
Study on Consumer Awareness towards E-banking

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INTRODUCTION

Electronic banking or in simple terms referred as the Net banking or the internet banking. Electronic banking is a payment system which is supported by a website and which offers different types of products and services electronically for any bank like deposit, transfer, payment etc.

In simple language, electronic banking can be defined as a system where funds are transferred through the medium of e-signals rather than a physical transfer of paper records and other types of money. Financial institutions like credit unions and mainly the banks are the one where the transfer of funds occurs. And other than these there are also other commercial stores where transfer of funds take place. The funds are transferred through the electronic banking system whenever a person withdraws money from the ATM or pays for goods and other stuff through card (debit card).

Intricate computer systems that communicate using telephone lines are the one electronic banking depends or relies on. All the fund transfer and the ownership of funds are recorded by these computer systems and the method by which people and other institutions access funds are controlled by them.

Electronic banking ranges in size and are numerous. For example, an ATM machine/ network is a small system of electronic banking where there are sets of interconnected automated teller machines with which a computer system and centralised financial institution is linked. And for a large electronic banking system there is Fed wire which stands for federal reserve wire network, it is a system where large monetary transactions are dealt like real estate transactions or time- sensitive payments.

One of the major parts of E- Financing is E- banking and when retail and wholesale banking services are deployed over the internet it is called internet banking, both of these terms are complementary to each other. Electronic banking has the potential for reducing the maintenance cost by the use of the internet for data and information transfer and for the user interface the use of web browsers. For their users e- banking provide services like 24*7 a day access to services and providing current information.

E-banking services which are provided by the banks are -:

- Mobile Banking
- Internet Banking
- Debit Card

- Credit Card
- Electronic Fund Transfer
- ATM

RESEARCH METHODOLOGY

Type of Research

This research paper relied on quantitative research. It's a form of study that places a premium on the quantification of data collecting and analysis. It is based on a deductive technique that emphasises hypothesis testing and is shaped by empiricist and positivist beliefs. This form of research aided in a more thorough examination of the subject.

Research Design

A Descriptive Research project could be characterised as the goal of this project. Descriptive research is a technique that may be used in a variety of research methods and isn't just for market researchers. The purpose of a descriptive study is to describe the characteristics or behaviour of a group of people. Data gathering, analysis, and presentation are all part of this process. It allows the researcher to properly communicate the problem statement so that others may better understand why this type of research is needed. Some of the advantages of using this design type are effective to analyse non-quantified topics and issues, the possibility to observe the phenomenon in a completely natural and unchanged natural environment, the opportunity to integrate the qualitative and quantitative methods of data collection and less time-consuming.

Data collection

The chosen technique for collecting information is from primary sources (from survey) and secondary sources (on the internet). To direct a study properly, plotting the whole process is essential because consistency and authenticity of the results from the study relies upon the dependable information and data. In this connection, a few activities have been done to gather information and data. For research purposes information is gathered from Impact of E-banking on Indian banking industry and its customers.

The data that has been collected is through: -

1. Bank Website's
2. Research paper on E- banking
3. Online Survey

OBJECTIVES

- **To find out the reason why consumers use E-banking services:** In today's scenario usage of E-banking is very high. Everyone prefers E-banking services like:- mobile banking, internet banking, electronic fund transfer, etc. over carrying cash. So, finding the reason behind is very important.
- **To study the difficulties faced by the electronic banking users:** In today's scenario everyone is using E-banking as it is very convenient but on the same hand there are so many problems which the users are facing like server issues, awareness, etc.
- **To study the role of banks in Electronic Banking:** Banks play a vital role in the functioning of E-banking. E-banking reduces the burden on staff which gives staff an increase in their customer care base, error reduces, less usage of paper is good for the environment, etc.
- **To acknowledge the need and advantages of electronic banking in the Indian economy:** In the last 3 decades technology has evolved a lot along with it has become very risky for the users. E-banking is a very secure and convenient way of paying bills, checking balance, etc. Banks use an encryption device so that you are safe from online frauds, hacking etc.
- **To identify the services given by various banks to promote electronic banking:** To spread awareness of E-banking banks are providing so many services like ATM, mobile banking, online banking, smart cards, etc.

LITERATURE REVIEW

V. Raja, Joe A. (2012), "Global E-banking scenario and challenges in banking system", In the research paper we identified different types of internet banking services provided by banks. It gives us a side-by-side comparison between the traditional banking systems and net banking. It also gives brief information about the benefits of online banking & the security measures taken by the banks to give a stress-free experience to the customers.

Sudhakar A. M., Suryanarayana, (2011), "Emerging mobile banking scenario and its adoption in India: a study", India's banking sector got a great boost by technological developments of broadband communications & smart phones diffusion into the life of normal people. In a short span of time the customer relationship between bank and customer has strengthened because of a revolution called Mobile Banking. It is a time-efficient and convenient service which will help in boosting economic growth. This article also talks about the scenario of Mobile Banking in India & other countries.

Dr. Roshan lal and Dr. Rajni saluja (2012), "E-banking: The Indian Scenario" This article talks about how the Staff member of banks must be given some training on how to operate E-banking so that they can teach customers how to use E-banking. E-banking services need to be custom-made on the basis of age, gender, occupation etc so that all the necessities of a customer are delivered.

Mookerji (1998), Pegu (2000), Gupta (1999) and Das Gupta (2002) discovered that in India Online banking is growing very fast and by 2005, the competition between banks will increase. In India all the banks have their website but there are hardly any banks who give transactional online banking service.

