

<https://doi.org/10.33472/AFJBS.6.6.2024.1-10>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

A Comparative Study of Customer Perception Changes In Mobile Banking: Pre-COVID vs. Post-COVID in Chennai: A Psychological Perspective

Dr. S. Purushothaman¹, Aravinth A², Abirami.M³, Balaji J⁴, Lekha K⁵, Rebekah Beryl Sugirtha J⁶, Priyadharshini.S⁷

¹Assistant Professor, Department of Management Studies, Easwari Engineering College, Chennai

²IInd year, Department of Management Studies, Easwari Engineering College, Chennai.

Article Info

Volume 6, Issue 6, June 2024

Received: 05 April 2024

Accepted: 10 May 2024

Published: 06 June 2024

doi: 10.33472/AFJBS.6.6.2024.2266-227

ABSTRACT:

The COVID-19 pandemic has had a substantial influence on daily life, the global economy, and the financial industry in particular. Lockdown measures implemented to stop the disease's spread have also had an impact. The reasons influencing the uptake of mobile banking, particularly during and after the COVID-19 pandemic, have been well studied. Additionally, the study will look at how much these internet purchases have aided during the Covid-19 pandemic. Thus the aim of the current research is to identify the change in perception of customers in usage of mobile banking in India during Pre – COVID and Post – COVID. For this study a total of 200 respondents at Chennai city were surveyed using electronic questionnaire. This study is based on quantitative analysis using primary data. The Wilcoxon signed rank test correlation analysis has been used for analysis. This research is to identify that the awareness on mobile banking is increasing or decreasing and their adaptive behavior to use mobile banking.

Keywords: Banking, COVID, Mobile banking, pandemic.

© 2024 Zahraa Abbas A. Al-Abrihemy, This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made

1. Introduction

An overview of the subject and the importance of examining how Indian consumers' perceptions of mobile banking have changed both before and after the COVID-19 pandemic should be covered in the introduction section. A quick overview of the pandemic's effects on many facets of life, such as the financial sector, and how they have sped up the uptake of mobile banking could be included. It might also address how crucial it is to comprehend consumer perceptions in order to modify banking services to satisfy changing demands.

Objectives

- 1.To examine how mobile banking affected consumers' perceptions in Pre-COVID and Post-COVID.
- 2.To evaluate the degree of customer satisfaction in using mobile banking services.
3. To comprehend how consumers have adapt to the changes in banking lifestyle brought by the pandemic of their usage of mobile banking based on their gender.

Need For Study

- 1.The necessity of the study section goes into more detail about the significance of this investigation and the knowledge gaps it seeks to fill. Important topics to be discussed more frequently in usage of mobile devices for financial transactions and the quick development of digital banking technologies.
- 2.The COVID-19 pandemic has prompted significant shifts in consumer behaviour, with more people relying on digital channels for financial transactions due to lockdowns, social distancing measures, and safety concerns. Understanding how these behaviours have changed can provide insights into the future of mobile banking usage.
- 3.Analysing changes in consumer perception can highlight whether mobile banking has become more inclusive post-COVID that need to be addressed to ensure equitable access to digital financial services.
- 4.Studying consumer perception can reveal how concerns about health and safety have influenced attitudes towards mobile banking security and privacy.

Limitations of the Study

The limitations of this study has been mentioned as follows:

- The study's sample may not represent the entire population due to limitations in sampling methods or accessibility to certain demographic groups. For instance, individuals without access to mobile devices or the internet may be underrepresented.
- Participants may have difficulty accurately recalling their perceptions and behaviours before and after the COVID-19 pandemic, leading to inaccuracies in the data collected.
- Findings from the study may not be applicable to all regions or countries due to cultural, economic, or technological differences in mobile banking adoption and usage patterns.
- External factors beyond the scope of the study, such as changes in mobile banking technology or economic conditions, may impact customer perceptions independently of the COVID-19 pandemic.
- The survey questions used to measure customer perceptions may lack sufficient depth or specificity, potentially overlooking nuanced attitudes and behaviors towards mobile banking.
- The timing of data collection relative to the progression of the pandemic and associated events may influence participants' perceptions differently, potentially leading to variations in responses based on when they were surveyed.

2. Literature Review

Driven by growing connectivity and technological advancements, the digitization of the banking sector has been a major global trend. Through the use of digital technologies, this transformation seeks to offer clients banking services that are quicker, more effective, and easier to access. Banks have completely changed how customers interact with them and receive services thanks to the introduction of online and mobile banking, e-payments, virtual assistance, and cutting-edge technologies like block chain and artificial intelligence. (Claudia Gabriela BAICU, The impact of COVID-19 on consumer behaviour in retail banking. Evidence from Romania, 2019, Vol. 15, No. Special Issue, pp. 534-556, ISSN 2069–8887.)

