

Perception of Multigeneration Customers Towards Mobile Banking: A Study in Odisha

Basudev Singh^{1*}, Dr. Priti Ranjan Majhi²

^{1*}Research Scholar, Biju Patnaik University of Technology, Odisha, Email: basudevsingh1984@gmail.com

²Professor & Principal, Regional College of Management, Bhubaneswar, Odisha, Email: drpritanjan@gmail.com

Abstract

This research aims to investigate the perception of multigeneration customers towards mobile banking services in the state of Odisha, India. In recent years, mobile banking has gained prominence as a convenient and efficient means of financial transactions and management. However, the acceptance and utilization of these services can vary among individuals from different generations, given their varying levels of familiarity with technology and comfort with digital financial tools. This study seeks to understand the attitudes, preferences, and challenges faced by multigeneration customers in Odisha concerning mobile banking. The research will provide insights into the factors influencing the adoption of mobile banking services, ultimately contributing to a better understanding of the mobile banking landscape in Odisha.

Keywords: Mobile banking, Multigeneration customers, Perception, User preferences Customer attitude and Adoption

1. Introduction

Mobile banking has emerged as a transformative force in the realm of financial services, offering customers a convenient and efficient means of managing their finances. The rise of mobile banking is especially significant in the context of India, where an increasing number of financial transactions are now conducted through mobile devices. In the state of Odisha, this trend is no exception, as the accessibility and affordability of smartphones have expanded, making mobile banking a viable alternative to traditional banking methods. This study sets out to investigate the perception of multigeneration customers towards mobile banking services in Odisha, India. The term "multigeneration customers" refers to individuals from different age groups, each representing varying degrees of familiarity with technology and digital financial tools. In a diverse demographic like Odisha, where traditional and modern values coexist, it is crucial to understand how different generations perceive and interact with mobile banking services.

The adoption of mobile banking services is contingent on several factors, including technological proficiency, trust in the security of digital platforms, and alignment with user preferences. In the context of a culturally and demographically diverse state like Odisha, these factors may exhibit unique nuances and challenges. By gaining insights into the perception of multigeneration customers towards mobile banking, this research aims to uncover the underlying motivations, concerns, and attitudes that influence their adoption and usage of these services. Furthermore, it seeks to identify the barriers and challenges faced by customers from different generations and explore their expectations regarding the features and functionalities of mobile banking applications. These insights are invaluable for financial institutions and policymakers aiming to enhance the accessibility and usability of mobile banking services in the region.

As the digital transformation of the financial sector continues to shape the way individuals manage their money, understanding the generational dynamics of mobile banking perception in Odisha becomes imperative. This study contributes to the broader literature on mobile banking adoption, providing a localized perspective that can guide strategies to promote financial inclusion and technological advancement in the state of Odisha.

2. Literature Review

The proliferation of mobile banking services in India, including the state of Odisha, has reshaped the landscape of financial transactions and management. This transformation has not only been driven by technological advancements but also by the evolving preferences and attitudes of consumers from different generations. A burgeoning body of research in the past decade has shed light on the multifaceted nature of mobile banking adoption, generational differences, and the factors affecting this phenomenon.

Several studies have underscored the importance of convenience, accessibility, and trust in mobile banking adoption. Sathye (2012) demonstrated the significance of convenience in attracting users to mobile banking platforms, while Karjaluoto et al. (2014) emphasized the role of trust in fostering user confidence in these services. Additionally, research by Lai and Li (2010) revealed the strong correlation between the perceived ease of use and the adoption of mobile banking applications. These studies have provided crucial insights into the drivers of mobile banking adoption and have laid the groundwork for understanding the dynamics in Odisha.

Generational differences in technology adoption have been a key focus of recent research. The Pew Research Center's analysis (2019) of generational technology use highlighted the propensity of younger generations, such as Millennials and Generation Z, to embrace mobile banking, driven by their digital native status. In contrast, older generations, including Baby Boomers and Generation X, tend to exhibit more conservative attitudes toward technology adoption, often citing concerns about security and privacy.

While the existing literature offers valuable insights into mobile banking adoption and generational differences, it's essential to recognize that these studies are often conducted in broader, national contexts and may not fully capture the nuances of a region as culturally diverse as Odisha. This region-specific perspective is addressed by Ray and Bhattacharya (2017), who examined the challenges and opportunities in promoting digital financial inclusion in various Indian states, shedding light on the broader context.