Mishra (2005), explained the benefits and security measures taken by banks to make sure online banking is safe for the customers. According to him, the main motive of online banking is to gain new & loyal customers, provide new and more e-banking services, and enhance user access. But in a questionnaire organised by the internet banking association, institutions members rated security as the supreme concern of internet banking.

Hasan (2002) observed that online home banking was a very good approach for banks to enchant & engage users. Between 1993-2000 75 percent of the Italian banks launched different types of online banking to get a hold on the customers. Big banks have the highest probability of acquiring online banking services.

Jeevan (2000) noticed that because of online banking, banks started to provide low-priced & modernised financial services. United States web-corporation declares that at last banks found an extensive online banking approach which will help them in securing a remarkable place in the progressively competitive financial services market. Technological changes, rivalry and style of living created a big impact on banking & banks in present are looking for different ways to give more and more services to the customers.

Munnukka, mattila and sournata (2005) and molla and AlSabbagh (2004)- all the various drivers and inhibitors of electronic banking adaptation are explored by them. Impact of electronic banking on customers has a less empirical analysis. In the Indian context there are not many studies available and the internet banking or e banking is a relatively new concept. All the studies that the author have gone through are not in the Indian context

Chauhan, V and Chaudhary, V (2015). Internet Banking in India: Challenges and Opportunities in Indian Context. The paper revolves around the context of electronic banking or internet banking. It is mainly focused on the concept of electronic banking and their advantages for their customers as for the banks as well. From the year 2010 till 2014 percentage growth in mobile banking is almost 500 % with four hundred and ninety five percent whereas the percentage increase for the credit card is very less around eleven percent and for the NEFT and the RTGS fund transfer the percentage is about six hundred and two and eighty nine percent respectively. The paper concluded that most banks have the e- banking facilities for the benefit of consumers as well as the bank but it also has some security concerns which banks have to adhere to.

Manikyam, K. Ratna (2014). In “Indian Banking Sector- Challenges and Opportunities” analysed the challenges and effective opportunities and impact on privatisation, liberalisation and globalisation. Through the study they came to the realisation that to stand against foreign banks is that Indian banks should differentiate product and services as it is one of the biggest

banking challenges and globally for banks to survive from its competition is to build knowledge driven organisations. Progress and the challenge are the main concerns of this study along with the technological aspect of e- banking. One of the criticisms of this study is that it has not focused on the banking sector digitalization and with being the cashless economy, how will the economy move with the different gov scheme and internet penetration.

Haq, S., Khan, M. (2013). In “E-banking challenges and opportunities in the Indian banking sector” they concluded that after evaluating the population characteristic only twenty eight percent of the banking clients are using electronic banking. And in between the cyber banking and the age there was no proper relationship and apart from this there is also no relationship between gender and adoption of electronic banking. In the acceptance of electronic banking, it has been seen that income and education plays a role. To increase the awareness of electronic banking, different programs should be run by the bank to increase the financial literacy of the user.

Seranmadevi R MG., Saravanaraj (2012). In “An Empirical Study on Quality of Internet Banking Services in India ” they concluded that in terms of easy to use, reasonable and accessibility, electronic banking can be useful. The study concentrated on the facilities of e-banking like electronic credit card, repayments modes etc.

Dangwal.R.C., K. S. (January 2010). In “The upcoming Technology and the associated innovations” he concluded that technology is going through many changes and increasing rapidly. For product manufacturing and design and control innovative application is necessary.

Servon, L. a. (2008). In “Consumer financial literacy and the impact of online banking on the financial behaviour of lower-income bank customers” he summarised that electronic banking is like a revolution in the industry of finance and now banking is not only limited with branches and withdrawal of cash.

IMPACT OF E-BANKING ON BANKS AND ITS CUSTOMERS

The banking sector has evolved a lot over the years from Traditional Branch Banking to Electronic Banking. In Traditional banking, the customers used to visit their bank branch to perform their transactions, deposit money, check account balance, etc. whereas after the introduction of electronic banking it has become convenient for customers to perform all their tasks through phone or laptop. In 2020, the whole world was affected by Coronavirus which made a very hard impact on the banking sector. In India, lockdown was imposed and people were advised to maintain social distance, not leave home and at this difficult time e-banking services were a saviour for everyone. During covid the volume of e-banking transactions increased, 91% of the time there was need to fill up ATMs, etc. Over the years the usage of electronic banking has hiked a lot from 1% users in 1998 to 932 million users in 2022 and is expected to cross 1 billion users by 2025.

Advantages of E-banking

From bank's point of view: -

- E-banking helps in reducing the cost of delivering the services to customers.
- It reduces the use of paper which is good for the environment.
- Banks can earn money by promoting items through their website.
- It reduces the burden on staff which gives them more time to focus on customer care.
- E-banking with its better and fast options helps build good customer relationships.
- Since all the transactions can be made online there's no need to invest in more branches.
- E-banking services assist in gaining profits.

From customer's point of view: -

- It is easy to open and operate an online account.
- Funds get transferred from one account to another very fast.
- Customers can withdraw cash from ATMs 24/7.
- Since there are so many competitions in the market, all banks are trying to provide e-banking services at minimal cost.
- The customer can easily maintain his account, check balance through the internet 24/7.
- If you are out of the city or state or country, through the internet you can lodge your complaint or keep a check on your account.
- All the transaction records are present online which helps you to keep a check on your spendings.

