Impact of Mobile Banking on Customer Satisfaction: Study Based on Commercial Banks in Sri Lanka

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Abstract

Mobile banking has revolutionized the banking sector by offering convenience, accessibility, and efficiency. As digital banking services expand, customer satisfaction has become a crucial factor in determining the success of mobile banking platforms. The primary objective of this study is to examine the impact of mobile banking on customer satisfaction in commercial banks in Sri Lanka. Additionally, the study explores the relationship between key factors such as efficiency, ease of use, reliability, security, and privacy and their influence on customer satisfaction. This research focuses on licensed commercial banks (LCBs) in Sri Lanka, with a sample selected from customers of People's Bank, Hatton National Bank (HNB), and Amana Bank in the Kalmunai branch. A total of 390 mobile banking users participated in the study. Data was collected through a structured questionnaire and analyzed using the Statistical Package for Social Sciences (SPSS). Various statistical methods, including descriptive analysis, correlation analysis, and regression analysis, were employed to assess the relationships between the independent variables and customer satisfaction. The findings indicate that efficiency, reliability, and security have a significant positive impact on customer satisfaction, whereas ease of use and privacy do not show a significant influence. The study highlights the need for banks to enhance efficiency and reliability while addressing security concerns to improve customer satisfaction. Banks should focus on technological advancements, customer awareness, and personalized services to optimize mobile banking experiences. This study provides valuable insights for financial institutions to refine mobile banking strategies, improve service quality, and foster long-term customer trust and engagement in Sri Lanka's banking industry.

Keywords: Mobile Banking, Customer Satisfaction, Efficiency, Ease of Use, Reliability, Security and Privacy.

1. Introduction

The widespread adoption of technological advancements and the rapid expansion of the financial sector have transformed banking services in the 21st century. Technological advancements have revolutionized traditional banking by replacing manual ledgers with streamlined, systemized processes, resulting in greater efficiency, convenience, and time savings. Today, the widespread adoption of e-banking technology allows customers to conduct banking activities anytime and anywhere. E-banking provides a service that is both fast and dependable for users (Panthi, 2023).

Recent advancements in telecommunications have paved the way for innovative financial access methods, such as mobile banking, where customers can interact with their banks directly through their mobile phones (Barnes & Corbitt, 2003). As a growing segment of e-banking, mobile banking has become increasingly popular among clients due to its convenience. It allows users to access a wide range of banking and financial services via their mobile devices, including money transfers, savings accounts, insurance plans, bill payments, and payment receipts. Mobile banking leverages wireless communication technology to enhance the value and ease of financial transactions for customers (Taghavi Fard & Torabi, 2010). The Federal Reserve Bank (2015) defines mobile banking as the use of a mobile phone to access your bank or credit union account. This can be achieved through a variety of methods, such as visiting the institution's website using a mobile browser, sending text messages, or using a dedicated mobile banking application.

Mobile banking is viewed as a crucial driver of modern digital banking in Sri Lanka, significantly shaping customer satisfaction in the banking sector. This study focuses on understanding how mobile banking influences customer satisfaction by identifying the factors that encourage or discourage its adoption. Initially, mobile banking in Sri Lanka offered basic services, such as balance inquiries and fund transfers via SMS, during the early 2000s (Menikdiwela et al., 2022). Customers play a pivotal role in the success and sustainability of any organization, and the banking sector is no exception. Ensuring customer satisfaction is essential, as it not only enhances profitability but also improves overall performance for banks. In today's digital landscape, customer satisfaction has become a key indicator of a bank's success. With increasing competition, it is now regarded as the most critical aspect of banking services.

According to Perara and Gunaratna (2020), customer satisfaction refers to how a customer evaluates the difference between their initial expectations and the actual performance of a product or service after using it. Satisfaction is the feeling of pleasure or contentment that a person feels when the performance or outcome of a product matches or exceeds their expectations. Furthermore, actively measuring customer satisfaction and addressing dissatisfaction can help banks align their mobile banking services with evolving customer needs, ensuring tailored solutions for the future. Such efforts not only foster trust but also empower banks to achieve their goals in a rapidly advancing digital landscape (Jaride & Chama, 2021).

