MBA JOURNALS

NOLEGEIN Journal of
Business Risk Management

ISSN: 2582-287X
Volume 5, Issue 1, 2022
DOI (Journal): 10.37591/NJBRM

http://mbajournals.in/index.php/JoDBCM/index

Research NJBRM

A Gender wise Study on Privacy and Security in Digital Banking

Mitesh Kadakia*

Abstract

Banks have always been a place of trust for all: Young/old, Rich/Poor, Male/Female, Literate. The concept of bank in India is that of a place where there are long ques for every activity and a huge amount of paperwork is to be done for each transaction. However, due to the introduction of technology in the banking sector, the scenario is not the same anymore; it has reduced the quantum of paperwork for many banking activities and at the same time the footfall of the customers in the bank has reduced, resulting in shorter or no ques in many banks. The main reason why people deposit their money and other valuables in the bank is 'Trust'. The trust that their money and personal data is safe in bank. They are not worried about the transactions done through bank. Risk is a part of any business and banking is no exception. However, the kind of risk faced by bank is a little different than that of the other businesses. The risks faced by banks are mainly Systematic and Unsystematic in nature. As said that every coin has two sides, so is the case of introduction of technology in banking, it has given certain benefits in the banking process, however, it has increased the risk of Cyber Security mainly in today's world of Digital Banking. As a bank, the ability to find the best solution to overcome the cyber risk which would ensure the safety of customer's money/data would be the key for the banks to stay and prosper in business by maintaining the trust of the customers. This study aims at analyzing the privacy and security of the customers using digital banking. It also intends to examine the gender wise customer perception towards the concerns and safety of the customers based on their belief about the safety of their valuables/data.

Keywords: Banking, privacy, digital banking, cyber security, cyber risk

INTRODUCTION

Banks play a pivotal role in the growth and sustainability of modern economy, especially with the growth of Digital Banking. Bank is understood as a Financial Institution which is involved in the process of accepting deposits and lending money. In recent period, 'Under Digital India Initiative' by GOI, the banks have started providing lot of core banking services (Online) to their customers with an aim to maintain customer faith and trust in the bank and offer an enhanced customer satisfaction. For any business, customer satisfaction is a key-factor and bank/banking business is no exception. For banks, customer satisfaction can be maintained by providing better and trust-worthy services. To enhance the customer satisfaction, the banks need to update their websites/Apps on timely basis and make them more user friendly, and at the same time provide the much-needed security. Banks also need to make effective use of promotional measures for the new and revised services and offers/schemes to keep the customers updated, this in turn would enhance and enrich the customer satisfaction which would help in retaining the customers. The banking sector has been under attack since its inception for various reasons

***Author for Correspondence**
Mitesh Kadakia
E-mail: mkadakia7@gmail.com

Associate Professor, Department of Commerce, Badruka College of Commerce & Arts, Kachiguda, Hyderabad, Telangana, India

Received Date: July 26, 2022
Accepted Date: August 04, 2022
Published Date: August 17, 2022

Citation: Mitesh Kadakia. A Gender wise Study on Privacy and Security in Digital Banking. NOLEGEIN Journal of Business Risk Management. 2022; 5(1): 9–14p.

related to privacy and security. Initially, the expected attacks were on the Physical Money in the Banks, then it moved to theft of Manually Recorded Data and now it is all about the Cyber Fraud. Cyber security is important for every banking institution as most of the transactions are done using various digital wallets or digital banking services provided by banks via their apps or websites. Excessive use of technology has left banks exposed to new and various types of cyber-crimes and online-frauds. It is indispensable for banks to provide impeccable security and improve services to maintain customer satisfaction and this in turn would help in customer retention. Banks need to integrate security awareness in its SOP and educate the customers about the means and ways of safeguarding themselves against any cyber-attack.