Disadvantages of E-banking: -

- If the bank's server is down, you cannot make any transactions.
- Since all the information is present online it is easy for hackers to hack your account and gain access to it.
- The customer-banker relationship will decrease as no one will visit the bank.
- To give a better experience to the customers the bank upgrades their site a lot which gets confusing and difficult to understand.
- You tend to spend more money than usual because it is easy to make payments.
- E-banking offers a lot of services but still some services require your signature on documents like loans, large amounts of cash withdrawal, etc.

Challenges faced in adoption of E-banking: -

- **Security Risk:** Customers refuse to use electronic banking because they think most of the time it's not safe and secure. So, it is a very big challenge for banks to convince people to start using electronic banking.
- **Customer Awareness:** Many people do not have knowledge of how an e-banking works, functioning, facilities, procedures, etc. Therefore, they all need to be taught.

- **Privacy Risk:** All the consumer's personal information is present online. Most consumers are scared of identity theft or their information being shared with other people
- **The Trust Factor:** It is difficult to trust an online based banking system. A lot of questions come into our mind like: - Did the transaction go through? Lack of online security? Did I write the correct account number? etc.
- **Technical Difficulties:** As e-banking uses technology, many technical errors can happen like bank websites not working because of heavy traffic, server issues, forgetting id passwords, etc. the consumers have to deal with all of it.

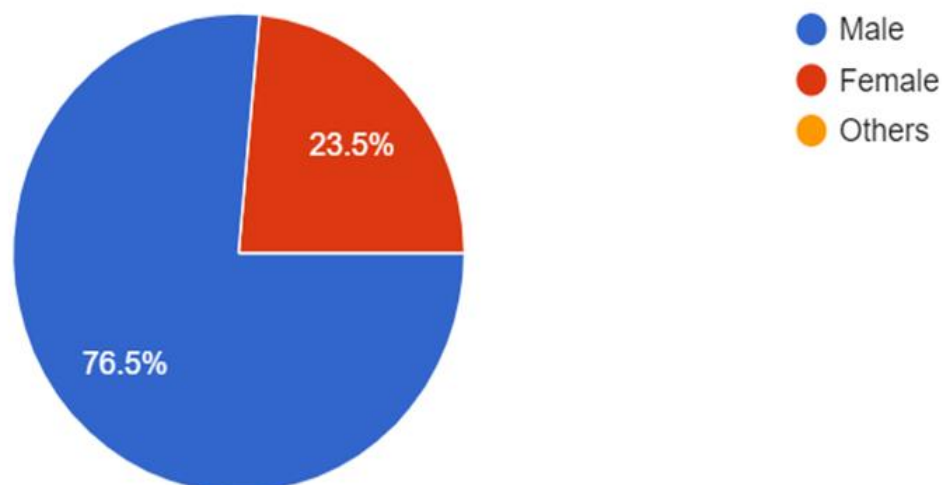
DATA ANALYSIS

We did an online survey in which we posted questionnaires and gave some alternatives which helped us in our review and in getting more information on how E-banking is affecting its customers.

1)

S.NO	GENDER	NO. OF RESPONSES	PERCENTAGE
1.	Male	65	76.5
2.	Female	20	23.5
	TOTAL	85	100

Table 1.1

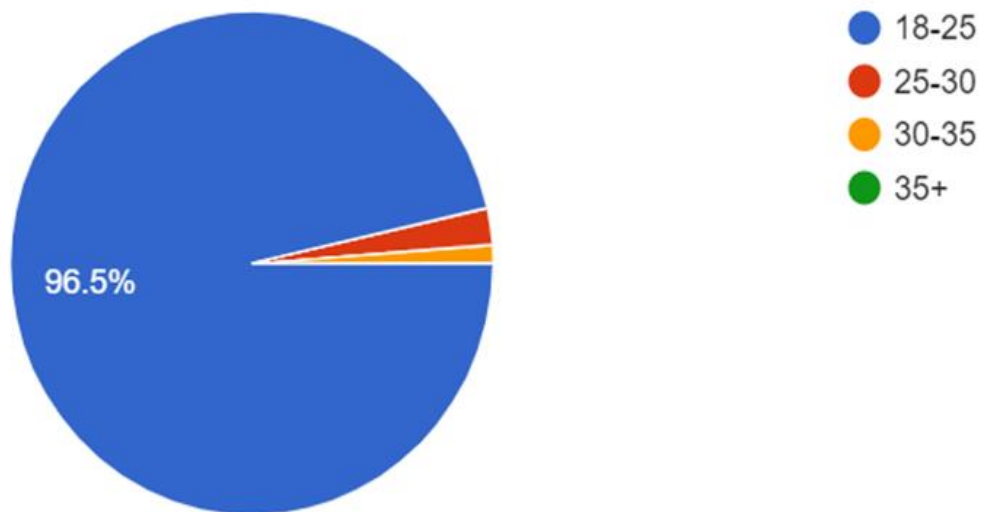


Findings reveal that the no. of male respondents are 65 and no. of female respondents are 20.