Mobile banking has emerged as a transformative solution in this context, offering unparalleled convenience, credibility, ease of use, and prompt service. It allows customers to perform banking transactions on mobile devices, such as smartphones and tablets, providing an entire banking experience at their fingertips. Mobile banking applications, a key component of financial technology (Fintech), have evolved beyond simple balance inquiries to become integral to the overall financial experience. They are now a critical factor for customers when choosing a bank, making mobile banking a cornerstone of modern customer satisfaction strategies. This study explores the impact of mobile banking on customer satisfaction: A study Based on Commercial Banks in Sri Lanka by examining the factors influencing customer satisfaction.

Problem Statement

Digital transformation has made smartphones an essential part of everyday life, creating new opportunities for banks in Sri Lanka to reconnect with customers and meet their growing demands (Nayanajith et al., 2022). Mobile banking has been available worldwide since the early 2000s, with European banks adopting the service as early as 1999, following the introduction of smartphones. In Sri Lanka, almost all commercial banks have implemented mobile banking services. These services offer a number of benefits, such as reducing transaction times and the need for physical branch visits. Building trust in mobile banking is challenging, largely due to concerns about the reliability and security of online services, which many consider to be risks that cannot be completely eliminated (Manel et al., 2022). When considering mobile banking services, customers prioritize concerns such as privacy, data security, and the reliability of mobile banking platforms, which significantly influence their decision to engage these services (Meniktivela et al., 2022; Kyei et al., 2023).

Many banks in Sri Lanka face challenges in expanding their mobile banking customer base (Nayanajith et al., 2022; Sulistiowathy et al., 2021). This highlights a significant gap in understanding the factors influencing customers' satisfaction with mobile banking. Furthermore, there is a dearth of academic research examining these influencing factors in light of recent technological advancements in the banking sector in Sri Lanka. This study aims to address these gaps by examining the impact of mobile banking on customers' satisfaction.

Research Questions

This study sets out to answer the following research questions.

- *Main Question:* What are the impacts of mobile banking on customer satisfaction in commercial banks in Sri Lanka?
- *Specific Question:* What is the relationship between the key factors such as efficiency, ease of use, reliability, security, privacy and customer satisfaction in mobile banking services in Sri Lanka?

Research Objectives

This study explores the following aspects.

- *Primary Objective:* To examine the impacts of mobile banking on customer satisfaction in commercial banks in Sri Lanka.
- *Secondary Objective:* To examine the relationship between the key factors such as efficiency, ease of use, reliability, security and privacy on customer satisfaction in mobile banking services in Sri Lanka.

2. Literature Review

Mobile banking's primary contribution to customer satisfaction lies in the convenience it provides. Several studies have shown that mobile banking significantly improves customer experiences by providing 24/7 services without the need for physical visits. This reduction in time and effort is a key driver of satisfaction, especially for tech-savvy customers who prefer digital banking over traditional methods. A study by Sheikh and Karjaluvoto (2022) emphasizes that the usability of mobile banking sites is characterized by intuitive interfaces, easy navigation and fast loading times plays a vital role in shaping customer satisfaction. Customers who perceive mobile banking as user-friendly tend to report higher satisfaction levels.

According to Kumar et al. (2024), the presence of advanced security features such as two-factor authentication, encryption, and biometrics (such as fingerprint or face recognition) help build trust in mobile banking platforms. Customers who feel safe using these services are more likely to continue using them and express satisfaction. In regions with high cyber security concerns, security issues become a major factor affecting customer satisfaction.

Panthi (2023) conducted a study on “Customer Satisfaction towards Mobile Banking Service Quality”. This study sought to find out the effects of mobile banking on customer satisfaction, the study adopted descriptive and causal-comparative research designs. According to the correlation analysis for this study, all service quality variables (assertiveness, reliability, assurance, empathy and responsiveness) and customer satisfaction are positively related. Among the variables carried out in this study, the regression result shows that responsiveness has a significant positive effect on determining customer satisfaction in Rubandehi district.

Fianto et al. (2021) conducted a study entitled “Mobile banking service quality and its impact on customer satisfaction of Indonesian Islamic banks”. This study examines the influential factors of Indonesian Islamic banks' mobile banking service quality dimensions (delight, security, ease, design and usability) towards customer satisfaction. This study shows that enjoyment, security, design and usability of Islamic mobile banks significantly influence customer satisfaction. It suggests that Islamic banks should pay more attention to increasing their mobile banking application systems, which is the most important factor affecting customer satisfaction.