NEED FOR THE STUDY

As in every business, even in banking it is the customer who is the base of success or growth. As a customer in modern times is much more knowledgeable and has a wide exposure with many varying choices, each customer is looking for quality services. The only way to retain a customer is by providing the best quality services with utmost security of their data and money [1]. Customer satisfaction is the core goal of any bank as it would lead to enhanced profits and better customer relations. This study intends to understand the need to distinguish between the customers personal data into public data and non-public data. As it is understood that each bank shares its customer data with others for various commercial purposes. As a banking institution, it is vital for banks to ensure the security and confidentiality of the customers information/data. Bankers need to understand the value of maintaining the customer's privacy and the same about their information. In recent period, cyber-security concerns have increased manifolds making them as the prime focus for all banks and banking institutions. The risk of cyber-attacks has made banks more vigilant, leading to boosted cyber-security measures [2].

SCOPE OF THE STUDY

This study on gender-wise study on privacy and security in digital banking covers the following aspects:

- Customer satisfaction in day-to-day digital banking (online transactions).
- Factors influencing customers while using digital/online banking websites/apps.
- Relation between cyber security and usage of digital banking services.
- The customer's perception towards the aspects of privacy and security.

OBJECTIVES OF THE STUDY

1. To evaluate the customer satisfaction in online/digital banking [3].
2. To analyze the factors affecting customer security in digital banking.
3. To understand the ease of access to the banking services by the customers.
4. To examine the perception and satisfaction of customers towards privacy and security issues in digital banking.

REVIEW OF LITERATURE

Foderaro in his article titled, "Digital Transformation and its Impact on Finance and the Banking System" has observed that most of the common banking business is taken over by New FinTech Platforms and Hybrid Banks. He also said that now it is the responsibility of such institutions to protect the data and the money of its customers [4].

Jain *et al.* in an article have concluded that though demonetization has acted as the engine in the growth of digital banking in India, the Indian banks would need to overcome many challenges to make digital banking pervasive and more customer friendly [5].

Zahoor and Sunami in their paper on "Challenges in privacy and security in banking sector and related countermeasures" have observed that the use of IT has brought major changes in the banking sector. In recent period, banking has transformed expressively due to increased use of internet for banking activities. They also observed that the change from physical to online banking has made banking transactions easier, more convenient and safer for both the banks and the customers [6].

Subashini and Gopalasamy in their paper "A Review of service quality and Customer Satisfaction in banking services: Global scenario" have shown that there is a relation between the customer satisfaction and the quality of service provided by the bank. In this situation, it has become the necessity for Indian banks to emphasis on customer satisfaction and security of their assets including the personal information (Data) for their survival and growth. They also suggested that service quality should be made as in indicator for customer satisfaction [7].

Bamoriya and Singh, in the research paper, identified that the users as well as non-users of digital banking have their reservations while using the mobile banking apps or the bank websites for digital transactions. From the customer's perspective, the security and privacy are of prime concern while using any form of digital facility provided by banks. The customer satisfaction also depends on the ease of downloading the software and its possible use by the customers [8].

RESEARCH DESIGN AND METHODOLOGY

The study is mainly based on the primary data and secondary data would be used only in some cases where it would be found appropriate for the purpose of study.

Sampling Method

A combination of sampling techniques was used in the study for collecting data from the respondents like Simple Random Sampling, Convenience Sampling, Multi-Stage Sampling, etc.

Sample Size

A sample size of 100 respondents is considered suitable for study.

Sample Frame

The respondents for the study are the customers from various banks, Private and Government, with different age groups, educational qualifications, income sources, etc. located in different parts of the State of Telangana.

Tools for Data Collection

A structured questionnaire was prepared (both in English and Vernacular language) to collect the data from the respondents for the purpose of study. The questionnaire was in paper form for the respondents who can be contacted physically and soft copy for those respondents who would not be available in person. Direct interview method was used to collect facts and figures (Data) in a more personalized and reliable manner.

Limitations

The study was conducted within the geographical limits of the State of Telangana and with only 100 respondents due to lack of time and logistic support. The study was conducted from February 21, 2022 to February 28, 2022.

Analytical Tool

Correlation and Chi-Square test have been used to analyze and interpret the data collected.

ANALYSIS

- $\mathbf{H_{01}}$**:** Based on the gender, respondents do not feel that the possibility of security breach in digital banking differs based on amount to be remitted in the bank.
- $\mathbf{H_{10}}$**:** Gender wise respondents feel that the possibility of security breach in digital banking differs based on amount to be remitted in the bank.

