, which is directly related to the feedback of marketing. Innovation is the main driver of competitiveness. In today's digital era it is important to make maximum use of new communication technologies and the Internet - especially in marketing and sales. The real challenges lie ahead of the company management: which marketing tools to retain and amplify, which ones to leave out and which sales strategy is the most effective. Nowadays, it is not just enough to know what consumers are looking for. Those who are familiar with market trends can predict which products consumers will put emphasis on. E changes have become more frequent and more distinct. The changes have become "the law of the market". However, the biggest threat is the increasing speed of changes. E change was a crucial factor for professionals in marketing and sales. Of course, sometimes it is best to maintain market position and retain market share. When the crisis waves begin to lose strength, it is ideal to have a good start in the competitive arena. You need to think of and plan the time after the crisis.

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A STUDY ON CONSUMER PERCEPTION FOR CELEBRITY ENDORSEMENT

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ABSTRACT

In today's world the celebrities are treated as a role model. People are changing their life style according with their favorite celebrity. This thing creates to a great extent an impact on the buying/ Purchasing behavior of the Consumer. This attracts the customers which leads to increases the company productivity which leads to increase in profit of the organization. Celebrities are not always creating any kind of effect on person's mind in terms of buying but giving the consumers information about the product. But mostly it gives a great impact on perception of choosing which product is the best in the market for the use. Now a Days celebrity endorsement plays an important role to market a product. A Brand is known by the celebrity who endorsed the same. Consumer perception is affected due to celebrity endorsement among youth in Mumbai. The area of research is in Mumbai.

INTRODUCTION

In today's world the celebrities are treated as a role model. People are changing their life style according with their favorite celebrity. This thing creates to a great extent an impact on the buying/ purchasing behavior of the Consumer. This attracts the customers which leads to increases the company productivity which leads to increase in profit of the organization. Celebrities are not always creating any kind of effect on person's mind in terms of buying but giving the consumers information about the product. But mostly it gives a great impact on perception of choosing which **product** is the best in the market for the use. Now a Days celebrity endorsement plays an important role to market a product. We always think that if our favorite celebrity is using them. Then we use that to be like them (Khatri 2006). From last 100 years advertising is changing in different phases from the classical to modern. Now a day it is one of the excellent strategy used by marketers to influence customers by showing celebrities with their products, it includes different appeals lie, exciting, absurdity, sexual, etc. which give a negative thought to the youth. Belch, G. and Belch, M. (2008) acknowledged that the main aim of formulating such strategies is to get high brand revelation, longing, concentration and curiosity and to earn maximum profit. Thus marketers attach famous personalities, celebrities with their products.

CELEBRITY ENDORSEMENT

Khatri (2006) studies that the celebrity endorsement is the Promoting strategy to attract the customers to a product. By analyzing the resent market, now it's become the need of the marketers to use the different famous personalities to relate with their brands to create unique identity of the brand and to do flourish his company's brand or product, which results high expenditure for the company to use that strategy, however nowadays it is used to be a powerful strategic tool to get maximum profit. It also shows that this can carry risk, because there is no sureness that the celebrity can come up with the sales generation of the firm. But it creates a humming voice and gives popularity to the company and the brand. This may increase the expectation of the customers in terms of real star by delivering the company promise. There are certain perspectives occurred where the real persons can work better than the celebrities' endorsement, but not always.

BRAND

AMA classifies that brand is a given name, indication, symbol, intend or blend of them that make one product or service different from other product or service which leads to Profit maximization. Brand is only about to create some associations with the customer, when it shows any characteristics of the brand we just recognize the brand. It's about getting people to know you as the only one that satisfy them the best way. The good brand includes, clears message delivery, assures your trustworthiness, attach with your target market, peruse the buyer and create loyalty. To make your brand successful first you need to understand the desires of your customers and then offer any brand in that manner according to the customer demand. Your brand should be in the minds of your customers. Once customers accept the brand, the brand gets more loyalty from the customers and stays for long in the market. According to Silvera & Austid (2004) brand is a set of insights and descriptions that signify a corporation's product or services, but many people think brand just a name or symbol but in real life it is beyond that and have larger definition and scope. It's the overall image of the product; it is the tools, which attach the customer's heart and mind.

STATEMENT OF PROBLEM**THE PROBLEMS OF RESEARCH ARE AS FOLLOWS:**

- To study weather consumer perception is affected due to celebrity endorsement among youth in Mumbai.
- To study weather celebrity endorsement brings any change in the buying behavior of consumer among the youth in Mumbai.

REVIEW OF LITERATURE

According to **Rizan Raheem Ahmed** in a research published by him on the topic **Impact of Celebrity Endorsement on Consumer Buying Behavior at Pakistan** in the year **2015**. He conducted this research with an objective: -To examine the impact of celebrity endorsement on buying behavior. To study the perception of students and professionals about the celebrity endorsement. To Know the relationship between celebrity endorsement and customer buying behavior. To analyze influence of brand over celebrity endorsement. To analyze which factor of celebrity influence more to the public. Concludes that the Celebrity endorsed advertisements are more attractive than the non-celebrity endorsed advertisements. Respondents also voted that the one of the best medium for watching the advertisements is TV and then Internet. It is concluded that the highest relationship existed between the perception and the buying behavior. The lowest relationship is, between celebrity attractiveness and the consumer perception. There is a significant relationship among all the attributes of the celebrity endorsing a product. It is finally concluded that there is a relationship between celebrity endorsement and buying behavior. Respondents clearly conveyed that they do purchase those products and services, which are endorsed by the celebrities. Results show that the celebrity endorsement has an impact on customers as per their attitude and buying intention. Physical attractiveness, credibility and congruence of the celebrity with the reference to endorsed advertisement all have an influence on customer perception about the advertised product. It has also highlighted that celebrity endorsement advertisements do help in boosting up the sales and purchase of product, people like to buy the products more if endorsed by the celebrity and it shows that Present customers is aware and influenced by Celebrity endorsement.

