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# Effect of Changing Technology within the Banking Industry

## Namrata Bhalla

Assistant Professor, Faculty of Business Management, PCTE Group of Institutes, Baddowal, India

#### Introduction

#### 1.1 History of banking system

Indian banking system originated within the first decade of 18th century because the General Bank of India came into existence within the year 1786. The India's oldest bank which is alive is that the depository financial institution of India being established as "The Bank of Bengal" in Calcutta in June 1806. In 1850 the foreign banks like Credit Lyonnais started their operations in Calcutta. Calcutta most active trading port during British Empire. within the year 1865, the primary fully Indian owned bank was established in Allahabad.

In 1935, the Federal Reserve Bank of India formally took over the responsibility of regulating Indian banking sector. In 1947, after India's independence the Federal Reserve Bank was nationalized and given more powers, the GOI was issued an ordinance and nationalized the 14 largest commercial banks with effect from the midnight of July 19, 1969. In 1980 for the second time nationalisation of 6 more commercial banks was done. The nationalization was done to offer the govt more control of credit delivery, around 91% of the banking business of India.

Narasimha Rao government formulated a policy of liberalization within the year 1990 and gave licenses to alittle number of personal banks, which was referred to as the New Generation tech- savvy banks, a number of the banks were just like the UTI Bank (now re-named as Axis Bank), ICICI Bank and HDFC Bank. Liberalization along side the rapid climb within the economy of India boosted the banking sector in India, which has seen strong contribution from all the three sectors of banks, namely, government banks, private banks and foreign bank. Indian banking system was completely shooked with the new policy. Till this point the Bankers wont to the follow the 4-6-4 method (Borrow at 4%; Lend at 6%; head home at 4) of functioning. This new wave ushered during a modern outlook and tech-savvy methods of working for traditional banks which led to the retail boom in India. People not barely demanded more from their banks but also received more. Today Banking in India is usually fair and mature in terms of supply, product range and reach though in rural India still remains a challenge for the private sector and foreign banks. Banking in terms of quality of assets and capital adequacy, banks in India are considered to possess clean, strong and transparent balance sheets relative to other banks in comparable other economies.

The digital payments revolution has trigger massive changes within the way credit is disbursed in India. Debit cards have radically replaced credit cards because the preferred payment mode in India, after demonetization. Debit cards garnered a share of 87.14 per cent of the entire card spending. In general, these websites offer only the foremost basic services. 55% approximately called 'entry level' sites, offering little quite company information and basic marketing materials. Only 8% offer 'advanced transactions' like online funds transfer, transactions & cash management services.

## 1.1.1 Present trend:

- \* The figure of internet banking users in India is estimated to rise to 45 mn by 2018-end, consistent with a survey by IAMAI.
- \* Already, an estimated 80 million users transfer funds online, including mobile banking figures, Rs 77,942 Cr consistent with IAMAI.

# 1.1.2 Future Scope

Internet banking usage and transactions are set to grow, and there's a mixture of reasons for this. a number of them being:

- \* Increased transaction sets for end users;
- \* Optimum channel availability;
- \* Higher broadband penetration;
- \* Decreasing prices of the PC; and

\* Heightened awareness from an end customer's viewpoint.

Internet / Mobile banking has become one among the key fulcrums in ensuring that a customer is engaged with the bank and in-tuned with the changing environment. it's a window to succeed in bent customers, regardless of their geographical location.

## 1.3 Size of the Industry

The Indian banking industry consists of 12 public sector banks, 22 private sector banks, 3 foreign banks, 43 regional rural banks, 1,458 urban cooperative banks (FY20 data).

#### 1.4 Top Indian Banks

- 1. Depository financial institution of India: SBI undoubtedly is that the leading bank in India when it involves number of branches, ATM, Äôs, net profits, total assets managed, etc. With an employee base of on the brink of 3 lakh people SBI commands 20% (approx.) of the Indian banking sector. The bank manages assets worth quite 500 billion USD. depository financial institution of India has 190 foreign offices in 35 countries across the world as on 31.03.2020.
- 2. HDFC Bank: HDFC Bank has been ranked India, Äôs No.1 Bank in Forbes, Äô world, Äôs Best bank report. the Bank had a nationwide distribution network 5,326 branches and 14,996 ATM, Äôs in 2,825 cities/towns.

Axis Bank: Axis bank comes 5th within the list and 3rd within the list of personal sector bank. The bank has 2225 branches, 12000+ ATM, Äôs, 40200 employees. The bank manages assets worth 54 billion USD. The bank, Äôs net income is 1.5 billion USD.