Another study “Impact of Mobile Banking on Customers’ Satisfaction” Melto et al., (2021) was conducted on the basis of 111 samples collected through self-administered survey. It is concluded that perceived usefulness, ease, reliability and customer attitude have significant influence in determining customer satisfaction in banking industry. The study suggests that bank management should provide more value-added services in their mobile banking apps and design more user-friendly m-banking apps to improve customer experience.

Kahandawa and Wijayanayake (2014) conducted a study on "Impact of Mobile Banking Services on Customer Satisfaction: A Study on Sri Lankan State Commercial Bank. The results of the study revealed that customer satisfaction with mobile banking services is influenced by usefulness, ease, relative advantage, risk and perception of user lifestyle and current needs of customers. Yu (2012) observed that mobile banking adoption rates remain below expectations. The study concluded that individual intentions to adopt mobile banking in Taiwan are significantly influenced by social influence, perceived financial cost, performance expectancy, and perceived credibility, in that order of impact. The research also identified that individual intention and facilitating conditions notably affect behavior.

Khraim et al. (2011) conducted a survey on "Factors Affecting Jordanian Consumers' Adoption of Mobile Banking Services" to identify factors influencing the adoption of mobile banking services among Jordanian users. They found that self-efficacy, trial ability, compatibility, complexity, risk, and relative advantage significantly impact mobile banking adoption. Al-Smadi (2012) further emphasized that uncertainty avoidance positively and significantly affects perceived ease of use and perceived usefulness. Additionally, perceived risk has a substantial impact on customers' attitudes, which in turn influences their intention to use electronic banking services in Jordan. Nasri (2011) highlighted that the use of internet banking in Tunisia is primarily influenced by convenience, risk, security, and prior internet knowledge. Information about online banking did not significantly affect the intention to use internet banking services. The study also suggested that demographic factors, particularly occupation and education, significantly impact internet banking behavior. Understanding these factors is essential for practitioners involved in planning and promoting new banking services in a competitive market.

3. Hypothesis Development

Efficiency and customer satisfaction in mobile banking

Mobile banking services have significantly improved the efficiency of banking operations for users. Customers can conveniently access a wide range of services, such as checking account balances, reviewing transaction histories, and transferring funds. As highlighted in previous studies, mobile and electronic banking have been recognized to improve service efficiency and provide higher customer satisfaction compared to traditional banking methods (Zavareh et al., 2012). According to Dias and Dissanayake (2023) found in their study that there is a significant positive impact of efficiency on customers' satisfaction with mobile banking.

$H_{0:}$ There is no significant impact of efficiency on customer satisfaction in mobile banking.

$H_{1:}$ There is a significant positive impact of efficiency on customer satisfaction in mobile banking.

Ease of Use and customer satisfaction in mobile banking

The simplicity and ease of use of innovative products and services play a key role in influencing customer satisfaction. Features such as user-friendly navigation tools and intuitive domain names on websites contribute significantly to this ease of use (Sharma & Singh, 2013). Mobile banking, in particular, stands out for its simple processes, requiring no additional skills other than installing the application on the mobile device. When combined with technology, ease of use is an important factor in determining customer satisfaction. According to Fernando and Kumari (2022), found in their study that there is a significant positive impact of ease of use on customers' satisfaction with mobile banking.

$H_{0:}$ There is no significant impact of ease of use on customer satisfaction in mobile banking.

$H_{2:}$ There is a significant positive impact of ease of use on customer satisfaction in mobile banking.

Reliability and customer satisfaction in mobile banking

When banks deliver their services through mobile platforms with the same consistency and quality as physical branches, this is referred to as reliability. Reliability encompasses elements such as stability, dependability, and the bank's ability to keep its promises. Key features include accurate billing, accurate recording, and ensuring that services are delivered on time (Fernando & Kumari, 2022). In essence, reliability reflects a bank's ability to consistently meet or exceed customer expectations while maintaining a solid foundation. According to Fernando and Kumari (2022), found in their study that there is a significant positive impact of reliability on customers' satisfaction with mobile banking.

$H_{0:}$ There is no significant impact of reliability on customer satisfaction in mobile banking.