GAP ANALYSIS

In the past the preachers have studied various factors, awareness, impact on celebrity endorsement, consumer's perception towards celebrity endorsement but has not studied the negative effect of celebrity endorsement for the topic "A Study on Consumer Perception for Celebrity Endorsement" so the researcher has decided to do a research on the negative and the positive effect of celebrity endorsement to the consumers

OBJECTIVE OF RESEARCH

1. To study awareness of celebrity endorsement among youth in Mumbai.
2. To analyze the impact of celebrity endorsement among youth in Mumbai.
3. To study weather celebrity endorsement is creating any negative impact on the youth in Mumbai.
4. To study the consumer's perception for celebrity endorsement among youth in Mumbai

HYPHOTHESIS

Ho: There is no impact of celebrity endorsement on consumer perception & buying behavior

H1: There is impact of celebrity endorsement on consumer perception & buying behavior

RESEARCH METHODOLOGY**Research Problem**

- To study weather consumer perception is affected due to celebrity endorsement among youth.
- To study weather celebrity endorsement brings any change in the buying behavior of consumer among the youth.

OBJECTIVE

- To study awareness of celebrity endorsement among youth.
- To analyze the impact of celebrity endorsement among youth.
- To study weather celebrity endorsement is creating any negative impact on the youth.
- To study the consumer's perception for celebrity endorsement among youth.

Area: The area of research is in Mumbai.

Sample size: The sample size is 200 youths

Duration: The duration of research is from 07 February, 2019 to 07 March, 2019

Procedure of collecting data: Questionnaire

DATA ANALYSIS

1. Are you Aware about celebrity endorsement?

	Male	Female
Yes	80	76
No	10	14
Maybe	10	10

Table No: 8.1: - representing the awareness of celebrity endorsement among youth

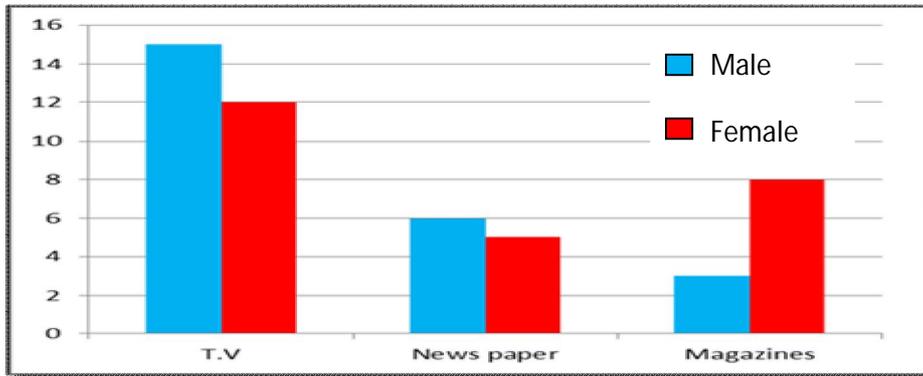


Fig. no: 8.2: - Graphical representation of awareness of celebrity endorsement

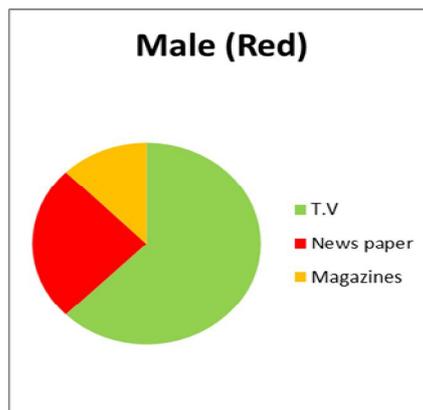
INTERPRETATION

The above table and the figure represent the awareness of celebrity endorsement among youth in Mumbai. From the figure we get to know that most of the youth are aware about the celebrity endorsement. Most aware are males, because nearly 80 males know about celebrity endorsement whereas only 76 females know about the same. And nearly 10 members out of 50 both males and females are not well known about the celebrity endorsement.

2. Do products require celebrity endorsement?

	Male	Female
Yes	22	10
No	20	9
Maybe	58	31

Table No: 8.3: - Tabular representation of the need of celebrity endorsement for a product.



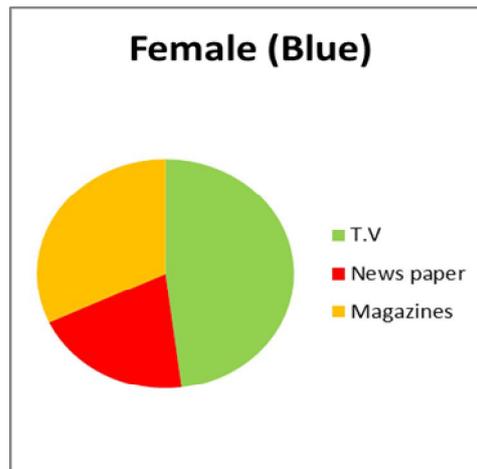


Fig no: 8.4: - Graphical representation of the need of celebrity endorsement for a product.

INTERPRETATION

The above table and the figure reflect that does a product need a celebrity endorsement. From the figure we get to know that most of the youth are aware about the celebrity endorsement but not in detail. Most aware are males, because 22 males say celebrity endorsement is required whereas only 10 females say celebrity endorsement is required. But 20 males say celebrity endorsement is not required whereas only 9 females say celebrity endorsement is not required.

3. Celebrity endorsement influence purchasing perception

	Male	Female
Yes	30	46
No	35	22
Some Time	35	32

Table no: 8.7: - Tabular representation of does celebrity endorsement influence purchasing perception

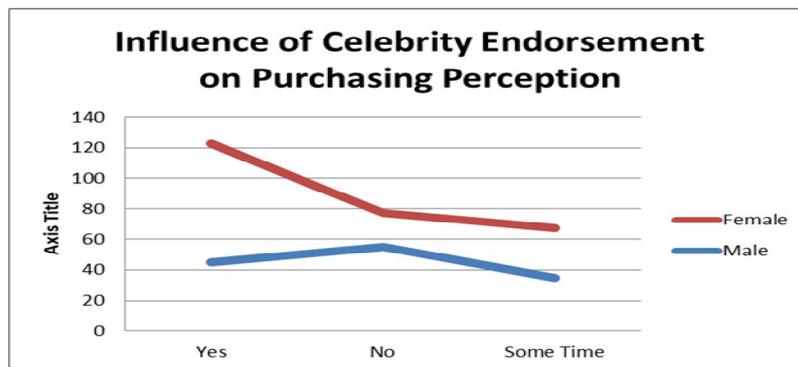


Fig no: 8.8: - Graphical presentation to study does celebrity endorsement influence purchasing perception

INTERPRETATION

The above table and the diagram represents that does celebrity endorsement influence the purchasing perception of the consumer. The diagram reflects that females are the most influenced once by celebrity endorsement because when 46 females get influenced by celebrity endorsement only 30 males are influenced. Males are influenced only some time.