# 1.5 Payment Banks

Payments bank may be a new model of banks conceptualised by the Federal Reserve Bank of India (RBI). These banks can accept a restricted deposit, which is currently limited to  $,C\pi 1$  lakh per customer. s. Payments banks may issue ATM and debit cards, and offer net-banking and mobile- banking. The banks are going to be licensed as payments banks under Section 22 of the Banking Regulation Act, 1949, and can be registered as public Ltd. under the businesses Act, 2013.

There are six payments banks

- 1. Airtel Payments Banks Ltd.
- 2. Fino Payments Bank Ltd.
- 3. India Post Payments Bank Ltd.
- 4. Jio Payments Bank Ltd.
- 5. NSDL Payments Bank Ltd.
- 6. PayTm Payments Bank Ltd.

#### 1.6 Changing Technology

more customer-friendly.

Technology is rapidly changing the way business is completed across all industries and retail banks must find better ways to reply to constantly evolving consumer needs.

Millennials are embracing born-on-the-web alternatives to form payments and for checking and savings accounts and loans.

Big Tech rivals like Amazon, Google and Facebook are expected to be even more disruptive than FinTechs due to their deeper and expansive customer reach and engagement.

Open banking, which took off in Europe will eventually reach the U.S., enabling consumers to use third-party providers to manage their finances. New technology in banking is already transforming the financial sector, and therefore the traditional banking landscape is about to rapidly change within the next five years. Safety features, like advanced cryptography and biometrics, will help protect against bank scams, and remote applications will make it easier than ever to try to to your banking without visiting a branch ,Äî but if we do, the experience is probably going to be far

#### 1.7.1. Proliferation of Non-Banks

Banks hope that technology will allow them to deliver a faster, more transparent experience to consumers. an outsized portion of their resources, however, is necessarily dedicated to security, compliance and other industry-specific requirements,

#### 1.7.2. Partnerships

Although banks can pour many money into technology, the fastest thanks to deliver financial innovation within the future is probably going getting to involve strategic partnerships. Fast-growing companies that have already got new-wave fintech or social media platforms in situ could make excellent partners for traditional banks seeking to reinforce customer experience.

#### Wearables

Wearables ,Äî like smartwatches ,Äî are poised to become the longer term of the retail banking experience, consistent with Samsung Insights. Another sort of wearable could be smart glasses for bank tellers, consistent with a report from Deloitte, which could process customer banking information for the worker because the employee is simultaneously doing other customer service tasks.

Overall, consumer behaviour and smart device trends are steering banking technology advances within the direction of convenience. An increasing number of remote technologies will allow you to interact together with your bank right from the palm of your hand.

#### **Government Initiatives**

\* As of September 2018, the govt of India has made the Pradhan Mantri Jan Dhan Yojana (PMJDY) scheme an open-ended scheme and has also added more incentives. Govt of India is getting to inject Rs 42,000 crore (US\$ 5.99 billion) within the public sector banks by March 2019

## 1.8.1 The changing definition of "primary bank"

It depends on whom you ask, consistent with this year, Äôs survey. We saw greater age-related differences not only in primary bank selection, but also in how consumers define their primary bank.

# 1.8.2 New variables for deposit growth

Securing a customer doesn, Äôt mean a bank will automatically win that customer, Äôs next account. In fact, consumers suggest that they're even as likely to open their next account with a replacement bank as they're with their existing bank. Customer expansion has always been easier than customer acquisition.

## 2.1 Review of Literature

Researchers have conducted various studies to analyse the changing technologies in banking system and therefore the needs of the purchasers.

(Sharma, 2017): This research paper studied the extent of customer satisfaction by the computerization of the banking operations. It collected the info of the purchasers of SBI and ICICI. Customers still prefer public banks over private banks in terms of reliability. But private banks are giving tough competition to the general public banks in terms of customer service, aside from net banking sites, app has been a standard tool for customer convenience. Everyone agrees that automation in banking processes has unquestionably improved the way banking is completed.

( Achimba, Ongonga, & Nyarondia, 2014): This study evaluates the role of technology on consumer satisfaction. It studied the activities conducted by the banks within the process of customer relationship management. conclusions of the study were that Technology can enable the corporate to supply good customer services as long because it has appropriate technology. for instance ATM, Äôs, Mobile Banking and On- Line Banking. Technology

(Parmeswar, Dhir, & Dhir, 2016): Authors of this text have researched on the innovation within the banking sector, they need specified to a specific bank i.e. is ICICI Bank. They observed that ICICI Bank has strategically broadened its reach by using technology. ICICI Bank has been ready to provide secure efficient and seamless service to its wide base of consumers.