$H_{3:}$ There is a significant positive impact of reliability on customer satisfaction in mobile banking.

Security and customer satisfaction in mobile banking

Security is a cornerstone of any successful business, especially in the banking industry. It is closely linked to trust and is a critical factor when customers choose banking services (Barnes & Corbitt, 2003). Security operates on the premise that one party trusts the other to build a solid and long-term relationship and provide guarantees and safeguards. This trust is essential to building a strong foundation for customer interactions (Barnes & Corbitt, 2003). According to Fernando and Kumari (2022), found in their study that there is a significant positive impact of security on customers' satisfaction with mobile banking.

$H_{0:}$ There is no significant impact of security on customer satisfaction in mobile banking.

$H_{4:}$ There is a significant positive impact of security on customer satisfaction in mobile banking.

Privacy and customer satisfaction in mobile banking

Privacy in mobile banking refers to the extent to which a service ensures security, reliability, and authenticity in protecting customers' sensitive banking information from any unauthorized access or interference. In many developing countries, technological limitations often lead to customers' reluctance to share personal banking details or to conduct transactions through means other than physical bank branches (Barnes & Corbitt, 2003). Privacy plays a key role in influencing customer satisfaction with mobile banking. Customers are more likely to trust and use mobile banking services when they can be assured that their information is protected, making privacy a cornerstone of a positive banking experience. According to Fernando and Kumari (2022), found in their study that there is a significant positive impact of privacy on customers' satisfaction with mobile banking.

$H_{0:}$ There is no significant impact of privacy on customer satisfaction in mobile banking.

$H_{5:}$ There is a significant positive impact of privacy on customer satisfaction in mobile banking.

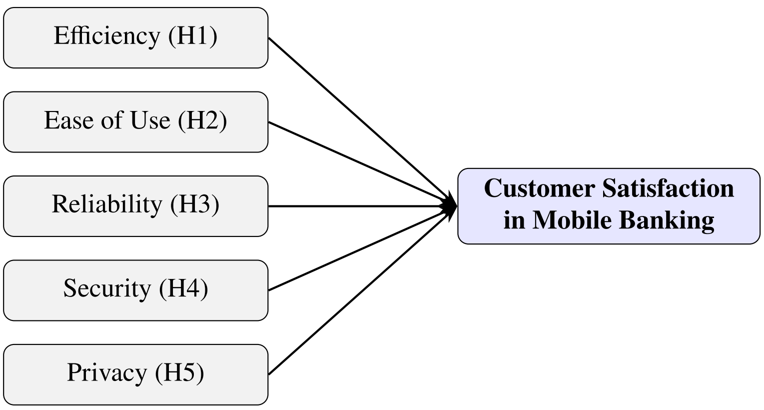

Figure 1. *Conceptual Framework*

Source: Developed based on previous studies (Fernando & Kumari, 2022; Dias & Dissanayake, 2023)

4. Data and Methods

This study employs a quantitative research approach, utilizing primary data sources. Quantitative research is widely recognized for its effectiveness in hypothesis testing (Sekaran et al., 2007). Data were collected through a structured questionnaire distributed among 390 customers from three commercial banks in Sri Lanka: People's Bank, Hatton National Bank (HNB), and Amana Bank, with 130 respondents from each bank. Due to time and cost constraints, Purposive sampling was employed to select participants with relevant experience in mobile banking, as it allows researchers to target individuals who can provide valuable insights into the study's focus (Etikan et al., 2016).

The questionnaire focused on key factors influencing customer satisfaction in mobile banking, including efficiency, ease of use, reliability, security, and privacy. The questions were designed to be clear and aligned with the study's objectives, primarily utilizing a 5-point Likert scale. The survey structure and variables were refined based on previous research (Dias & Dissanayake 2023; Fernando & Kumari, 2022; Fianto et al., 2021). Specifically, the questionnaire was adapted from the studies by Mwendwa et al (2016), Piyananda and Aluthge (2022), Huparikar and Shinde (2022) and Lakchan and Samaraweera (2023) to examine factors affecting the demand for Islamic banking products. A total of 390 responses were collected. Data analysis was conducted using the Statistical Package for Social Sciences (SPSS), with results presented through reliability analysis, correlation analysis, and regression analysis.