FINDINGS, SUGGESTIONS & CONCLUSION

The researcher could find that the customers are influenced when a celebrity endorse a product. Due to Celebrity endorsement there is an influence in the demand, supply, consumer perception. But some endorsement goes to such extent that it leaves back a negative impact to the consumers of today’s world. The researcher wants to suggest that celebrity endorsement should be used by each and every producer to advertise his product which may lead to growth of our economy. But to the extent that the endorsement should not leave back a negative impact on the consumers.

If celebrity endorsement is done to provide positive message to the world and to the customer, then celebrity endorsement is the best way to advertise the product. And yes, celebrity endorsement does influence the youth of the world which leads to growth of our economy and also brings up updates and new fashions.

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CURRENT STATUS OF RENEWABLE ENERGY OF DIFFERENT STATES IN INDIA

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ABSTRACT

An increasing demand of energy one can think of utilization of renewable energy sources. Now a days these things plays very important role. This paper overview the various renewable energy sources like solar energy, Wind Power, Small Hydro Power and Biomass Power and found that Karnataka has the maximum installed capacity to produce renewable energy and Goa has the minimum installed capacity to produce renewable energy.

INTRODUCTION

The Sun is the one of the important renewable energy sources. Sun gives us infinite heat and radiation. Nowadays we are facing scarcity of energy, so it is needed to concentrate on renewable energy sources which will not affect global warming. Demand of energy is increasing year by year in different fields like house hold works, industries, vehicles etc., Industrial waste and other waste also can convert into energy. The present study is to basically review the different renewable energy sources and also the states which are using renewable energy sources to produce energy. The heat and radiation is coming to earth every day can generate the required energy for the world for all years. Solar power has the capacity to provide electricity for fewer amounts when compared with the electricity generated with the coal. So much of land is available in India to install solar panels and also to plant wind power plants. All these can help us to reduce Environmental and Economic problems. In India from 2012 installation of solar plants has increased. Before that we were not involved much to generate solar energy.

After Second World War some advanced countries have started thinking of solar energy development programmes. Due to hike of oil prices and other environmental problems we in India focused on solar energy development programmes in seventies. In 1982 Government of India formed a Department of Nonconventional Energy Sources to under-take development programmes.

RENEWABLE ENERGY

Renewable energy is generated from sources which do not have an end or those can be recycled from natural sources like solar, wind, water.

SOLAR ENERGY

In many places of India, we can observe clear sun light for almost 250 to 300 days a year. India gets almost 5,000 trillion KWh/year, which is more than the requirement of people. With this we can generate solar energy and also, we can reduce carbon foot print.

WIND POWER

Wind power is most important one. It does not generate any gasses. Wind power is generated through wind Turbines by using air installed in some place. It is alternative renewable energy source for traditional energy source.

SMALL HYDRO POWER

Hydro projects in India are in between 10MW to 30MW are considered as Small Hydro Power. As India is the 7th largest producer of hydroelectric power in 2008 after Norway, it has been considered country having more potential as compared to other countries of the world. Small hydro power projects are those which are under 25MW and are called as renewable energy source. The first SHP plant in India was in set up in 1987.

BIO MASS

Biomass is wood, grasses, leaves and other raw organic material that may burn and produce energy, including manure and animal drug. Biomass is also an important energy source. To meet the electricity requirements Government of India has taken initiatives to generate electricity with the help of Biomass power projects.

REVIEW OF LITERATURE:

Suruchi Dedgaonkar, Vishal Patil, Niraj Rathod, Gajanan Hakare & Jyotiba Bhosale (2016) suggested a model to estimate solar radiation using Least Square Linear Regression Method. *Arun Kumar Singh Tomar, K.K. Gautam (2018)* reviewed different Renewable energy sources like solar power, Wind power, Bio Energy, Small Hydro Power (SHP), Tidal Energy and Ocean Thermal Energy Conservation. They also mentioned about

different government schemes that have been undertaken by India during 2016-2017 and made some recommendations to utilize Renewable Energy Sources towards sustainable development.

Soumendra Nath Basu, Avijit Karmakar & Pushmita Bhattacharya (2015) explained the origin of solar energy in Indian till 2015 and stated about the importance of solar energy in India.

A.Renuka Prasad, Dr. Sumer Singh, Dr. Harish Nagar (2017) studied about the current production of solar energy and direct and indirect methods to produce energy. They also explained direct solar usage systems like Solar Cooking, Water heating System, Solar Drying and Solar distillation.

OBJECTIVES

1. To know different renewable energy sources
2. To know the states that are producing maximum and minimum renewable energy

DATA

Data is secondary data and collected from the Annual report of Ministry of New and Renewable Energy (MNRE) Annual Report as on 01.31. 2019.