( Aliyu & Tasmin, 2012): Under this research paper authors have studied the impact of ICT (Information, Communication and Technology) on Customer Service Delivery. In 2012 technology was bit new within the market therefore the customers weren't easily accepting the changes because there was perceived security risk, lack of awareness, lack of comfort with the computertechnology.

(Wessels & Drennan, 2010): This study conducted in 2010 investigated upon the key factors that motivate the purchasers to use Mobile Banking.

Perceived usefulness, perceived risk, cost and compatibility were found to affect consumer acceptance of M,Äêbanking. The results also support a mediation model, whereby attitude transfers the consequences of the consumers' perceptions to their intention to use M,Äê banking.

(Mishra & Singh, 2013): This study mainly focused on proposing a customer centric mobile banking model for developing country like India. Researchers have used conjoint analysis to work out user preferences of mobile banking attributes. Urban poor in India preferred a joint bank, Äitelecom led mobile banking model. The results show preference for banks over other touch points for handling cash.

(Iberahim, Taufik, Adzmir, & Saharuddin, 2016): This study was designed to look at four elements of service quality which are the consistency, dependability, timeliness and technology, supported two popular dimensions, which are the reliability and responsiveness and its influence of customer satisfaction. This research contributes to enhance the knowledge of how ATM service quality dimension may influence customers, Äô satisfaction. The research proposes for further exploration on the applicability of the determinants in related services industry.

(Gautam & Vikas, 2012): the present study attempts to live and compare the effect of the introduction of latest technologies through electronic-banking on the service quality, operational efficiency, and profitability of banks, and to assess the impact of adjusting from the normal means to the electronic banking on the purchasers and on the banks also.

(Singh & Tigga, 2012): Technological innovations witnessed by the banking sector during the nineties have changed the way business must be conducted. The paper aims to explore some important and popular IT enabled services of banking institutions, its benefits and issues at the present.

## 3.1 Objectives of the Study

- \* to know their usage pattern of internet banking and various other services provided by the amongst the purchasers
- \* To analyse the role of technology employed by banks in satisfying customer needs
- \* to look at the most factors concerning the usage or non-usage of those technological facilities among the purchasers

#### 3.2 Research Design

The research design refers to the general strategy that you simply prefer to integrate the various components of the study during a coherent and logical way, thereby, ensuring you'll effectively address the research problem; it constitutes the blueprint for the gathering, measurement, and analysis of knowledge.

Exploratory also as Descriptive research design has been utilized in this scientific research.

## \* Exploratory research

Exploratory research is an examination into a topic in an effort to realize further insight in like reviewing available literature and/or data. we've provided insights into and an understanding of the matter faced by the opposite researches with the assistance of Review of Literature.

#### \* Descriptive research

A study designed to depict the participants an accurate way, observational and case study are the 2 main ways to gather information, the most idea behind using this sort of research is to raised define an opinion, attitude, or behaviour held by a gaggle of individuals towards online and offline services provided by the banks in Ludhiana.

## 3.3 Sampling Plan

A sample may be a subset of a population. Usually, the dimensions of the sample is far but the dimensions of the population. the first goal of much research is to use information collected from a

sample to undertake to characterize a particular population. As such, it should be considered on how representative the sample is of the population.

## 3.3.1 Target Population

Target Population consists of the people to whom the research is targeted, during this particular research the researcher has covered the population who are using the banking services in a method or the opposite. Target population consists of the banking customers aged above 40 years so.

#### 3.3.2 Sampling Technique

For conducting the research, researcher are going to be using Non-Probability Sampling Technique where the individuals don't have an equal probability of getting selected. Sample is chosen as per the judgement and convenience of the researcher. So, the technique used is Convenience Sampling Technique.

#### 3.3.3 Sample Size

For achieving the said objectives researcher will take a sample size of 100 people for conducting the study. The sample belongs to the world of Ludhiana.

#### 3.3.4 Research Instrument

Instrument which will be employed by the researcher for collecting the first data are going to be questionnaires.

#### 3.4 Data Collection

Data for the said study are often obtained from the first sources also because the secondary sources.

- \* Primary Data- Questionnaires are prepared to urge the primary hand data from the purchasers for the study
- \* Secondary Data- Various sites, journals, books etc. were studied to urge the specified data

#### 3.5 Data Analysis Tools/ Techniques

\* For the analysis of the info researcher are going to be using various statistical tools and techniques. this is able to include An nova, T-test, Pie diagrams, Bar graphs, Cross

Tabulation Analysis The researcher also will use various graphs and tables for interpretation.