Interpretation of F test

From the Table 1, we infer that F test value is 1.931 and significant value is 0.070. Since, the significant value is >0.05, we accept Null hypothesis and reject alternative hypothesis. Thus, based on the gender of the respondents, they do not feel that there is a possibility of security breach while using digital banking based on the amount of remittance in the bank. Thus, gender wise, respondents do not feel that the possibility of security breach in digital banking differs based on amount to be remitted in the bank [4].

- **H_{02}:** Based on the gender of the respondent, they do not believe that by performing online/digital transaction, one can become victim of cybercrime.
- **H_{20}:** Based on the gender of the respondent, they do not believe that by performing online/digital transaction, one can become victim of cybercrime.

Table 1. Table of F-Test.

F	df1	df2	Sig.
1.931	8	65	.070

Interpretation of 1st Chi-Square Test

As per the information available in the Table 2, we conclude that Chi-Square test value is 1.20 and its significant value is 0.5483. As the significant value is >0.05, we accept Null hypothesis and reject alternative hypothesis. Thus, based on the gender of the respondents, there is no difference in the belief that by making an online transaction one can become the victim of cyber-fraud [6].

- **H_{03}**: Irrespective of the gender of the respondents, they believe that there is no relation between the app/website used in online transaction and becoming a victim of cybercrime.
- **H_{30}**: Irrespective of the gender of the respondents, they believe that there is relation between the app/website used in online transaction and becoming a victim of cybercrime.

Table 2. 1st Chi-Square Test.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.203[a]	2	.548
Likelihood Ratio	1.590	2	.452
Linear-by-Linear Association	.896	1	.344
No. of Valid Cases	98		

Table 3. Symmetric Measures.

	Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Pearson's R	0.111	0.105	0.946	.347[c]
Ordinal by Spearman Correlation	0.091	0.113	0.771	.443[c]
No. of Valid Cases	98			

Interpretation of Gender

As per the information available in the Table 3 we conclude that the correlation value is .1111 and the significant value is 0.347[c]. As the significant value is >0.05, we accept Null hypothesis and reject alternative hypothesis. Thus, irrespective of the gender of the respondents, they do not feel that there is any direct relation between the app/website used in online transaction and becoming a victim of cybercrime [9].

- **H_{04}:** Gender wise, there is no significant relation between making an online transaction and been exposed to cyber-fraud.
- **H_{40}:** Gender wise there is significant relation between making an online transaction and been exposed to cyber-fraud.

Interpretation of 2nd Chi-Square Test

Based on the data as per Table 4, we can conclude that the value of Chi-Square test is 5.812[a] and significant value is 0.668. As the significant value is >0.05, we accept Null hypothesis and reject alternative hypothesis. Thus, gender wise, respondents believe that there is no significant relation between making an online transaction and been exposed to cyber-fraud [10].

- **H_{05}:** Gender wise, there is no significant difference in age of customer and maintaining secrecy in bank account.
- **H_{50}:** Gender wise, there is significant difference in age of customer and maintaining secrecy in bank account.

Table 4. 2nd Chi-Square Tests.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.812[a]	8	.668
Likelihood Ratio	5.777	8	.672
Linear-by-Linear Association	.179	1	.673
No. of Valid Cases	98		

Interpretation of 3rd Chi-Square Test

Based on the data as per Table 5, we can conclude that the value of Chi-Square test is 1.461[a] and significant value is 0.691. As the significant value is >0.05, we accept Null hypothesis and reject alternative hypothesis. Thus, gender wise, respondents do not feel that maintaining secrecy in banks does not differ based on age factor.