2)

S.NO	AGE	NO. OF RESPONSES	PERCENTAGE
1.	18-25	82	96.5
2.	25-30	2	2.4
3.	30-35	1	1.2
4.	35+	0	0
	TOTAL	85	100

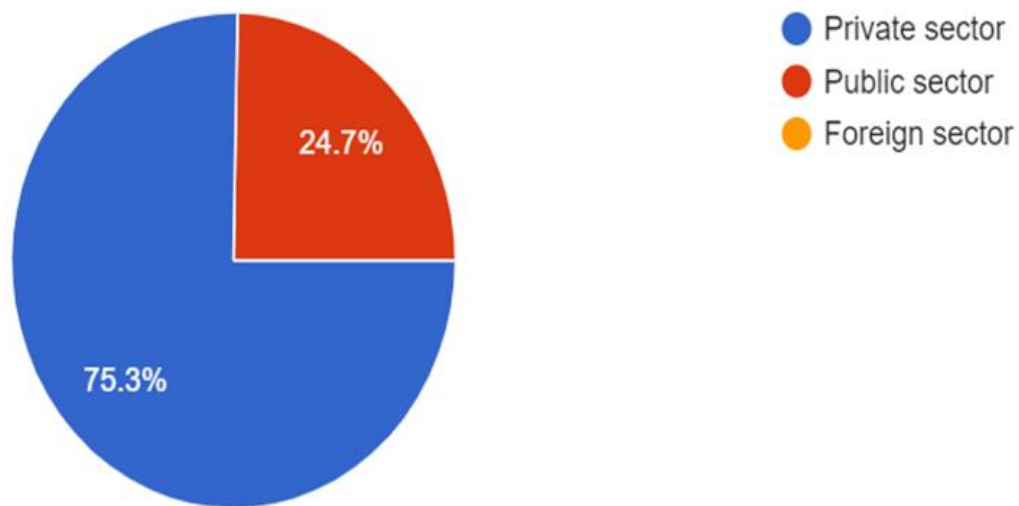
Table 1.2



From the survey we found that most no. of respondents are from the 18-25 age group (96.5%) whereas 25-30 and 30-35 age groups have (2.4%) and (1.2%) respondents respectively and the 35+ age group has 0 respondents.

3)

S.NO	TYPE OF BANK	NO. OF RESPONSES	PERCENTAGE
1.	Private Sector	64	75.3
2.	Public Sector	21	24.7
3.	Foreign Sector	0	0
	TOTAL	85	100

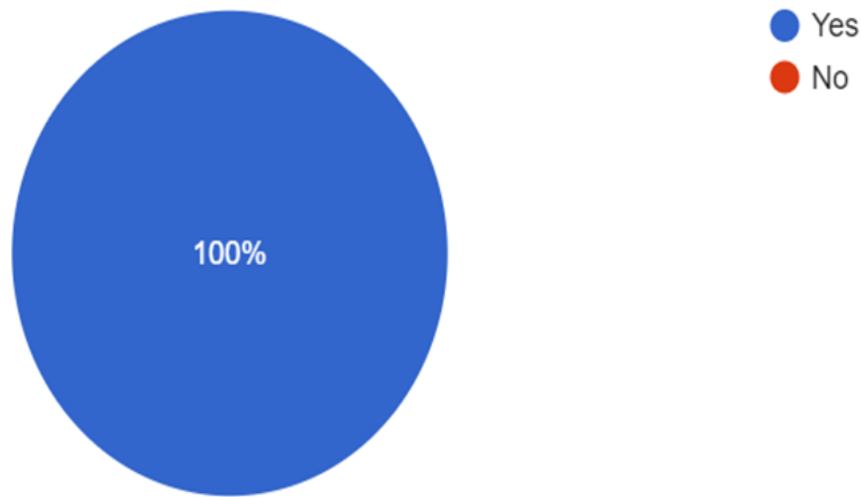
Table 1.3

Majority percentage of consumers are using Private Sector bank (75.3%) like HDFC Bank, ICICI Bank, Axis Bank, etc and the rest are using Public Sector bank (24.7%) like SBI, PNB, Bank of Baroda, etc and no one is using Foreign Sector bank.

4)

S.NO	DO YOU USE ONLINE BANKING	NO. OF RESPONSES	PERCENTAGE
1.	Yes	85	100
2.	No	0	0
	TOTAL	85	100

Table 1.4

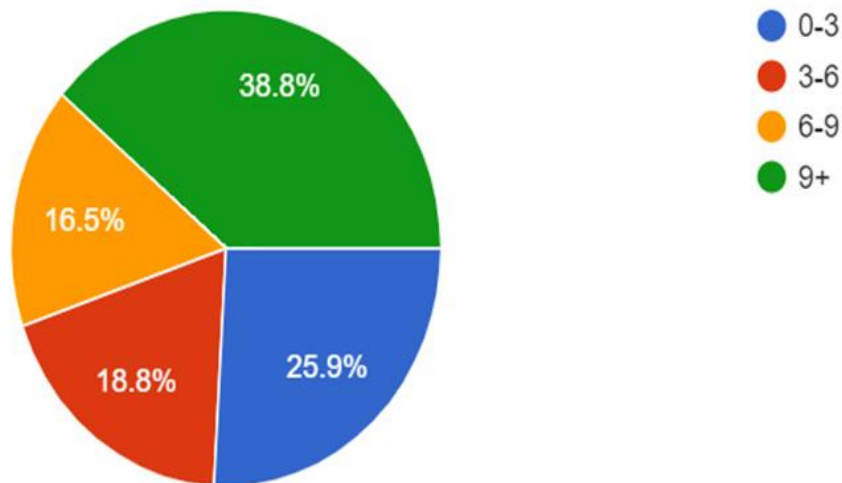


It is clearly visible that all the respondents use online banking.