RESULTS

Solar power plants are installed through various government schemes for farmers for irrigation pumping systems, for Government colleges, Schools, Hospitals, Government office buildings etc., through Rooftop Solar Systems under various Scheme. Provided solar power to interior villages / Habitations where there is no grid power available through DDUGJY (Deen Dayal Upadhyay Grameena Jyoti Yojana and standalone solar systems under **Saubhagya** Scheme. The people who stay in the forest areas are getting electricity for the first time with solar energy. Government is encouraging Solar Power and providing subsidy for installing solar systems. In Karnataka all households has to be installed with solar water heating system. All the state and central government's has set up independent and separate nodal agencies for renewable energy sources like MNRE, REC (Central), SECI, CREDA (Chhattisgarh), MEDA (Maharashtra), HAREDA (Haryana), TEDA (Tamilnadu), APNREDCAP (Andhra), RERA (Rajasthan), JREDA (Jharkhand), KREDL (Karnataka), GEDA (Gujarat) etc.,

State-wise installed Renewable Power as on 31.01.2019

S.No.	States	Solar Power (MW)	Small Hydro Power (MW)	Bio Power (MW)	Wind Power (MW)	Total (MW)
1	Andhra Pradesh	2889.29	162.11	500.34	4076.45	7628.19
2	Arunachal Pradesh	5.39	107.1			112.49
3	Assam	18.65	34.11			52.76
4	Bihar	142.45	70.7	121.2		334.35
5	Chhattisgarh	231.35	76	230.5		537.85
6	Goa	1.69	0.05			1.74
7	Gujarat	2003.03	45.7	77.3	5965.87	8091.9
8	Haryana	219.59	73.5	205.66		498.75
9	Himachal Pradesh	4.5	860.61	7.2		872.31
10	Jammu & Kashmir	14.38	179.03			193.41
11	Jharkhand	32.41	4.05	4.3		40.76
12	Karnataka	5328.81	1230.73	1799.8	4682.8	13042.14
13	Kerala	138.49	222.02	0.72	52.5	413.73
14	Madhya Pradesh	1649.89	95.91	120.75	2519.89	4386.44
15	Maharashtra	1619.56	375.57	2528.69	4794.13	9317.95
16	Manipur	3.23	5.45			8.68
17	Meghalaya	0.12	31.03	13.8		44.95

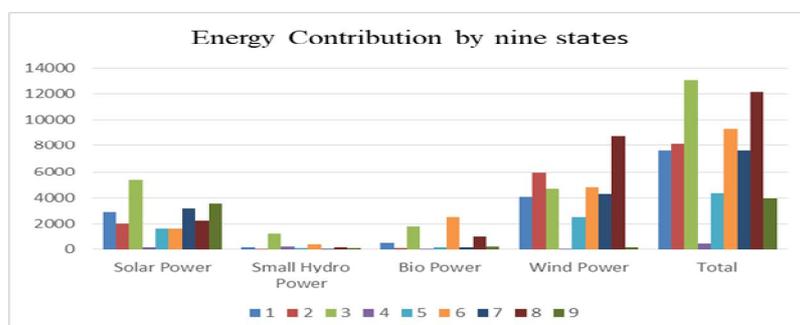
18	Mizoram	0.5	36.47			36.97
19	Nagaland	1	30.67			31.67
20	Odisha	390.27	64.625	59.22		514.115
21	Punjab	905.62	173.55	326.35		1405.52
22	Rajasthan	3141.89	23.85	121.3	4299.72	7586.76
23	Sikkim	0.01	52.11			52.12
24	Tamil Nadu	2233.34	123.05	1003.88	8764.34	12124.61
25	Telangana	3583.61	90.87	177.6	128.1	3980.18
26	Tripura	5.09	16.01			21.1
27	Uttar Pradesh	902.33	25.1	2117.51		3044.94
28	Uttarakhand	304.27	214.32	130.5		649.09
29	West Bengal	69.56	98.5	319.92		487.98
	Total	25840.32	4522.795	9866.54	35283.8	75513.5

Karnataka has capacity to produce maximum renewable energy by different modes such as solar power, Small Hydro power, Bio-Power and Wind Power followed by Tamil Nadu. Goa has minimum production capacity. Among solar power, Bio mass power, small hydro power, and wind power, the maximum production is wind power which is generated only by nine states. East Indian states where sun light reaches to earth is less are having less installed capacity. Sikkim is least installed solar energy state. Goa installed capacity of small Hydro power is only 0.05 MW which is less than solar power. 20 states generate Bio mass power out of which Kerala is the state which is installed less.

Energy contribution by Nine States

S.No.	States	Solar Power (MW)	Small Hydro Power (MW)	Bio Power (MW)	Wind Power (MW)	Total (MW)
1	Andhra Pradesh	2889.29	162.11	500.34	4076.45	7628.19
2	Gujarat	2003.03	45.7	77.3	5965.87	8091.9
3	Karnataka	5328.81	1230.73	1799.8	4682.8	13042.1
4	Kerala	138.49	222.02	0.72	52.5	413.73
5	Madhya Pradesh	1649.89	95.91	120.75	2519.89	4386.44
6	Maharashtra	1619.56	375.57	2528.69	4794.13	9317.95
7	Rajasthan	3141.89	23.85	121.3	4299.72	7586.76
8	Tamil Nadu	2233.34	123.05	1003.88	8764.34	12124.6
9	Telangana	3583.61	90.87	177.6	128.1	3980.18
	Total	22587.91	2369.81	6330.38	35283.8	66571.9

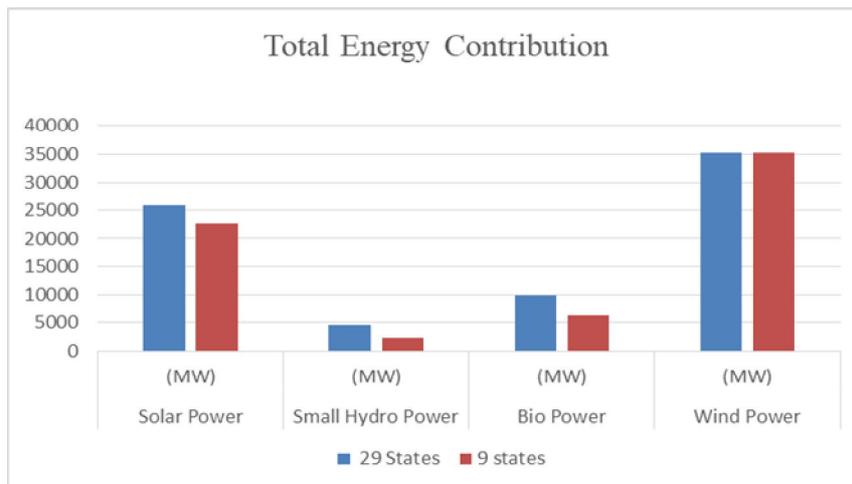
Out of 29 states 9 states are produces by these four methods.