The banking sector was already going through a digital revolution before the COVID-19 pandemic to satisfy the changing demands and expectations of clients. This move to digital solutions was made with the intention of improving accessibility and giving customers individualized experiences. On the other hand, the pandemic served as a driving force behind the global uptake of digital banking services. (Syrine Ben Romdhane, 2021, impact of information technology and Digitalization on banking strategy pre-covid-19, challenges in the COVID era and post-COVID Stakes, vol. 6, no. 2; 2021Issn 2576-1285 e-ISSN 2576-1293).

Prior to the pandemic, research was carried out to better understand people's attitudes and perspectives regarding the digital transformation of the banking industry. These studies were carried out both personally and by organizations such as The Romanian Institute for Evaluation and Strategies. These studies aimed to monitor people's perceptions and reactions to new banking technologies, offering insights into the use and perception of digital banking applications.

The COVID-19 pandemic has had a significant impact on consumer behaviour and attitudes towards digital banking in Romania, as it has in many other countries. The pandemic's social distancing and lockdown measures made people more dependent on digital channels for their banking needs. During the pandemic, research was done to determine how psychological distress caused by COVID-19 affected the uptake of e-mobile banking in developing nations Vietnam, for example. The Technology Acceptance Model (TAM) and other models were used in these studies to analyse the variables influencing people's intentions to use e-mobile banking services. (Dr. Varsha Agarwal, A Study on Growth of Mobile Banking in India During COVID-19 Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(6), ISSN 1567-214x,2020).

Particularly mobile banking has experienced rapid expansion, providing users with cutting-edge methods to conveniently complete a variety of financial transactions from their mobile devices. Major Banks introduction of mobile banking apps and encouragement from state institutions like the Reserve Bank of India (RBI) and the Government of India (GOI) have further spurred this expansion. Mobile banking became an essential tool for ensuring financial transactions while following social distancing norms during the COVID-19 pandemic. (Do Hoai Linh, 2023, Does Covid-19 Psychological Distress Impact on E-Mobile Banking Adoption in Emerging Countries in the Post Covid-19 Era ISSN: 2197-5523). In addition, the digitization of financial services brings up theoretical issues regarding the composition and operation of the banking sector, particularly in light of crises such as the COVID-19 pandemic. Research has indicated that in order for banks to effectively manage crises and reduce risks, they must combine physical proximity with digital offerings. The ability to digitally transform banks to promote strategic planning and innovation in order to adjust to changing conditions and prevent future crises. (Abhishek Kumar Gupta, 2021, Perceptual Study of Customers on the Service Quality of Banks in Bihar during Pre and Post COVID Era, ISSN: 0011-93426)

Research carried out in Romania during the pandemic provided insight into retail banking customer behaviour as well as the uptake of online and mobile banking services. These studies' findings indicate that the pandemic has affected consumers' perceptions of digital banking, which has ramifications for banks in terms of bettering client communication, financial education, and the creation of new goods and services to satisfy changing customer demands. In conclusion, research shows that the COVID-19 pandemic has had a major influence on customer behaviour in the banking industry, especially in terms of encouraging the use of digital banking services. Comprehending the evolving attitudes and actions of consumers regarding digital banking is imperative for banks to proficiently modify their approaches and products in the aftermath of the pandemic. (Alina Elena ionaşcu, digital transformation in the banking sector: a pre- and post- covid-19 analysis, 2023).

3. Research Design:

1. Wilcoxon Research Design:

There are two variants of the signed-rank test. From a theoretical point of view, the one-sample test is more fundamental because the paired sample test is performed by converting the data to the situation of the one-sample test. However, most practical applications of the signed-rank test arise from paired data.

2. Correlational Research Design:

Correlational research uses statistical data to determine the strength of a relationship between two or more variables. This design seeks and interprets relationships between and among a number of facts. This type of research will identify trends and patterns in data but will not prove the causes of these observed patterns.

Target Population:

The target population for this study comprises respondents within the age of 18 years to 60 years and above, ensuring representation across a wide range of demographic segments, including young adults, middle-aged individuals, and seniors. This age range was selected to encompass a diverse spectrum of mobile banking users, capturing both digital natives who are typically more adept at technology adoption and older individuals who may have varying levels of familiarity with digital financial services. By including participants from different age groups, this study aims to explore the perspectives and experiences of mobile banking users across various life stages. Gender distribution included male, female, and those who preferred not to disclose. Education level varied, spanning from high school diplomas to master's degrees or higher, with employment status ranging from full-time employment to unemployment, student status, or retirement and Household income. Geographic location categorized participants as urban, suburban, or rural residents. This comprehensive socio-demographic data collection aimed to capture the diverse perspectives and experiences shaping customer perceptions of mobile banking across various demographic segments.