5)

S.NO	NO. OF ONLINE TRANSACTIONS IN A WEEK	NO. OF RESPONSES	PERCENTAGE
1.	0-3	22	25.9
2.	3-6	16	18.8
3.	6-9	14	16.5
4.	9+	33	38.8
	TOTAL	85	100

Table 1.5

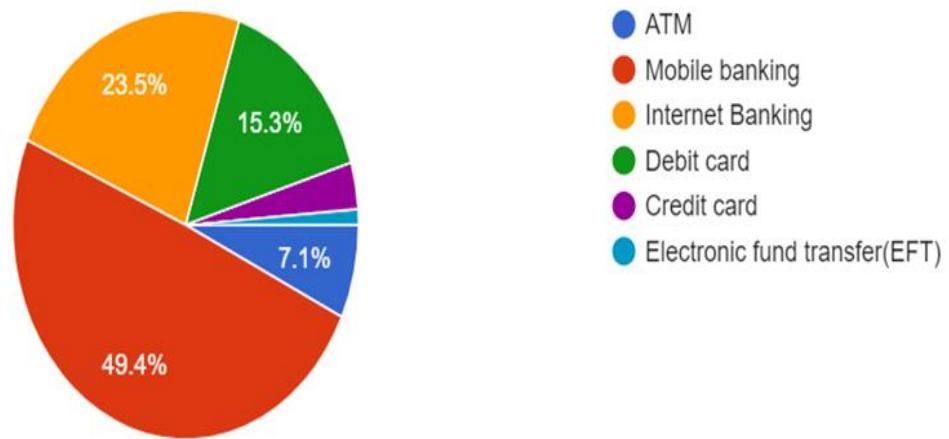


According to the data out of 85 responses, 25.9% people do less than 3 transactions in a week, 38.8% people are doing on an average 9 and more transactions in a week and 35.3% people are doing more than 3 but less than 9 transactions in a week.

6)

S.NO	PREFERRED E-BANKING SERVICE	NO. OF RESPONSES	PERCENTAGE
1.	ATM	6	7.1
2.	Mobile Banking	42	49.4
3.	Internet Banking	20	23.5
4.	Debit Card	13	15.3
5.	Credit Card	3	3.5
6.	Electronic Fund Transfer	1	1.2
	TOTAL	85	100

Table 1.6

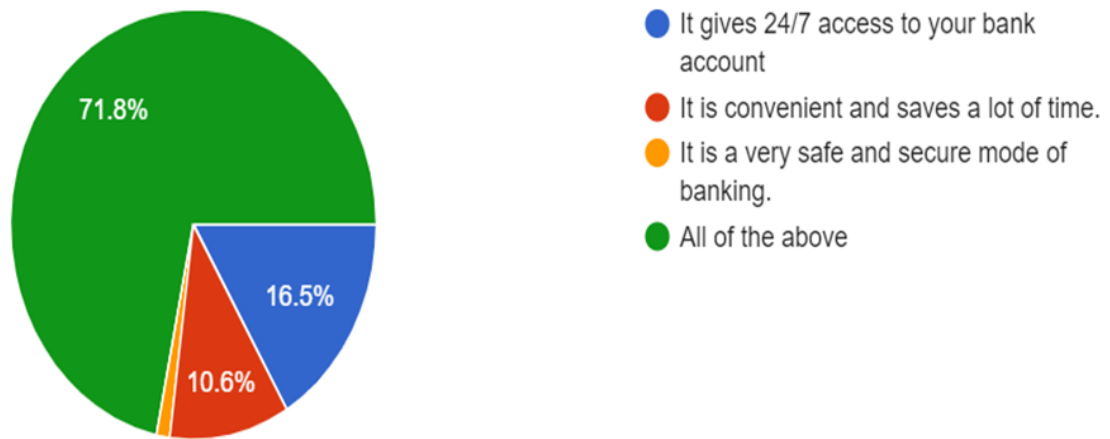


The pie chart clearly shows us that Mobile banking (49.4%) is the most preferred e-banking service because it is very time-efficient, convenient (scan & pay), etc. The second most preferred service is Internet banking (23.5%) and the main reason why it is not first is because Internet Banking can only be done by personal computer. The third most used service is Debit Card (15.3%). The fourth most used service is ATM (7.1%) it is accessed by those who like to carry and pay by cash. No. of Credit card users are less as compared to Debit card because you have to pay interest on Credit card. The least preferred service is EFT.

7)

S.NO	WHY DO YOU USE E-BANKING	NO. OF RESPONSES	PERCENTAGE
1.	24/7 access	14	16.5
2.	Convenient and Time-efficient	10	10.6
3.	Safe and Secure	1	1.2
4.	All of the above	61	71.8
	TOTAL	85	100