Total Energy Contribution

S.No.	States	Solar Power (MW)	Small Hydro Power (MW)	Bio Power (MW)	Wind Power (MW)
1	29 States	25840.32	4522.795	9866.54	35283.8
2	9 states	22587.91	2369.81	6330.38	35283.8

The above table explains that out of 29 states 9 states are contributing more than 50% energy.



CONCLUSION

On an average global temperature is increased by 0.3 degree centigrade to 0.6 degree centigrade. There is a need to investigate about various sources to provide energy which are not harmful for our environment. I found that out of 29 states only 9 states are producing Solar Power, Small Hydro Power, Bio Power and Wind Power. Karnataka has maximum installed capacity of these four energy sources and Goa has the minimum installed capacity.

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A REVIEW ON DIFFERENT TECHNIQUES OF FIRE DETECTION USING IMAGE PROCESSING

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ABSTRACT

Lately, eruption of fire is considered as a major concern which generally results in severe casualty to human and their properties and also causes rigorous destruction to nature. In recent years, this kind of incident greatly increases. However, various control units are available to deal with the situation but after the event and sometimes the situation goes out of hand. There are mixed techniques that have been developed by researchers in order to provide prevention system against the disaster caused by fire. But the real time execution of all those fire retardant techniques is not up to the mark. So, a prevention technique is required which can efficiently detect the outbreak of fire. In the proposed system, a method is developed to enhance flame luminance using Chromaticity Pigmentation through which fire can be detected with high level of accuracy.

Keywords: Fire Detection, Alarm, Color Detection, Color Models, Image Processing.

1. INTRODUCTION

Outbreak of fire causes heavy damage not only to the environment but also various human and animals lose their life in these incidents. To deal with such incidents, various techniques based on fire detection and prevention system were developed. However, it is difficult to cope with the situation of fire outbreaks, especially before the accident. Even though, various investigate has been performed by the researchers to address the concern regarding the issue. Some researches has exploited the technique of wireless sensor network to perceive the situation but to detect any incident related to fire using physical equipment is something very unreliable. Since the key problem of this system is its energy utilization which let the sensor to detect temperature in every small interval of time. Traditionally, A detection technique was also developed which was based on point based fire. The basic approach of that model is the value of temperature which is fixed at particular interval. Although, temperature based models are limited to its implementation as it takes time to detect fire. Increase in temperature will increases the intensity of fire. So, to detect the eruption of fire at early stage is impossible with this technique. Nowadays, systems to detect fire through videos are taken into consideration which doesn't require any proximity with the spot to detect the incident. Various techniques were exploited by the researchers to develop a fire detection system to resolve the issue but still lagging somewhere. There are various small devices of indoor fire detection available in the market but having less accuracy. Some researchers worked on smoke detection but the false acceptance rate of these systems are higher and generates false alarm.



Fig. 1.1 Fire Detection Device [9]



Fig. 1.2 Smoke Detection [10]

2. LITERATURE SURVEY

2.1 Review on existing systems

Angelo Gonzalez et al. [1] proposed a method by inducing Convolutional Neural Network to detect fire in the shown images. The approach used was SFewAN-SD (Simple Feature Extraction with FCN AlexNet, Single Deconvolution). The system which has been proposed is a fraction of Unmanned Autonomous Vehicle (UAV) system which was used to detect and examine wildfire. The model which has been induced in this paper is Caffe Framework and examined 500 various images of fire to verify the system. The technique exploited two different approaches of CNN which are amendment of AlexNet and convolution series. The overall accuracy verified by the system which has been proposed in this paper to detect fire in image is 94.76%.

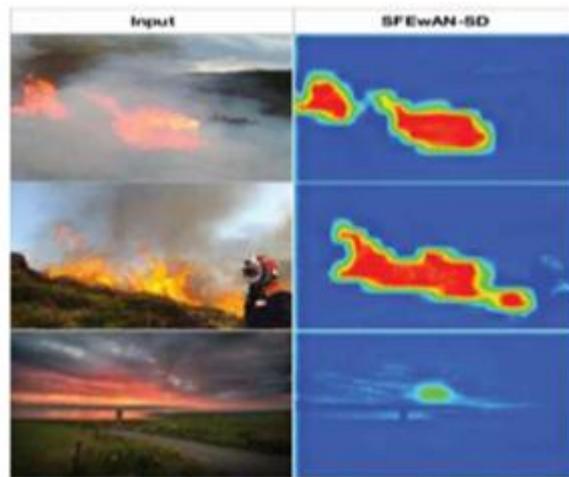


Fig. 2.1.1 Initial Two Rows for Positive Samples & Third Row Is For Negative Image [1]

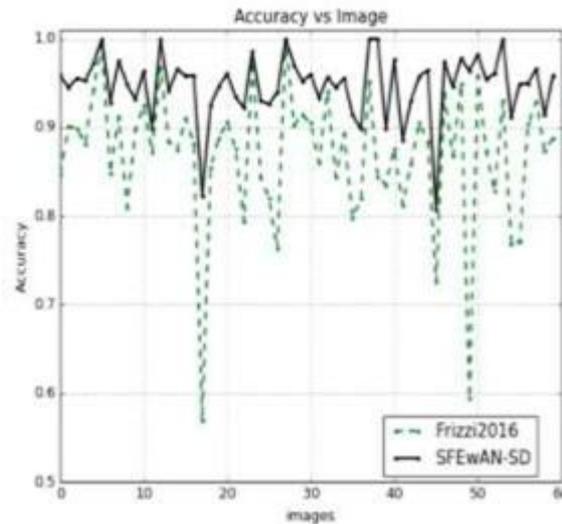


Fig. 2.1.2 Accuracy Graph for 60 Images [1]