#### 3.6 Need and Scope of Study

## 3.6.1 Need

As banking is that the most progressive industry in recent years, therefore it's its own significance. In recent years, growth and turnaround within the banking sector has been amazing and exceptional thanks to online technology exploited by the banking. the essential purpose of this research is to guage the customer acceptance of online banking.

#### 3.6.2 Scope of the study

For this study, researcher has considered relations between the various variables like income class, age groups and banking habits of individuals. The research will help in estimating the acceptance levels of internet banking, which has become a really important aspect of the banking sector today.

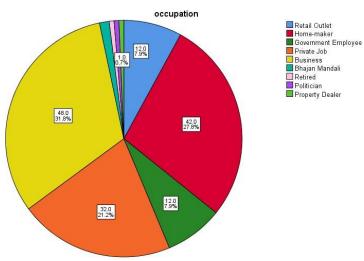
# 4 Data Analysis and Interpretation

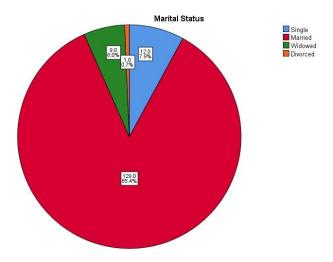
# 4.1 Result and Analysis

Thischapterwillidentifythefindingsfromtheconductedprimarydata; forwhichthemethod has been set out in chapter three of this dissertation. The method for collecting the primary data was in the form of a self-completed questionnaire-based survey. Results are collected from a total of 100 respondents aged 40 years and above

**Interpretation:** Majority of the population in the research is Graduate. But there is connection of educational qualification with the use of banking services because everyone in the population is availing these services irrespective

**Interpretation:** Majority of the research population is engaged in their private businesses as is the mostly population of Ludhiana. Some have Retail Outlets. But all of the occupations require a bank account as it is mandatory by the government. Even the home makers are availing the banking services.





**Interpretation:** Majority of the respondents in the study are married as the study is of respondents aged above 40 years. Respondents who are single, divorced or widowed are less in number.

Table 6

Income Level	Frequency	Percent
Upto 10,000	5	3.3
10,000-25,000	8	5.3
25,000-40,000	21	13.9
40,000-55,000	25	16.6
55,000-1,00,000	32	21.2
1,00,000-2,00,000	37	24.5
Above 2,00,000	23	15.2
Total	151	100.0

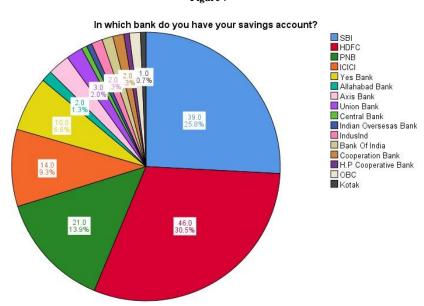
**Interpretation:**Respondents in all income groups have bank accounts and use various services provided by the banks. Government has made it mandatory for all people above 18 years to have a bank account.

Table 7

Banks	Frequency	Percent
SBI	39	25.8
HDFC	46	30.5
PNB	21	13.9
ICICI	14	9.3
Yes Bank	10	6.6
Allahabad Bank	2	1.3
Axis Bank	4	2.6

U	inion Bank	3	2.0
C	entral Bank	1	.7
In	ndian Overseas Bank	1	.7
In	ndusInd	2	1.3
В	ank of India	2	1.3
C	ooperation Bank	2	1.3
Н	.P Cooperative Bank	1	.7
0.	BC	2	1.3
K	otak	1	.7
To	otal	151	100.0

Figure 7



**Interpretation:** Population has mixed preferences for the choice of banks. Despite the number of frauds in public sector banks population continues to have accounts in such banks because of their faith in the system. Total 73 respondents out of 151 have account in public sector banks whereas 78 respondents have accounts on private sector banks

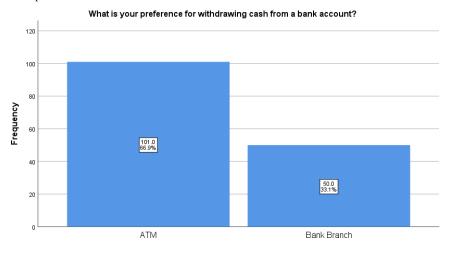


Figure 8

Interpretation: Looking at the data collected majority of the respondents prefer to withdraw cash via ATM but there are still some people who are not comfortable to withdraw cash via ATMs' and go to banks to withdraw cash due to various reasons such as security reasons, large amount to be withdrawn etc.