Table 1.7

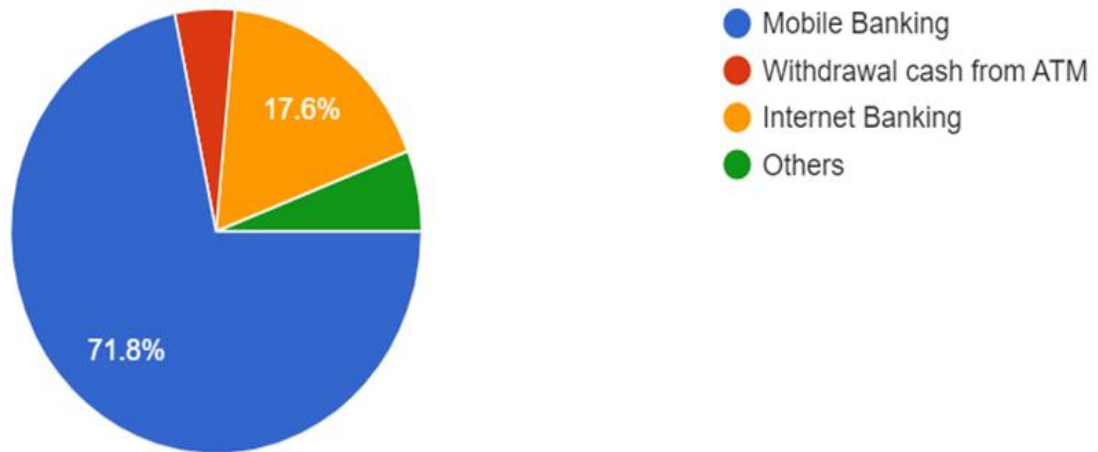


16.5% people prefer E-banking because you can manage your account 24/7, 10.6% people prefer E-banking because it is time-efficient and 1.2% people use E-banking it is safe whereas 71.8% people prefer E-banking because of the all reasons i.e., 24/7 access, convenient, time-efficient, safe and secure.

8)

S.NO	PREFERABLE MODE OF PAYMENT	NO. OF RESPONSES	PERCENTAGE
1.	Mobile Banking	61	71.8
2.	Cash withdraw from ATM	4	4.7
3.	Internet Banking	15	17.6
4.	Others	5	5.9
	TOTAL	85	100

Table 1.8

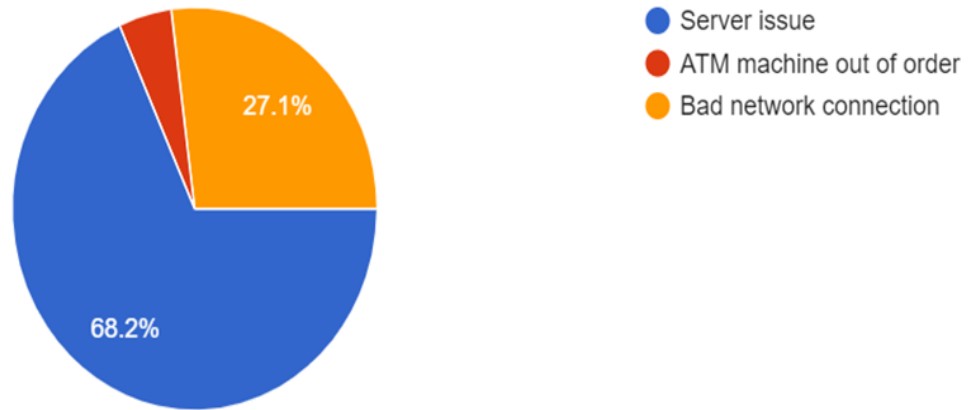


Findings reveal that 71.8% people prefer Mobile Banking as mode of payment as it is easy to use, time-efficient and safe whereas 17.6% people use Internet Banking for paying someone and 4.7% and 5.9% use cash or any other mode of payment respectively.

9)

S.NO	PROBLEM FACED BY E-BANKING USERS	NO. OF RESPONSES	PERCENTAGE
1.	Server Issues	58	68.2
2.	ATM Machine out of order	04	4.7
3.	Bad Network Connection	23	27.2
	TOTAL	85	100

Table 1.9

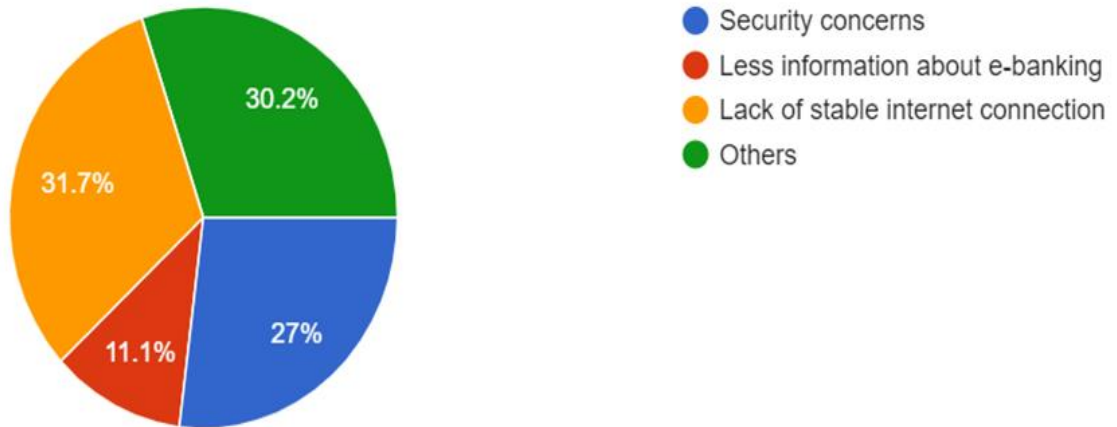


According to the table 68.2% of people face a server issue most whereas 27.2% believe that network connection also creates hindrance while transferring money and 4.7% have experienced an ATM machine not working.