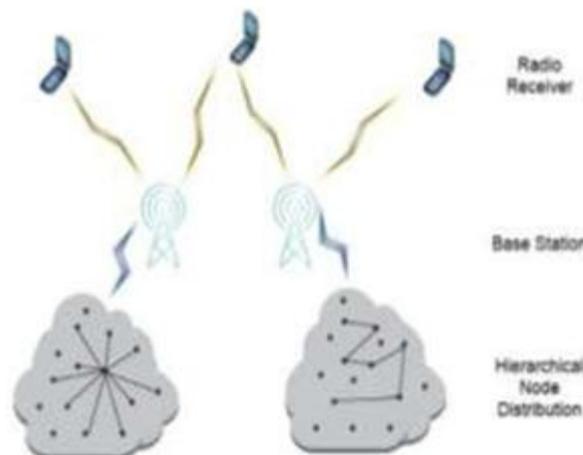


Fig. 2.1.3 Architecture Diagram of WSN [2]

Shruti Gupta et al. [2] proposed a system to detect any calamity by exploiting the functionality of WSN i.e. wireless sensor networks. The system further have used an algorithm of LEACH i.e. Low Energy Adaptive Clustering Hierarchy to sustain the communication among the defined nodes. The overall system which has been projected in this paper relied on the value of preset temperature. The technique used in the paper executed when the temperature reached to its preset threshold value which was sensed by the induced sensors and the extracted information processed through the LEACH algorithm.

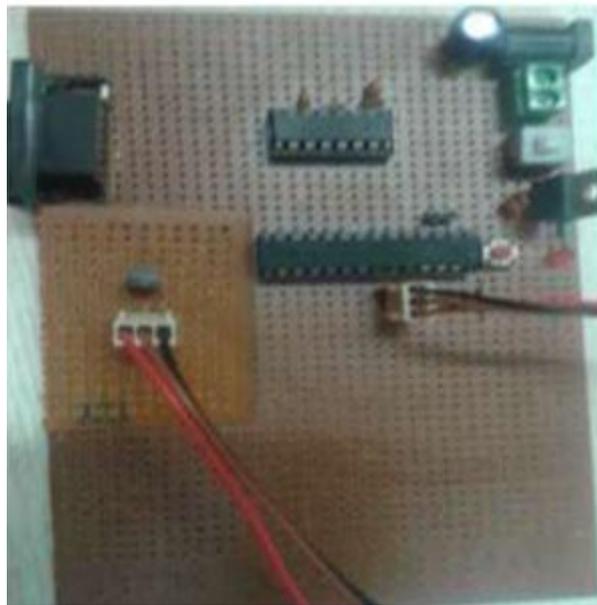


Fig. 2.1.4 Physical Architecture of Simulation Model [2]

Kuang-Pen Chou et al. [3] developed a system which exploited feature extraction method which is based on blocks to examine the local data of assorted regions to reduce computational data. System relied on the concept to extract the features obtained from a fire block including its color, source immobility and its disorder. Basically, the system which has been proposed extracts the feature from videos of fire and recognized various features for the detection of fire. System used both global and local extraction of features from the acquired video to identify fire and enhance the rate of error.

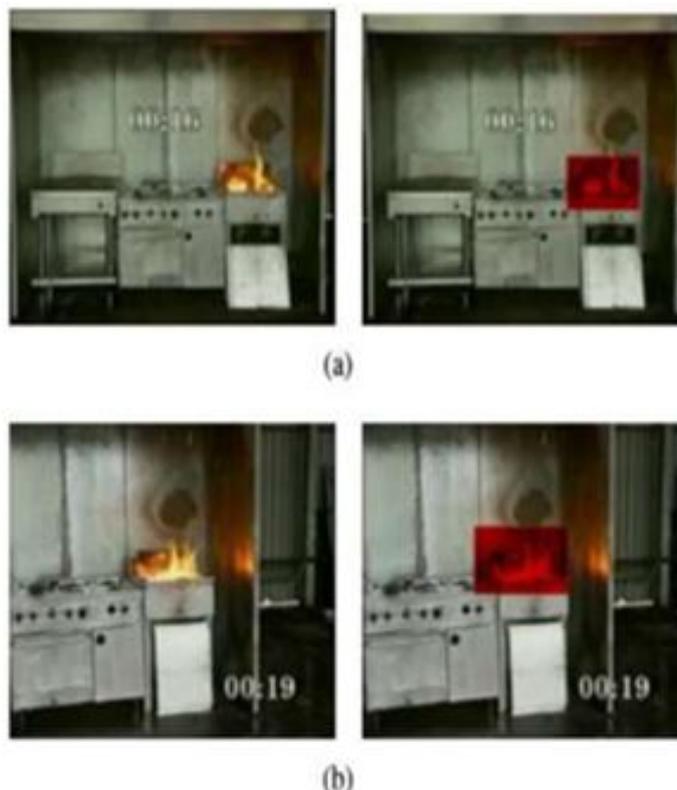


Fig. 2.1.5 Fire Reflection on Metal at Different Scenarios [3]

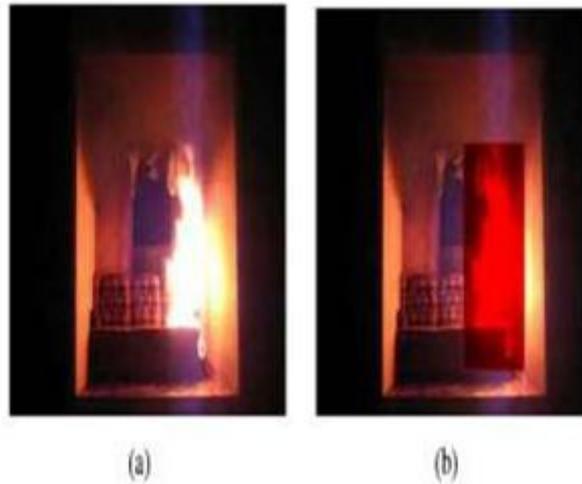


Fig. 2.1.6 Fire Detection in Dark Space [3]

Rubayat Ahmed Khan et al. [4] proposed a system base on the technique of video processing. System extracted various features like color and spatiotemporal characteristics to recognize the area of fire. Pixels of color usually appear in a fire is extracted by exploiting the rule of RGB. As the pixels extracted from fire are dynamic in nature, for this, the projected system exploited foreground technique. The system which has been proposed stated the accuracy of 97.7% obtained after executing the result.