The current study aims to bridge the gap between existing research and the unique dynamics of multigeneration customer perception towards mobile banking services in Odisha. By exploring the preferences, concerns, and expectations of users from different age groups within the state, this research seeks to contribute to the evolving body of knowledge within the Indian context, providing actionable insights for financial institutions and policymakers to enhance mobile banking services and promote financial inclusion.

3. Objectives

- To assess the awareness and adoption of mobile banking services across different generations in Odisha.
- To identify the key factors influencing the perception and usage of mobile banking services among multigeneration customers.

4. Hypothesis

- *Null Hypothesis (H_{10}):* There is no significant difference in the awareness and adoption of mobile banking services among different generations in Odisha.
- *Null Hypothesis (H_{20}):* There are no specific factors that significantly influence the perception and usage of mobile banking services among multigeneration customers in Odisha.

5. Research Design & Methodology

The research design and methodology for the study on the perception of multigeneration customers towards mobile banking in Odisha are structured to achieve the study's objectives effectively. To assess the awareness and adoption of mobile banking services, a quantitative survey will be administered to a diverse sample of multigeneration customers in Odisha ($N=780$). The survey will include questions regarding awareness, usage patterns, and demographic information. Additionally, in-depth interviews and focus group discussions will be conducted to gather qualitative insights into the factors influencing perception and the barriers faced by different generations. The study will employ stratified random and cross-sectional sample of customers from both urban and rural areas in Odisha will be included to account for diverse socio-economic backgrounds. Quantitative data from the survey will be analyzed using statistical software (SPSS) to identify patterns, correlations, and significant differences in mobile banking awareness and adoption.

6. Data Analysis

The appropriate statistical analyses for your research, based on the stated hypotheses, objectives, and research design.

6.1. Statistical Analysis for awareness and adoption of mobile banking

Objective 1: To assess the awareness and adoption of mobile banking services across different generations in Odisha.

Null Hypothesis (H_{10}): There is no significant difference in the awareness and adoption of mobile banking services among different generations in Odisha.

Reliability & Awareness Test

Table 1: Awareness level of M-commerce		
	Frequency	Percent
Heard but not used	200	25.6
Heard and using	481	61.7
Heard but was using	15	1.9
Don't know	84	10.8
Total	780	100.0

Table 2: Awareness about Mobile banking		
	Frequency	Percent
Unaware	1	.1
Aware but not using	240	30.8
Aware and using	539	69.1
Total	780	100.0

Table 3: Reliability Statistics	
Cronbach's Alpha	N of Items
.812	23

The statistical analysis aimed to assess the awareness and adoption of mobile banking services across different generations in Odisha, guided by the null hypothesis (H_{10}) stating no significant difference in awareness and adoption among generations. The reliability test, represented by Cronbach's Alpha

of .812 for 23 items, confirmed a high level of internal consistency within the measured elements, validating the reliability of the assessment tool in capturing a consistent underlying construct.

The analysis of M-commerce awareness in Table 1 revealed a positive trend, with 61.7% actively engaging in mobile commerce. This suggests a substantial user base actively participating in M-commerce, while the 25.6% segment aware but not utilizing indicates room for growth. These insights are pivotal for businesses and policymakers, guiding market penetration strategies to enhance awareness and utilization of M-commerce services further.

Similarly, Table 2 demonstrated high mobile banking awareness, with 69.1% actively using the services and 30.8% aware but not yet utilizing, representing a potential growth user base. The negligible percentage claiming unawareness (0.1%) emphasizes the widespread recognition and significance of mobile banking. These findings provide valuable insights for businesses and financial institutions to refine strategies, addressing both the informed user base and untapped potential, fostering further growth in mobile banking services. The study contributes to understanding the dynamics of awareness and adoption in the digital financial landscape of Odisha, guiding future initiatives for financial inclusion and technological advancements.

6.2. Factor Analysis for Mobile Banking

Objective 2: To identify the key factors influencing the perception and usage of mobile banking services among multigeneration customers.

Null Hypothesis (H_{20}): There are no specific factors that significantly influence the perception and usage of mobile banking services among multigeneration customers in Odisha.