Tools Used for Data Collection

The tool used for the research study is **Questionnaire**. Questionnaire is list of a research or survey questions asked to respondents and designed to extract specific information. The descriptive statistics are compared with SPSS. The different statistical tools used for the present study includes the following:

1. Wilcoxon signed rank t test
2. Correlation

Hypothesis and Data Analysis:**1. Wilcoxon Signed Rank T Test**

H0: There is no significance difference between the customer satisfaction of using mobile banking PRE-COVID and POST-COVID.

H1: There is a significance difference between the customer satisfaction of using mobile banking PRE-COVID and POST-COVID.

Descriptive Statistics				
	N	Percentiles		
		25 th	50th (Median)	75 th
PRECOVID	200	2.0000	2.0000	3.0000
POSTCOVID	200	4.0000	4.0000	5.0000

Wilcoxon Signed Ranks Test

Ranks				
		N	Mean Rank	Sum of Ranks
POSTCOVID – PRECOVID	Negative Ranks	6 ^a	39.00	234.00
	Positive Ranks	171 ^b	90.75	15519.00
	Ties	23 ^c		
	Total	200		
a. POSTCOVID < PRECOVID				
b. POSTCOVID > PRECOVID				
c. POSTCOVID = PRECOVID				

Test Statistics	
	POSTCOVID – PRECOVID
Z	-11.328 ^b
Asymp. Sig. (2-tailed)	<.001
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Inference

From the above table, it is observed that the Wilcoxon Signed Rank Test value (r) is -11.328. Since the r value is negative there is a negative relationship between the satisfaction of using mobile banking PRE-COVID and POST-COVID. . And the Sig. (2-tailed) value (p) is 0.001 which is greater than 0.05 i.e. $0.001 < 0.05$ and hence, we reject the Null Hypothesis (H0) and accept the Alternate Hypothesis (H1). And hence, there is a significance difference between the customer satisfaction of using mobile banking PRE-COVID and POST-COVID.

2. Correlation Analysis

H0: There is no significant difference in the bank account and mobile banking POST-COVID

H1: There is a significant difference in the bank account and mobile banking POST-COVID

Correlations			
		BANKACCOUNT	MOBILEBANKING
BANKACCOUNT	Pearson Correlation	1	.031
	Sig. (2-tailed)		.665

	N	200	200
MOBILEBANKING	Pearson Correlation	.031	1
	Sig. (2-tailed)	.665	
	N	200	200

Inference:

From the above table, it is observed that the Pearson Correlation value (r) is 0.031. Since the r value is positive there is a positive relationship between the bank account and mobile banking. And the Sig. (2-tailed) value (p) is 0.665 which is greater than 0.05 i.e. $0.665 > 0.05$ and hence, we accept the Null Hypothesis (H_0) and reject the Alternate Hypothesis (H_1). And hence, there is no significant difference between the bank account and mobile banking.

Findings:

1. From the Wilcoxon Signed Rank Test it is found that there exists a negative relationship exists between Pre-COVID and Post-COVID in customer satisfaction.
2. From Pearson correlation it is found that there exists a positive relationship between the bank account and mobile banking.

It is been concluded that the perception of customer in mobile banking has been increased in POST-COVID as it is considered as the safe and secured mode of financial transaction and it has reached more customers during quarantine.

Suggestions

1. Prioritize the development of strong security features including biometric authentication, multi-factor authentication, and real-time transaction monitoring due to the increase in cyber risks during the pandemic.
2. Maintain the security, usability, and current ness of the mobile banking app by regularly updating and improving it in response to user input, technical developments, and modifications in regulatory requirements.
3. Give consumers the ability to track spending, set savings targets, and get individualized financial advice based on their spending patterns and financial objectives using the mobile app's features.
4. The mobile banking app can include a variety of customer service channels, such as live chat and Chabot's, to help users with any problems or questions they might have immediately.

5. Conclusion

India's banking system has undergone a total change thanks to mobile banking. When mobile banking was first introduced in the early 21st century, its activities were restricted. However, as information and technology advanced over time, mobile banking began to take on new significance in the banking infrastructure. Customers have found that mobile banking is successful in meeting their demands with little downsides and has increased customer satisfaction. The foundation for the development of mobile banking services in India has been established by elements such the growing number of smartphone and internet users, accessibility ease, convenience, and security in completing digital transactions.