Table 5. 3rd Chi-Square Tests.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.461[a]	3	.691
Likelihood Ratio	1.733	3	.630
Linear-by-Linear Association	.152	1	.697
No. of Valid Cases	98		

Findings

On the basis of above analysis, based on primary data obtained from 100 respondents it is observed that:

- *Gender:* Analysis showed 61% of the respondents were females and only 39% were males.
- *Age:* The highest number of respondents (49%) belonged to the age group of 20–35 years and the least respondents (2%) belonged to the age group of 50–60 years.
- *Income:* The analysis of the data shows that majority of respondents were 25–50 K salary bracket.
- *Service quality:* A good majority of respondents (around 52%) were satisfied with the overall services of banks. This includes 58% female and only 42% males.
- 64% of the total respondents have stated that they were satisfied with number of services offered by banking institutions.
- 88% of the total respondents have stated that they are receiving SMS alerts from banks.
- Majority of the respondents (around 49.3%) said that there is ease of access and usefulness of Online Banking Services.
- Majority of respondents have stated that they feel safe while withdrawing bulk amount and there is adequate bank staff to meet their requirements.
- 94.7% respondents believe that bank is maintaining secrecy of their accounts.
- Majority of respondents stated that banks are essential need for them and 82.7% stated that there is proper surveillance/Security arrangement in Digital Banking.

- 82.7% respondents have experienced data theft issues and 2% respondents has become a victim of cybercrime.
- Only 20% of respondents are completely aware about cybercrime.

CONCLUSION

This study presented an understanding about concept of privacy and security issues and customers' awareness on cybercrimes. Based on the study, we can conclude that the Indian customers, irrespective of their gender, have a high-level trust and belief in their respective bank, and in general, in the Indian Banking System. In spite of the rising cases of cybercrimes, still most of the respondents believe that they are not at the risk of any cyber fraud. This may be due to complete trust or may be due to lack of the knowledge of possible crimes and frauds. As an institute of public interest, the banks should take initiative on them to educate the customers in the usage of digital banking and the precautions that need to be taken. The banks should also try and design their online line banking platforms with highest level of security. The banks also need to understand that it is not only about the safety of the customers' money but also their personal information which is more valuable in today's times where it is believed that *"Data is the New Oil"*.

REFERENCES

1. Navjeet Kaur. A Survey on Online Banking System Attacks and its Countermeasures. International Journal of Computer Science and Network Security (IJCSNS). 2015; 15(3): 57–61.
2. More Manisha M, Jadhav Meenakshi P, Nalawade KM. Online Banking and Cyber Attacks: The current Scenario. Int J Adv Res Comput Sci Softw Eng. 2015; 5(12): 743–749. ISSN: 2277 128X
3. Broderick AJ, Vachirapornpuk S. Service quality in Internet banking: the importance of customer role. Mark Intell Plan. 2002; 20(6): 327–335.
4. *Giovambattista Scuticchio Foderaro* (2020) Digital Transformation and its impact on Finance and the Banking System. [Online]. Forbes. Available from: https://www.forbes.com/sites/forbesbusinesscouncil/2020/10/15/digital-transformation-and-its-impact-on-finance-and-the-banking-system/?sh=536491e1424f
5. Jain V, Sharma MP, Kumar A, Kansal A. Digital Banking: A Case Study of India. Solid State Technol. 2020 Dec 30; 63(6): 19980–8.
6. Zahoor Z, Ud-din M, Sunami K. Challenges in privacy and security in banking sector and related countermeasures. Int J Comput Appl. 2016 Jun; 144(3): 24–5.
7. Subashini R, Velmurugan Gopalasamy. A review of service quality and customer satisfaction in banking services: Global scenario. J Internet Bank Commer. 2016 Sep 16; 21(S5).
8. Bamoriya Prerna Sharma, Singh P. Issues & Challenges in Mobile Banking in India: A Customers' Perspective. Res J Finance Account. 2011; 2(2). Retrieved from http://iiste.org/Journals/index.php/RJFA/article/view/189/73
9. Gopalakrishna G. (2011 Jan). Report of the Working Group on information security, electronic banking, technology risk management, and tackling cyber frauds. Mumbai, Maharashtra: RBI. [Online]. Reserve Bank of India. Available from: https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/WREB210111.pdf
10. Maria Korolov. (2015 Jun 23). Banks get attacked four times more than other industries. [Online]. Computerworld. Available from: https://www.computerworld.com/article/2939494/report-banks-get-attacked-four-times-more-than-other-industries.html