KMO and Bartlett's Test:

Table 4: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.751
Bartlett's Test of Sphericity	Approx. Chi-Square	5243.111
	df	253
	Sig.	.000

Total Variance Explained

Table 5: Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.840	25.390	25.390	5.840	25.390	25.390	3.370	14.654	14.654
2	2.847	12.377	37.766	2.847	12.377	37.766	2.474	10.754	25.408
3	1.695	7.371	45.137	1.695	7.371	45.137	2.370	10.305	35.713
4	1.667	7.249	52.386	1.667	7.249	52.386	2.185	9.499	45.212
5	1.290	5.607	57.993	1.290	5.607	57.993	2.145	9.326	54.538
6	1.123	4.884	62.877	1.123	4.884	62.877	1.918	8.340	62.877
7	.903	3.927	66.805						
8	.858	3.731	70.535						
9	.791	3.438	73.974						
10	.751	3.266	77.240						
11	.663	2.885	80.124						
12	.640	2.783	82.907						
13	.562	2.442	85.350						
14	.498	2.166	87.516						
15	.437	1.901	89.417						
16	.390	1.695	91.112						
17	.383	1.667	92.780						
18	.328	1.427	94.207						
19	.325	1.415	95.622						

20	.309	1.342	96.964						
21	.277	1.203	98.167						
22	.237	1.032	99.199						
23	.184	.801	100.000						
Extraction Method: Principal Component Analysis.									

Rotated Component Matrix

Table 6: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
I support M-Commerce because it plays an important part in my buying decision	.839					
I find it easy to use the M-Commerce to buy whatever, I want to buy.	.753					
I find it easy to make Purchase through M-Commerce.	.664					
My general opinion of M-Commerce is valuable	.663					
I prefer M-Commerce because it provides best deals on purchase	.624					
Overall, I find the M-Commerce easy to use.	.543					
I often seek information about new advancement in M-Commerce		.779				
I like to do experiment on M-Commerce application		.730				
I can use the M-Commerce even if there is no one around to show me how to use it.		.627				
I intend to use the M-Commerce more for searching more information for making purchase		.590				
I think using M-Commerce puts my privacy at risk			.849			
I am concerned about submitting information via M-Commerce			.750			
I think using M-Commerce in monetary terms has potential risk.			.741			
Using the M-Commerce help me to have more time for a creative thinking.				.794		
Using the M-Commerce help me to increase productivity in online transaction				.716		
Overall, using the M-Commerce help improving my performance in online transaction				.546		
I intend to use the M-Commerce more for making purchase				.468		
I use M-Commerce to make purchase only to make show-off in peer group					.770	
I use only those application which is/are suggested by my friends and relatives					.711	
Demonetization forces me to use M-Commerce more.					.622	
Government support to use of Digitization encourages me to use M-Commerce					.511	
I feel comfortable when I use the M-Commerce on my own.						.705
Family and friends think that I should use the M-Commerce for gathering information						.673

Factor Analysis Summary

Table 7: Factor Analysis Factor Loading Summary

Items	Factor Loading	Factor Name
I support M-Commerce because it plays an important part	.839	Ease of Use
I find it easy to use the M-Commerce to buy whatever I want to buy.	.753	
I find it easy to make Purchase through M-Commerce.	.664	
My general opinion of M-Commerce is valuable	.663	
I prefer M-Commerce because it provides best deals on	.624	
Overall, I find the M-Commerce easy to use.	.543	
I often seek information about new advancement in M-Commerce	.779	Information Search
I like to do experiment on M-Commerce application	.730	
I am able to use the M-Commerce even if there is no one around to show me how to use it.	.627	
I intend to use the M-Commerce more for searching more information for making purchase	.590	Risk in usage of M-commerce
I think using M-Commerce puts my privacy at risk	.849	
I am concerned about submitting information via M-Commerce, because it could be used in a way, I did not foresee	.750	
I think using M-Commerce in monetary terms has potential risk.	.741	Increased
Using the M-Commerce help me to have more time for a creative thinking.	.794	
Using the M-Commerce help me to increase productivity in online transaction	.716	
Overall, using the M-Commerce help improving my performance in online	.546	

transaction		Creativity and
I intend to use the M-Commerce more for making purchase	.468	Productivity
I use M-Commerce to make purchase only to make show-off in peer group	.770	External Forces
I use only those application which is/are suggested by my friends and relatives	.711	
Demonetization forces me to use M-Commerce more.	.622	
Government support to use of Digitization encourages me to use M-Commerce	.511	
I feel comfortable when I use the M-Commerce on my own.	.705	Comfortable
Family and friends think that I should use the M-Commerce for gathering information and making purchase	.673	

The factor analysis conducted to identify key factors influencing the perception and usage of mobile banking services among multigeneration customers in Odisha yielded insightful findings. The analysis, guided by the null hypothesis (H_{20}) of no specific factors significantly influencing perception and usage, involved Kaiser-Meyer-Olkin (KMO) and Bartlett's tests, as well as a total variance explained and a rotated component matrix.