5. Results and Discussion

Table 1. *Reliability Statistics for Overall Alpha Value*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.870	.870	30

Source : Processed data (2025)

Table 1 provides the reliability statistics for the overall Alpha Value. The Cronbach's Alpha value of 0.870, which is above the minimum acceptable threshold of 0.5, indicates a high level of internal consistency for the data. This value suggests that the variables included in the study have a strong correlation, and the measurement scale used to assess them is reliable. According to Hinton (2004), as cited from Nunnally and Bernstein (1994), a Cronbach's alpha value of 0.70 or higher indicates that the attributes being measured are internally consistent. A value above 0.7 is typically considered good, and since 0.870 exceeds this standard, it can be concluded that the instrument used to gather the data is consistent and dependable. As a result, the reliability of the findings from this study can be trusted, making the data suitable for further analysis and drawing conclusions regarding the impact of mobile banking factors on customer satisfaction. This high reliability ensures that the results are not significantly influenced by measurement errors, and the study's outcomes can be deemed credible and accurate.

Source : Processed data (2025)

The above table presents the Cronbach's Alpha coefficient values for each variable in the study. As shown in the table, the Cronbach's Alpha for the efficiency variable is 0.877, which means 87.7% of the questions measuring efficiency are reliable. For ease of use, the Cronbach's Alpha value is 0.840, indicating that 84.0% of the questions assessing ease of use are reliable. The reliability of the reliability variable itself is reflected by a Cronbach's Alpha of 0.830, which means that 83.0% of the questions measuring reliability are considered reliable. The security variable has an Alpha value of 0.841, suggesting that 84.1% of the questions assessing security are reliable. For privacy, the Cronbach's Alpha value is 0.854, meaning 85.4% of the questions measuring privacy are reliable. Lastly, the customer satisfaction variable in mobile

Table 2. *Reliability Statistics for Variables*

Variables	Cronbach's Alpha
Efficiency	.877
Ease of use	.840
Reliability	.830
Security	.841
Privacy	.854
Customer satisfaction in mobile banking	.845

banking has a Cronbach's Alpha value of 0.845, indicating that 84.5% of the questions assessing customer satisfaction are reliable.

In summary, the Cronbach's Alpha coefficient values for all variables efficiency, ease of use, reliability, security, privacy, and customer satisfaction are all above the threshold of 0.80, which is considered an indicator of excellent reliability. Therefore, the measurements used in this study are deemed to be very reliable, ensuring the consistency and accuracy of the results.

Source : Processed data (2025)

According to the Pearson correlation test, the correlation coefficient (r) between efficiency and customer satisfaction is 0.444, which indicates a moderate positive relationship. The correlation coefficient (r) between ease of use and customer satisfaction is 0.542, indicating a moderate positive relationship between the variables. The correlation coefficient (r) between reliability and customer satisfaction is 0.655, indicating a strong positive relationship. The correlation coefficient (r) between security and customer satisfaction is 0.580, indicating a moderate positive relationship. The correlation coefficient (r) between privacy and customer satisfaction is 0.474, indicating a moderate positive relationship.

a. Predictors: (Constant), Privacy, Efficiency, Reliability, Security, Ease of Use
b. Dependent Variable: Customer Satisfaction in Mobile Banking

Source : Processed data (2025)

The R value, or correlation coefficient, is commonly used to demonstrate the strength and direction of the relationship between the dependent and independent variables in a study. As presented in Table 4, the R value for this study is 0.708, indicating a positive and moderate-to-strong correlation between the independent variables (efficiency, ease of use, reliability, security, and privacy) and the dependent variable, customer satisfaction in mobile banking.

R-squared (the coefficient of determination) is a statistical measure used to evaluate the proportion of variance in the dependent variable that can be explained by the independent variables in the model. An R-squared value closer to 1 indicates that the model accounts for a significant portion of the variance in the outcome variable. In this study, the R-squared value is 0.501, meaning that 50.1% of the variation in customer satisfaction in mobile banking can be explained by the independent variables: efficiency, ease of use, reliability, security, and privacy. This demonstrates that these factors collectively play a significant role in determining customer satisfaction within the context of mobile banking.

a. Dependent Variable: Customer satisfaction in mobile banking

b. Predictors: (Constant), Privacy, Efficiency, Reliability, Security, Ease of use

Source : Processed data (2025)

In an ANOVA test, the p-value is a key metric used to determine whether there is a statistically significant difference between the levels of the independent variables. If the p-value is less than 0.05, it suggests that the independent variables contribute meaningfully to explaining the variations in the dependent variable.