10)

S.NO	REASONS FOR NOT USING E-BANKING	NO. OF RESPONSES	PERCENTAGE
1.	Security Concerns	17	27
2.	Less information about E-banking	7	11.1
3.	Lack of Stable Internet Connection	20	31.7
4.	Others	19	30.2
	TOTAL	63	100

Table 1.10

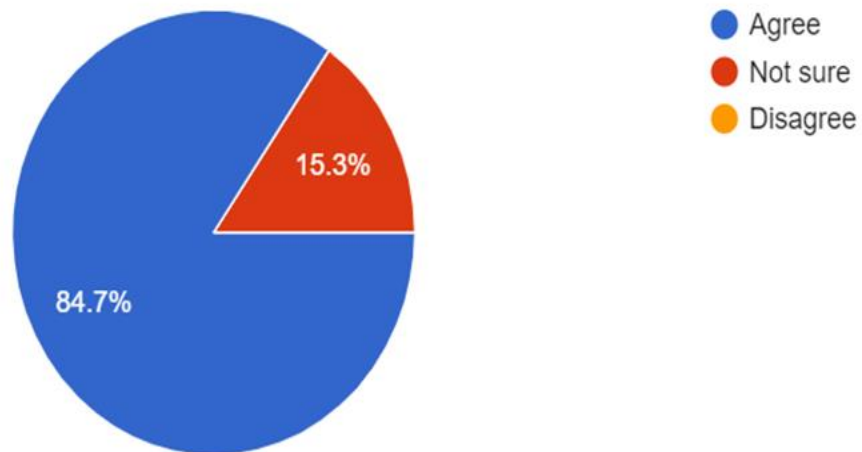


Majority percentage of people believes that the main reason why people are not using E-banking is Lack of Stable Internet Connection, 27% are not using E-banking because they don't think it is safe, 11.1% people think that community should be educated about E-banking and 30.2% people think there are so many other reasons for not using e-banking.

11)

S.NO	IS E-BANKING USER FRIENDLY	NO. OF RESPONSES	PERCENTAGE
1.	Agree	72	84.7
2.	Disagree	0	0
3.	Not Sure	13	15.3
	TOTAL	85	100

Table 1.11

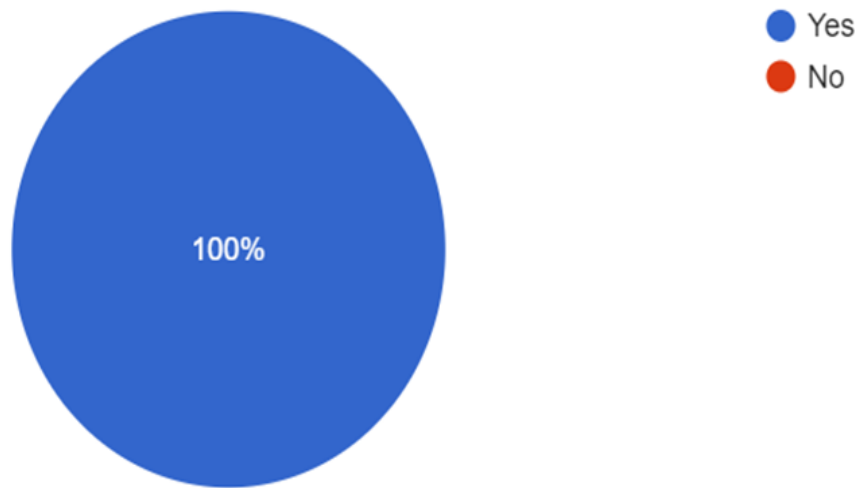


Findings show that 84.7% people think that E-banking is user-friendly which increases the level of customer satisfaction where 15.3% people are not sure about it.

12)

S.NO	DOES E-BANKING PLAY A VITAL ROLE IN DIGITAL INDIA MISSION	NO. OF RESPONSES	PERCENTAGE
1.	Yes	85	100
2.	No	0	0
	TOTAL	85	100

Table 1.12



According to the findings it is evident that 100% people believe that E-banking plays a huge role in the Digital India Mission.

FINDINGS

- E-banking services are very helpful for the consumers. It gives 24/7 access to your account at your fingertips, hassle free transactions (scan & pay), better access to bank records, etc. and this is the reason why people prefer E-banking.
- From Table 1.3 it can be seen that most of the respondents use Private Sector banks.
- Online banking is used by everyone and majority of people are from 18-25 age group (Table 1.2 and 1.4)
- Because of the hassle-free experience of e-banking the no. of online transactions in a week is above 9. (Table 1.5)
- From all the services available Mobile Banking is most preferred followed by Internet Banking, Debit Card, ATM, Credit Card and Electronic Fund Transfer. (Table 1.6)
- It is found out that for making payments everyone prefers Mobile Banking over Cash, Internet Banking, etc. (Table 1.8)
- The major problem which people are facing while using online banking is server down issues, bad internet connection and ATM problems. (Table 1.9)
- From the survey it is evident that the main reason why consumers do not use E-banking is because they do not have access to high-speed internet connection followed by security concerns and less education about E-banking. (Table 1.10)
- Majority of the people believe that E-banking is user-friendly which is a good sign because they must be impressed by the customer service. (Table 1.11)
- Demonetization has promoted E-banking a lot and everyone also believes that it plays a massive role in the Digital India Mission.