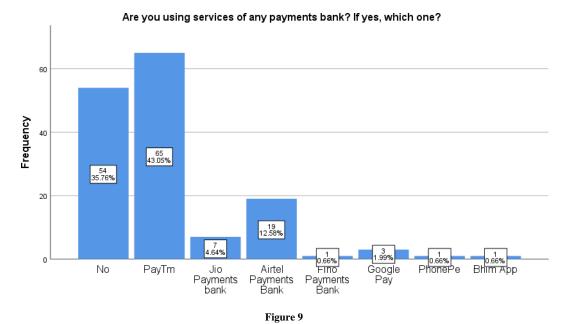


Figure 9

Table 9

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age Group	151	0	2	.76	.746
Are you using services of any payments bank? If yes, which one?	151	0	7	1.11	1.299
Valid N (listwise)	151				

Table10

Frequencie	Frequencies For what services do you still visit the bank		ses	D 4.60
bra	nnch?	h? N Percent		Percent of Cases
	Depositing cash	110	20.6%	79.1%
	Withdrawing cash	57	10.7%	41%
	Opening a F. D	84	15.7%	60.4%
	Operating the locker	91	17.1%	65.5%
	Payment of bills	47	8.8%	33.8%
	Applying for loans	84	15.8%	60.4%
Resolving Complaints		60	11.3%	43.2%
	Total	533	100.0%	383.4%

**Interpretation:** Majority of the population is using PayTm. It was the first payments bank launched in India and has the first mover advantage. Around 35.8% of the respondents are still not using the payments banks despite rapid increase in their usage.

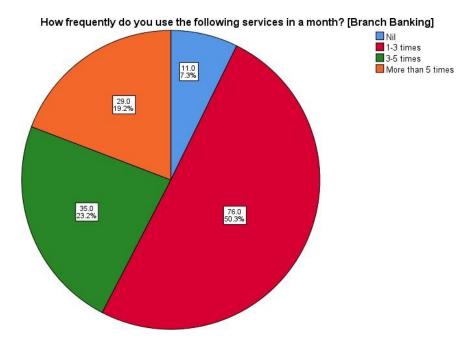


Figure 12

**Interpretation:** Majority of the respondents go to deposit cash. Next most common reason to visit a bank is operating locker, opening a FD and applying for loans. Majority of the payments becoming digital or online so number of respondents going to pay bills is very less. Withdrawing cash from the bank branches is the least attractive amongst the respondent.

Table 12

ly do you use the following services in a h? [ATM]	Frequency	Percent
	Troquoney	10100110
Nil	12	7.9
1-3 times	75	49.7
3-5 times	34	22.5
More than 5 times	30	19.9
Total	151	100.0

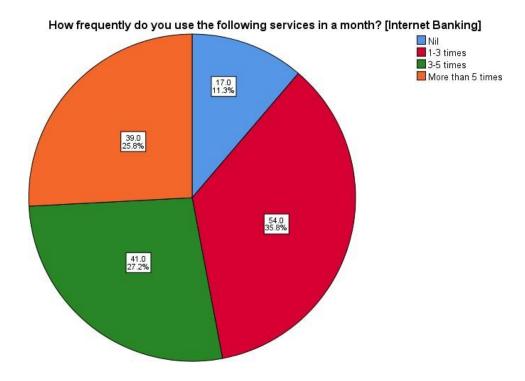


Figure 13

**Interpretation:** Most of the respondents use internet banking 1-3 times in a month.

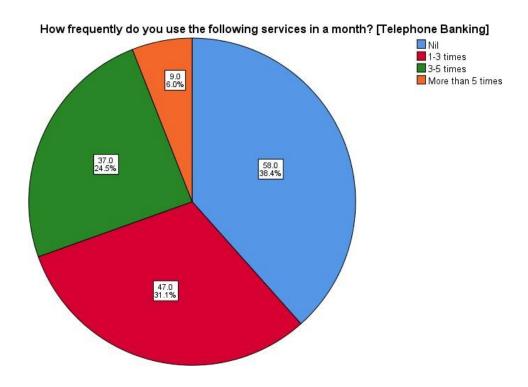


Figure 13

**Interpretation:** Majority of the respondents do not use telephone baking services provided by the banks.

Table 16

y do you use the following services in a e/App based banking]		
	Frequency	Percent
Nil	29	19.2
1-3 times	53	35.1
3-5 times	40	26.5
More than 5 times	29	19.2
Total	151	100.0

**Analysis:** 53 respondents use the applications of the banks 1-3 times to do their transactions. But 29 respondents do not use it at all. **Interpretation:** mobile based banking is mostly used by respondents 1-3 times in a month. This service is not very common amongst the respondents.