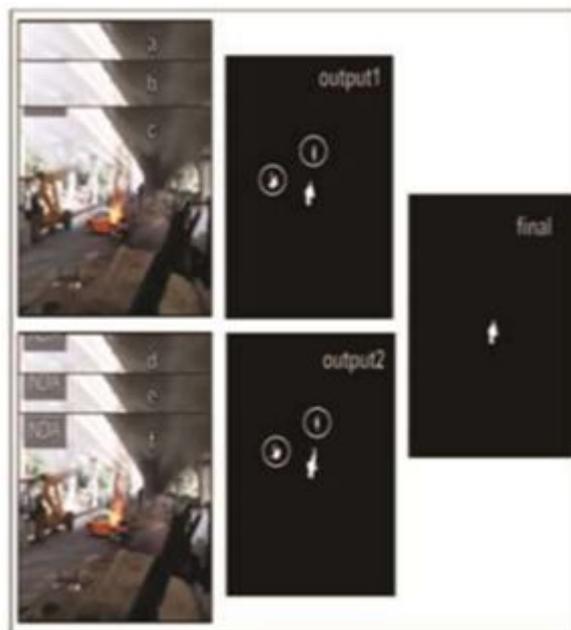


Fig. 2.1.7 “Output1” is the Result of Consecutive Frames A, B & C. “Output2” is the Output of (D), (E) and (F). “Final” is the Ultimate Output Where the Wrong Blobs are Eliminated and the True One is shown. [4]

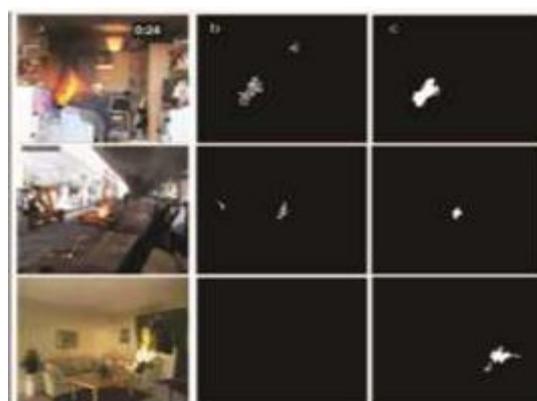


Fig. 2.1.8 Column (a) contains sample fire frames & Column (b) shows false regions in the first two instances while the last one got unobserved. [4]

Teng Wang et al. [5] proposed a system for indoor detection of fire by incorporated the characteristics of flame kinematics which was induced on the consecutively extracted video frames. Resemblances obtained from acquired video frames were also integrated in the system which has been proposed. The method which has been proposed is relied on the aim to avoid false alarm generation of fire detection. For this, comparable video frames which are in a row is considered under observation and proposed an approach, called a zone-based tracking algorithm.

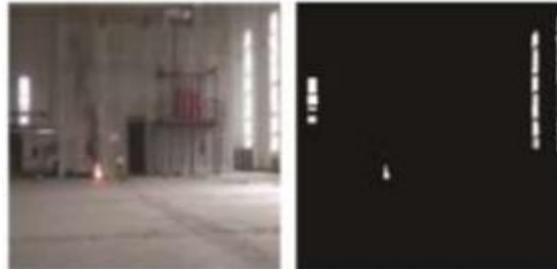


Fig. 2.1.9 (a) Original RGB image (b) Detection result through RGB- HSI model [5]



Fig. 2.1.10 Detection result of Current Frame through RGB-HSI Model (d) Display of Changing Areas [5]

Nurul Shakira Bakri et al. [6] proposed a system which exploited the technique of image processing to classify the pixels of color. Technique which has been proposed in the system considered fire images as an input. System also used the image enhancement technique with models of RGB and YCbCr color with predefined scenario of dividing up the pixels of extracted image's color. The system verified their technique which has been proposed by examine 10 different images. So the concluded result of system which has been proposed in the system offered the accuracy of 90%.

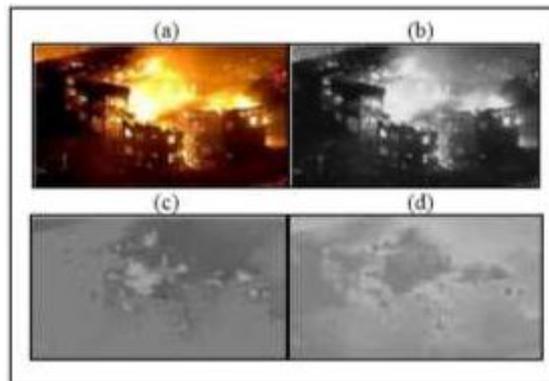


Fig 2.1.11 (a) Original image, (b) Y component, (c) Chrominance Blue, (d) Chrominance Red [6]

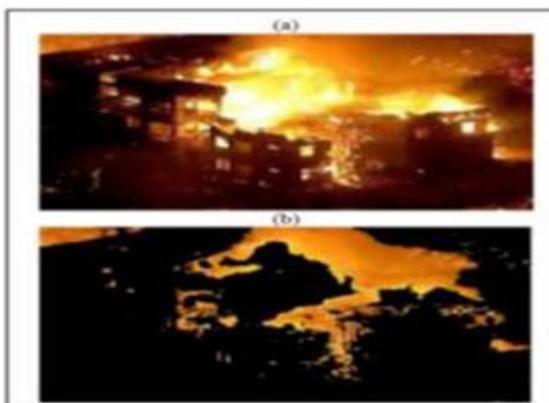


Fig. 2.1.12 (a) Contrast Enhanced Image, (b) Fire Pixel Detection [6]

Oxxy Giandi et al. [7] developed a technique in a system called fire predictor and fire appearance detector. In the system which has been proposed, fuzzy system technique was employed on fire detector and fire predictor illustrated the concentration of gas leak & generates an alarm on emergency. The system of fire detection proposed in the paper is in the form of model only. It has been stated that fuzzy system exploited various sensors to observe temperature, humidity, gas and smoke in the technique to measure fire symptoms. Basic task of fuzzy in the system is to observe data acquired by the sensors in intervals. Though the system based on gas concentration utilized LPG data for the prevention system against any gas explosion. The smoke and CO data was extracted with temperature and humidity sensor which is employed under fuzzy system used to calculate the fire appearances. Since, the data monitoring is not shown in real time because the parse of the serial data in MFC cannot read the data quickly.