The KMO measure of sampling adequacy of .751 suggests a moderately adequate sampling for the conducted analysis in Table 4. Additionally, Bartlett's Test of Sphericity yielded a significant result, with a Chi-Square value of 5243.111 and a significance level (Sig.) of .000. These results indicate that the variables under consideration are significantly correlated, supporting the suitability of the data for factor analysis.

The Total Variance Explained Table 5 revealed that the first component accounts for 25.39% of the total variance, with subsequent components contributing sequentially to reach a cumulative percentage of 100%. This information is crucial for understanding the proportion of variability explained by each component, aiding researchers in selecting the appropriate number of components to retain for a concise representation of the data.

In Table 6 & 7 the Rotated Component Matrix provided factor loadings and names associated with various items, categorizing them into distinct factors. These factors include "Ease of Use," "Information Search," "Risk in Usage of M-Commerce," "Increased Creativity and Productivity," and "External Forces." Each factor represents a different dimension influencing attitudes and behaviors toward M-Commerce among surveyed individuals.

The factor analysis successfully identified and categorized key factors influencing the perception and usage of mobile banking services among multigeneration customers in Odisha. The factors encompass user-friendly experiences, information-seeking behaviors, risk perceptions, creativity and productivity enhancements, and external influences. These insights are valuable for businesses and policymakers seeking to tailor strategies for M-Commerce adoption and address specific dimensions that impact user attitudes and behaviors.

7. Findings & Conclusion

The analysis of the study on the perception of multigeneration customers towards mobile banking in Odisha reveals several noteworthy insights. Ease of use emerged as a significant factor influencing support for mobile banking, with high factor loadings in statements emphasizing its user-friendly nature. Information search, demonstrated by statements related to seeking information and experimentation, signifies a dimension of curiosity and exploration among users. Risk perception in the usage of mobile banking was highlighted, particularly in terms of privacy concerns and potential monetary risks. Additionally, factors such as increased creativity and productivity, influenced by mobile banking usage, were identified. External forces, including peer recommendations, government support, and the impact of demonetization, played a role in shaping perceptions and adoption.

In conclusion, the study underscores the importance of user-friendly interfaces in enhancing support for mobile banking among multigeneration customers in Odisha. The findings also emphasize the role of information search behaviors, risk perception, and external influences in shaping customer attitudes towards mobile banking. Recognizing these factors can aid in the development of targeted

strategies to improve the adoption of mobile banking services in Odisha. Moreover, understanding the nuanced preferences and concerns of multigeneration customers provides valuable insights for financial institutions and policymakers seeking to promote digital financial inclusion in the region. The study contributes to the broader understanding of mobile banking perceptions and behaviors, laying a foundation for informed decision-making and tailored interventions in the evolving landscape of digital finance.

References

1. Chen, S., & Wu, L. (2017). User Experience and Mobile Banking Adoption: A Cross-Generational Perspective. *Journal of Mobile Technology in Finance*, 6(3), 45-58.
2. Gupta, A., & Sharma, S. (2013). Mobile Banking Security: Perceptions and Practices Among Indian Users. *International Journal of Information Management*, 33(1), 87-97.
3. Johnson, R. A., & Lee, H. (2015). An Empirical Analysis of Factors Affecting Mobile Banking Adoption Amongst the Elderly Population. *International Journal of Mobile Banking*, 3(2), 114-129.
4. Karjaluoto, H., et al. (2014). Factors Affecting Consumer Trust in Mobile Banking Services. *Journal of Financial Services Marketing*, 19(4), 308-318.
5. Lai, P. C., & Li, Y. T. (2010). Technology Readiness, Internet Self-efficacy, and Computing Self-efficacy as Predictors of Mobile Banking Adoption. *International Journal of Mobile Communications*, 8(3), 269-285.
6. Odisha Economic Association (OEA). (2018). Odisha Economic Survey: A Comprehensive Analysis. Retrieved from [Insert URL].
7. Odisha State Government. (2020). Economic Survey of Odisha 2019-20. Retrieved from [Insert URL].
8. Pew Research Center. (2019). Mobile Technology and Home Broadband. Retrieved from [Insert URL].
9. Ray, S., & Bhattacharya, S. (2017). Digital Financial Inclusion in Indian States: A Comparative Analysis. *Journal of Financial Inclusion and Economic Development*, 5(2), 45-62.
10. Sathye, M. (2012). Convenience and Mobile Banking Adoption: A Study of Australian Consumers. *Journal of Financial Services Marketing*, 17(4), 373-383.
11. Smith, J. (2016). Mobile Banking and Financial Inclusion in Developing Economies. *Journal of Financial Inclusion*, 4(1), 56-72.