CONCLUSION

In this world the internet/mobile and wireless market is one of the fastest growing markets. The banking industry has got a new platform through this arrival of technology and the increase in the use of smartphone devices. In the current time one of the unstoppable necessities is connecting a consumer with their money and balance anytime and anywhere. A strong banking relationship is built through this world-wide communication. If the banks accommodate all their customers' needs with all their clients and public base, they can achieve superior interaction. All the banks have to keep up with the advanced technology and their competition to keep their customer alliance. This has become a unique challenge for them. For every bank to succeed in this current time is that the consumers have the convenience for the services and apart from that to have ATMs is crucial. For the economy as well as for the public's success the banks and the financial institution need to embrace the new technologies and customise them for effective growth. Electronic banking is definitely here to stay. It is almost impossible for the banks to do conveniently with regular banking with the increase in the services that are being offered with the electronic banking. The banking industry will undoubtedly be charged with the internet as we venture into the future

REFERENCES

1. Monisha, Bhudhiraja, K., & Kaur, J. (2018, April 24). *Electronic banking in India: Innovations, challenges and opportunities*. International Journal of Engineering Research & Technology. Retrieved May 30, 2022, from <https://www.ijert.org/electronic-banking-in-india-innovations-challenges-and-opportunities>
2. Baby, J. (2017, April). *E- banking its impact on the society*. mercycollege. Retrieved June 1, 2022, from https://www.mercycollege.edu.in/pdf/publications/jency-baby/E__BANKING_%E2%80%93 ITS_IMPACT_ON_THE_SOCIETY_ijariie6287.pdf
3. N, S. (2017, May 2). *Role of E banking services in the banking sector - IJCRT*. Retrieved May 15, 2022, from <https://www.ijert.org/papers/IJCRT1133215.pdf>
4. Pushkar, B., & Gupta, A. (2018, December 31). *Impact of e-banking its growth and future in India*. SSRN. Retrieved June 1, 2022, from <https://deliverypdf.ssrn.com/delivery.php?ID=643118114082091092001009093069084030003031038023006082027093017119087066090066112000037049057099017029005080100072093116095018114053003033058068112031080103112109120059007007122108083007093126117109097125084085106031094113020096023006005001101066066070&EXT=pdf&INDEX=TRUE>
5. Saravanan, K., & Lakshmi, K. M. (2019, February). *Customer satisfaction on E-banking provided by Indian Bank in Nagapattinam District*. ResearchGate. Retrieved May 24, 2022, from https://www.researchgate.net/publication/331355107_CUSTOMER_SATISFACTION

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BANKING_PROVIDED_BY_INDIAN_BANK_IN_NAGAPATTINAM_DISTRICT
6. Kaushik, D. (2019, February). *A study of internet-banking in financial development in India*. Gnited Minds Journals. Retrieved May 27, 2022, from <http://ignited.in/I/a/68759>
 7. Singh, R. R., & Kaur, N. (2019, September). *Interaction between Online Banking and its Impact on Financial Performance of Banking Sector:- Evidence from Indian Public Sector Banks*. International Journal of Recent Technology and Engineering (IJRTE). Retrieved from <https://www.ijrte.org/wp-content/uploads/papers/v8i2S11/B11370982S1119.pdf>
 8. Nayak, N., Nath, V., & Goel, N. (2014, March 3). *A study of adoption behaviour of mobile banking services by Indian ...* ResearchGate. Retrieved April 12, 2022, from https://www.researchgate.net/publication/264558607_A_STUDY_OF_ADOPTION_BEHAVIOUR_OF_MOBILE_BANKING_SERVICES_BY_INDIAN_CONSUMER_S
 9. Bajwa, D. R. (2020, June). *A study of Global e-banking scenario and challenges in banking system*. ResearchGate. Retrieved June 15, 2022, from https://www.researchgate.net/publication/342301329_A_STUDY_OF_GOABAL_E-BANKING_SCENARIO_AND_CHALLENGES_IN_BANKING_SYSTEM
 10. Bhargava, A. (2017, May 29). *E-banking: Opportunities and challenges in India*. ResearchGate. Retrieved May 29, 2022, from https://www.researchgate.net/publication/320028421_E-BANKING_OPPORTUNITIES_AND_CHALLENGES_IN_INDIA
 11. Khan, M. S., Sreekumar, N. A., & Mahapatra, S. S. (2009, January). *Service Quality Evaluation in internet banking: An empirical study in India*. ResearchGate. Retrieved May 27, 2022, from https://www.researchgate.net/publication/239783127_Service_quality_evaluation_in_internet_banking_An_empirical_study_in_India
 12. Ahmed, A., Rezaul, K. M., & Rahman, M. A. (2010, February). *E-banking and its impact on Banks' performance and consumers' behaviour*. ResearchGate. Retrieved April 12, 2022, from https://www.researchgate.net/publication/221026353_E-Banking_and_Its_Impact_on_Banks'_Performance_and_Consumers'_Behaviour
 13. Krishnan, N., & R., S. (2020). *A study on customer's problems and prospects towards e-banking with special reference to Palakkad district, Kerala*. INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE. Retrieved April 7, 2022, from <https://forms.iimk.ac.in/research/markconf20/Proceedings/39.pdf>
 14. Carranza, R., Díaz, E., Sánchez-Camacho, C., & Martín-Consuegra, D. (2021, January 14). *E-banking adoption: An opportunity for customer value co-creation*. Frontiers. Retrieved May 26, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.621248/full>