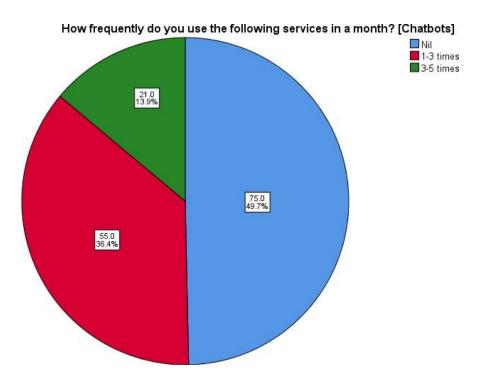


Figure 15

Interpretation: Majority of the respondents do not use chatbots as they are not aware of this service provided by their banks.

# Usage pattern of respondents w.r.t. occupation

In order to assess the usage behaviour of the respondents among various services of the banks, there have been some statements in the questionnaire which sought to fathom out the usage pattern. in order to find out the significant difference in usage pattern of respondents w.r.t. occupation ANNOVA has been used.

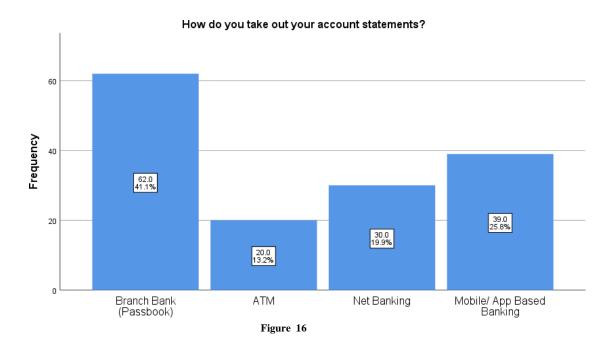
# ANNOVA

Table 17

				Std.	_	~-
	Occupation	N	Mean	Deviation	F	Sig
Branch Banking	Retail Outlet	12	1.92	0.900	1.880	0.067
	Home-maker	42	1.21	0.606	1	
	Government	12	1.42	0.793	-	
	Employee					
	Private Job	32	1.50	0.984	1	
	Business	48	1.81	0.982		
	Bhajan	2	1.00	0.000		
	Mandali					
	Retired	1	2.00		1	
	Politician	1	2.00		1	
	Property	1	1.00		1	
	Dealer					
	Total	151	1.54	0.885		
ATM	Retail Outlet	12	1.75	0.866	1.181	0.314
	Home-maker	42	1.40	0.857		
	Government	12	1.33	0.492		
	Employee					
	Private Job	32	1.81	0.780		
	Business	48	1.48	1.072		
	Bhajan	2	1.00	0.000		
	Mandali					
	Retired	1	3.00			
	Politician	1	2.00		]	
	Property	1	1.00			
	Dealer				4	
	Total	151	1.54	0.900		
Internet Banking	Retail Outlet	12	2.00	0.603	2.867	0.006
	Home-maker	42	1.19	0.969		
	Government	12	1.50	0.674		
	Employee				1	
	Private Job	32	1.72	0.813	1	
	Business	48	2.02	1.101	_	
	Bhajan	2	1.00	0.000		
	Mandali		İ		1	

	Politician	1	2.00			
	Property	1	2.00			
	Dealer	1	2.00			
	Total	151	1.68	0.984		
Telephone Banking	Retail Outlet	12	1.25	0.965	1.951	0.057
	Home-maker	42	0.64	0.879		
	Government	12	1.33	0.778		
	Employee					
	Private Job	32	0.88	0.907		
	Business	48	1.21	0.967		
	Bhajan	2	0.00	0.000		
	Mandali					
	Retired	1	2.00			
	Politician	1	1.00			
	Property	1	1.00			
	Dealer					
	Total	151	0.98	0.934		
Mobile /App based banking	Retail Outlet	12	1.58	0.669	1.831	0.076
	Home-maker	42	1.02	1.047		
	Government	12	1.25	0.452		
	Employee					
	Private Job	32	1.75	0.880		
	Business	48	1.65	1.158		
	Bhajan Mandali	2	1.00	0.000		
	Retired	1	2.00			
	Politician	1	2.00			
	Property	1	2.00			
	Dealer					
	Total	151	1.46	1.012		
Chatbots	Retail Outlet	12	0.75	0.622	1.443	0.184
	Home-maker	42	0.52	0.634		
	Government	12	1.00	0.853		
	Employee					
	Private Job	32	0.84	0.723		
	Business	48	0.52	0.743		
	Bhajan	2	1.00	0.000		
	Mandali	1	0.00		$\dashv$	
	Retired	1	0.00		4	
	Politician	1	0.00		4	
	Property Dealer	1	0.00			
	Total	151	0.64	0.715		