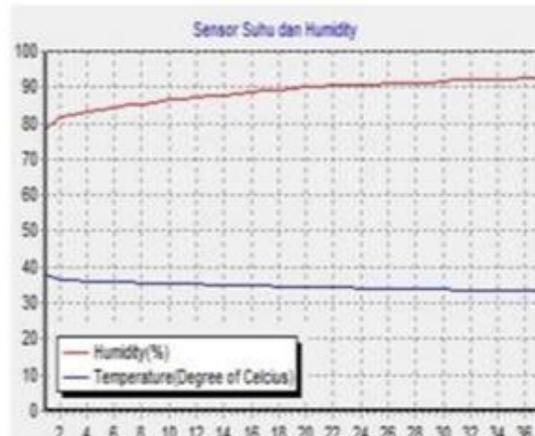


Fig. 2.1.13 Gas Leak Simulation (1) [7]

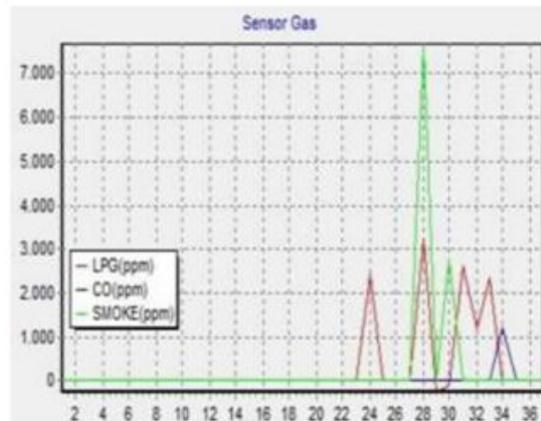


Fig. 2.1.14 Gas Leak Simulation (2) [7]

Khan Muhammad et al. [8] proposed a system based on images to detect fire by exploiting the technique of CNN (convolutional neural networks). The system which has been proposed in the paper relied on the basic idea of Google Net architecture. System utilized the deep learning architecture to detect flames as early as possible. The system which has been proposed in the paper used 68457 images from various dataset. Among those, 62690 frames are from Dataset1. The proposed system shown below,

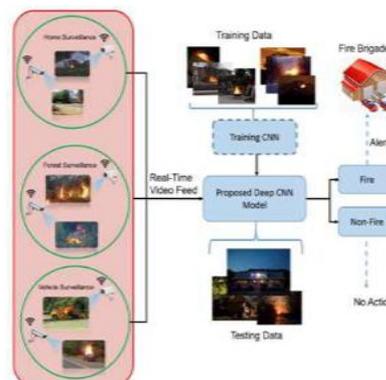


Fig. 2.1.15 Flame Detection in Surveillance videos using

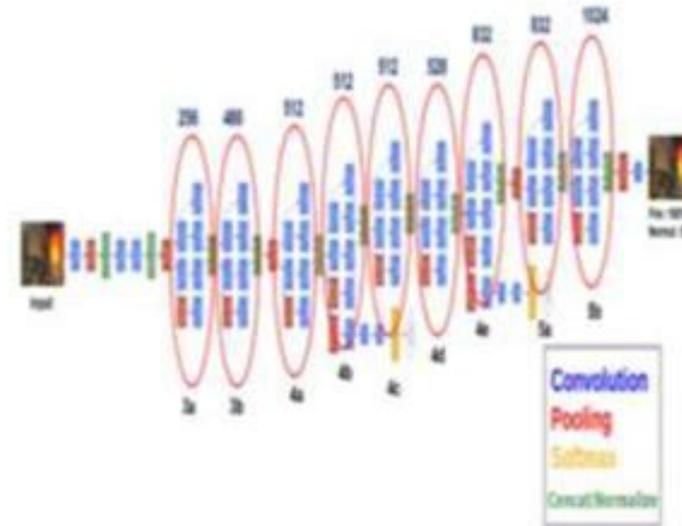


Fig. 2.1.16 Architectural Overview of Deep CNN [8]

3. PROBLEM IDENTIFICATION

Various techniques were developed in order to resolve the issues came across during fire detection. The system which has been proposed in the base paper [6] is relied on the conversion of RGB to YCbCr (Yellow, Chroma Blue, Chroma Red) color space. The formula used for the conversion is

$$\begin{bmatrix} Y \\ Cb \\ Cr \end{bmatrix} = \begin{bmatrix} 0.2568 & 0.5401 & 0.0979 \\ -0.1482 & -0.2910 & 0.4392 \\ 0.4392 & -0.3678 & -0.0714 \end{bmatrix} \begin{bmatrix} R \\ G \\ B \end{bmatrix} + \begin{bmatrix} 16 \\ 128 \\ 128 \end{bmatrix}$$

The technique which has been illustrated is not suitable for high brighten flame luminance and the obtained rate of conversion is bit lower than the requirement. Overall accuracy obtained should be enhanced as the circumstances of the incident may vary. The technique used in the system is failed to detect fire in the kind of image shown below, as it has low intensity.



Fig. 3.1 Fire with Low Flame Intensity

4. CONCLUSION AND FUTURE SCOPE

Those systems which have been proposed are not efficiently executed to detect the fire at real time. So, the system which is proposed is able to enhance flame luminance using chromaticity pigmentation that also enhances the accuracy or true acceptance rate. It increases the specific color pixel that relies on flame intensity which provides better level of accuracy. The current proposed concept of enhancing flame luminance using chromaticity pigmentation can be implemented for the detection of fire based calamities which would be effective for remote areas as well as indoor hazardous accidents.

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