People's fears have also been heightened by the pandemic because of the widespread belief that the cash notes carry the fatal virus. This made it more difficult for the average person to complete. In times like COVID-19, mobile banking has been extremely beneficial since it has

been effective in supporting social distancing policies and offering its clients round-the-clock banking services. Following demonetization, COVID-19 is the second factor that has accelerated the movement of banking clients from traditional, physical banking to digital platforms like mobile wallets and banking apps.

According to the study, there was an increase in the number of persons using mobile banking. There has been a noticeable increase in the number of transactions through mobile wallets. The Indian financial system is now ready to carry on with COVID-19 through mobile banking services.

6. Reference

1. Kavitha Muthukumaran, Vani Haridasan, (2022), Lifestyle and Behavior of Children During COVID-19, ECS Transactions, Volume 107 (1) pp. 8727.
2. Claudia Gabriela BAICU, The impact of COVID-19 on consumer behaviour in retail banking. Evidence from Romania, 2019, Vol. 15, No. Special Issue, pp. 534-556, ISSN 2069–8887.
3. Syrine Ben Romdhane, 2021, impact of information technology and Digitalization on banking strategy pre-covid-19, challenges in the COVID era and post-COVID Stakes, vol. 6, no. 2; 2021Issn 2576-1285 e-issn 2576-1293.
4. Haridasan, V., & Muthukumaran, K. (2021). Work–life balance of women working from home during lockdown – An empirical study. *International Journal of Management*, 13. <https://doi.org/10.34218/IJM.12.1.2021.042>
5. Dr. Varsha Agarwal, A Study on Growth of Mobile Banking in India During COVID-19 Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(6), ISSN 1567-214x,2020
6. K. Muthukumaran and K. Hariharanath, "Deep learning enabled financial crisis prediction model for small-medium sized industries," *Intelligent Automation & Soft Computing*, vol. 35, no.1, pp. 521–536, 2023. DOI: <https://doi.org/10.32604/iasc.2023.025968>
7. Do Hoai Linh, 2023, Does Covid-19 Psychological Distress Impact on E-Mobile Banking Adoption In Emerging Countries In The Post Covid-19 Era ISSN: 2197-5523.
8. Kavitha Muthukumaran, Vani Haridasan, (2018) Impact of Service Quality on Service Loyalty in Strengthening Customer Relationship in Telecom Services, *International Journal of Mechanical Engineering and Technology (IJMET)*, Volume 9 Issue 4 pp. 606-616.
9. Dr. Saikumari.V, “Training and organizational performance: the mediating role of e-learning in information technology industry – an empirical study”, the online journal of distance education and e-learning, july 2018 volume 6, issue 3
10. Abhishek Kumar Gupta, 2021, Perceptual Study of Customers on the Service Quality of Banks in Bihar during Pre and Post COVID Era, ISSN: 0011-93426
11. Alina Elena ionaşcu, digital transformation in the banking sector: a pre- and post- covid-19 analysis, 2023, issn 2067- 2462.
12. Dr. Saikumari. V, Deepadharshini. B, Haritha. V, Hema Varna. J, Harikrishnan. V. “A study on user interface design in E-commerce and its impact on consumer trust, Chennai”, *Industrial Engineering Journal*, ISSN 0970-2555, Vol 15, Issue 1, Oct 2022.
13. Kathiravan, M., V. Saikumari, and V. Sunitha. 2017. Convergence in Effective Performance Appraisal System Technique: Foster Employee Involvement and Organizational Commitment, Evidence from Indian SMEs. *Asian Journal of Research in Banking and Finance* 7: 87–110.
14. Muthukumaran, K., Haridasan, V., Mahalingam, B., Hariharanath, K., & Yuvaraj, D. (2024). Investigating The Aftermath: Factors Shaping the Well-Being Of Adolescent

- Girls And Young Women In The Wake Of The Pandemic. Migration Letters, 21(S3), 1511–1523. Retrieved from <https://migrationletters.com/index.php/ml/article/view/7605>
15. Dr. Saikumari V, (2023), A STUDY ON WORK LIFE BALANCE AND BUSINESS DEVELOPMENT STRATEGY: A HIGH GROWTH APPROACH IN THE CORPORATE WORLD, European Chemical Bulletin, 12(2).
 16. Dr.S Purushothaman, G Priyadharshini, M Hemavathi, J Gowrishankar “A Study on Customer Satisfaction towards E-Banking Services Offered by State Bank of India”, Annals of the Romanian Society for Cell Biology.