**Interpretation:** Therefore, it can be concluded that overall there are highly no significant differences in the usage pattern of the 9 occupational groups-Retail Outlet, Home-maker, Government Employee, Private Job, Business, Bhajan Mandali, Retired, Politician and Property Dealer, regarding the different variables pertaining to the usage pattern of respondents for using various banking services.



.Interpretation: Most of the respondents still rely on the Passbooks to get their account statements. Next most common mode of getting out the statements is Mobile/App Based Banking. People also get their statements from ATM as well as Net Banking.

Table 19 Occupation \* How would you prefer to take loans from the bank? Crosstabulation How would you prefer to take loans from the bank? Applying Visiting the Branch Loans on through net banking Total credit card Occupation Retail Outlet Home-maker Government Employee Private Job Business Bhajan Mandali Retired Politician Property dealer

Total	113	27	11	151

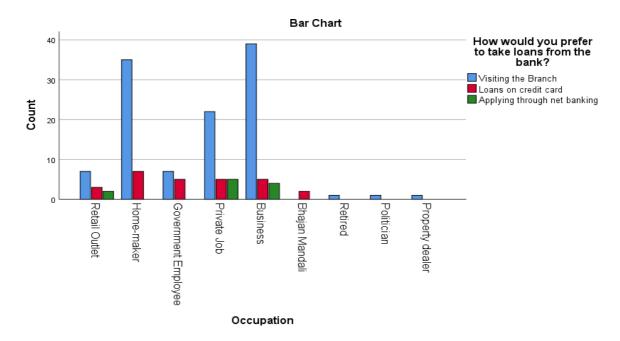


Figure 17

.Interpretation: Most of the people in all occupations prefer in taking loans by visiting the branch. But with the advent of technology many people also prefer to apply loans through net bankingandtakingloansoncreditcard.Althoughthepercentageinthesecategoriesislessbut it is gaining recognition withtime.

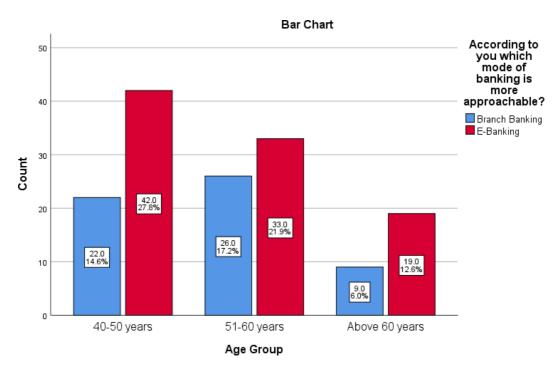


Figure 18

**Interpretation:** Respondents in all three age groups prefer E-banking over Branch Banking. So, on the whole we can say that respondents of above 40 years of age also prefer E-banking as the younger population.

Table 21

What are the f	actors that make you use various banking te	chnologies? Frequenci	es	
		Respoi	ıses	
		N	Percent	Percent of Cases
	Convenience	124	15.7%	82.7%
	24*7 usage	116	14.7%	77.3%
	Easy to use	94	11.9%	62.7%
	Makes the process easy	82	10.4%	54.7%
Factors	No need to visit the branch	77	9.8%	51.3%
	Fast Process	77	9.8%	51.3%
	Human interaction is less	72	9.1%	48.0%
	Physical material is reduced (statements etc.)	78	9.9%	52.0%
	No waiting time	68	8.6%	45.3%
_	Total	788	100.0%	525.3%

**Interpretation:** Convenience and 24\*7 usage of the banking technologies are the most common factors that make the respondents use these technologies. Banking technologies are easy to use and makes the process fast and easy which makes the respondents using it more. Also by using these technologies there will be no need to visit the bank branches, human interaction will be reduced and waiting time will also be reduced. On the whole using these technologies helps to save a lot of time and effort.

Table 22

				Percent
		Respon	nses	Cases
		N	Percent	
Factors	Risk of theft	115	26.0%	76.7%
	Hacking	96	21.7%	64.0%
	Lack of appropriate software	62	14.0%	41.3%
	Finding it difficult to use	44	10.0%	29.3%
	No knowledge of internet technologies	56	12.7%	37.3%
	Complex websites of banks	54	12.2%	36.0%
	Lack of privacy	15	3.4%	10.0%
Total		442	100.0%	294.7%

**Interpretation:** With the rise in cyber crimes and online thefts most common reason that respondents avoid using such technologies is the risk of theft and hacking of accounts. Lack of appropriate softwares with the respondents also makes them avoid these services. Some respondents do not have any knowledge of how to use such technologies and others find it difficult to use.

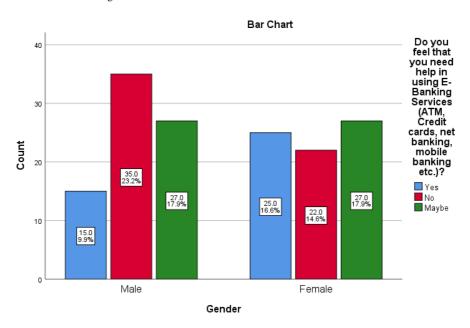


Figure 19

**Interpretation:** From the above crosstabulation it can be interpreted that more females require help in using E-banking services than males. Males are more well versed with the technology of the banks and their usage.

## FINDINGS AND CONCLUSIONS

- Services of the banks are being used by every person engaged in any occupation. Government has made it mandatory for people of all income groups to have a bank account.
- Banks are providing many offline and online services to their customers but most commonly used service is of ATM/Debit
  Card. E-payments and services connected to internet are also common among the users.
- ATM is the preferred mode for withdrawing cash rather going to the bank branches and standing in queues.
- Majority of the people are now using the services of the payment banks and the most common payment bank is Paytm and second most preferred one is Airtel Payments Bank.
- People mostly visit the bank branches to deposit cash and to operate the locker.
- Majority of the people visit bank branches 1-3 times in a month to do various transactions stated in the above statement.
- People use ATM 1-3 times in a month to withdraw cash or to check their account balances or to take out statement of recent transactions
- Internet banking is also used 1-3 times in a month by the people to avail the online services.
- Majority of the population does not use telephone banking and the percentage of people using it is very less. People use telephone banking mostly use it 1-3 times in a month.
- Major chunk of the population uses mobile/app based banking 1-3 times in a month or 3-5 times in a month.
- Usage pattern among different occupations is almost same.
- People in all the occupations prefer to take loans applying online or taking it on credit cards.
- People in all the age groups prefer E-Banking over Branch Banking.

#### References:

Achimba, C., Ongonga, J. O., & Nyarondia, S. M. (2014). Innovation in Banking Industry: Achieving Customer Satisfaction. *Open Journal of Business and Management*, 261-274.

Aliyu, A. A., & Tasmin, R. B. (2012). The Impact of Information and Communication Technology on Banks" Performance and Customer Service Delivery in the Banking Industry. Int. J Latest Trends Fin. Eco. Sc. ,80-90.

Akhlaq, A., & Ahmed, E. (2013). The effect of motivation on trust in the acceptance of internet banking in a low income country. *International Journal of Bank Marketing*.

Chaurasia, A.K. (2014). GREENBANKINGPRACTICESININDIANBANKS. JOMASS, 41-54.

Gautam, & Vikas. (2012). Measuring the Impact of New Technologies through Electronic-Banking on Profitability of Banks: Evidence formIndian Banking Industry. *Romanian Journal of Marketing*.

Ho, S., & Mallick, S. (2010). The impact of information technology on the banking industry. Journal of the Operational Research Society, 211-221.

Iberahim, H., Taufik, N. M., Adzmir, A. M., & Saharuddin, H. (2016). Customer Satisfaction on Reliability and Responsiveness of Self Service Technology for RetailBankingServices. *Procedia Economics and Finance*, 13-20.

Kaushal, R. (2012). Impactofe-banking on operational performance and service quality of banking sector in India. Shodh Ganga.

Mishra, V., & Singh, S. (2013). Mobile banking in a developing economy: Acustomer-centric model for policy formulation. Elsevier.

Parmeswar, N., Dhir, S., & Dhir, S. (2016). Banking on Innovation, Innovation in Banking at ICICIBank. Global Business and Organisational Excellence.

 $Sharma, D.J. (2017). A Study on Innovation in Banking and its Impact on Customer Satisfaction. {\it IOSR Journal of Economics and Finance (IOSR-JEF)}\ .$ 

Singh, H., & Tigga, A.E. (2012). Impactofin formation technology on Indian banking services. IEEE.