Table 3. *Correlation Analysis*

		Efficiency	Ease of use	Reliability	Security	Privacy	Customer satisfaction in mobile banking
Efficiency	Pearson Correlation	1	.571**	.376**	.318**	.333**	.444**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	390	390	390	390	390	390
Ease of use	Pearson Correlation	.571**	1	.650**	.543**	.508**	.542**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	390	390	390	390	390	390
Reliability	Pearson Correlation	.376**	.650**	1	.695**	.585**	.655**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	390	390	390	390	390	390
Security	Pearson Correlation	.318**	.543**	.695**	1	.625**	.580**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	390	390	390	390	390	390
Privacy	Pearson Correlation	.333**	.508**	.585**	.625**	1	.474**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	390	390	390	390	390	390
Customer satisfaction in mobile banking	Pearson Correlation	.444**	.542**	.655**	.580**	.474**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	390	390	390	390	390	390

Note. **. Correlation is significant at the 0.01 level (2-tailed).

Table 4. *Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin - Watson
1	.708[a]	.501	.495	.408	2.061

Table 5. *ANOVA Results*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.324	5	12.865	77.222	.000[b]
	Residual	63.973	384	.167		
	Total	128.297	389			

Additionally, a higher F value serves as further evidence of the significance of the independent variables in the model.

As presented in Table 5, the p-value for this study is 0.000, which is well below the alpha value of 0.05. This confirms the statistical significance of the model. Furthermore, the F value of 77.222 is relatively high, reinforcing the notion that the independent variables included in the analysis have a strong impact on the dependent variable. Based on these findings, it can be concluded that the independent variables (efficiency, ease of use, reliability, security, and privacy) play a significant role in explaining the variations in customer satisfaction within the context of mobile banking. This result underscores the importance of these factors in influencing customer satisfaction and highlights their relevance in driving a positive customer experience in the mobile banking sector.

Table 6. *Regression Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.842	.197		4.263	.000
	Efficiency	.192	.044	.193	4.378	.000
	Ease of use	.053	.054	.054	.986	.325
	Reliability	.349	.051	.394	6.901	.000
	Security	.187	.051	.200	3.674	.000
	Privacy	.026	.046	.028	.567	.571

Source : Processed data (2025)

According to Table 6, the B-values for the independent variables (efficiency, ease of use, reliability, security, and privacy) are 0.192, 0.053, 0.349, 0.187, and 0.260, respectively. This indicates that when efficiency, ease of use, reliability, security, and privacy increase by one unit, customer satisfaction in mobile banking is predicted to increase by 0.192, 0.053, 0.349, 0.187, and 0.260, respectively. Additionally, since the coefficients are positive, this implies that these variables positively impact customer satisfaction in mobile banking. The significance values (Sig.) for these variables (efficiency, ease of use, reliability, security, and privacy) are 0.000, 0.325, 0.000, 0.000, and 0.571, respectively.

These results reveal that efficiency, reliability, and security have a statistically significant impact on customer satisfaction, as their p-values are less than the alpha threshold of 0.05. Conversely, ease of use and privacy do not have a statistically significant impact, as their p-values (0.325 and 0.571, respectively) are greater than 0.05.

Source : Processed data (2025)

The correlation analysis results provide valuable insights into the relationship between the independent variables and dependent variable. The findings reveal that efficiency has a moderate positive relationship with the customer satisfaction (R = 0.444, P = 0.000), indicating that higher efficiency in mobile banking

Table 7. *Correlation Analysis Results*

Independent Variables	R and P Value	Results
Efficiency	R = 0.444 P = 0.000	Moderate Positive
Ease of use	R = 0.542 P = 0.000	Moderate Positive
Reliability	R = 0.655 P = 0.000	Strong Positive
Security	R = 0.580 P = 0.000	Moderate Positive
Privacy	R = 0.474 P = 0.000	Moderate Positive

services contributes to improved customer satisfaction. Similarly, ease of use also demonstrates a moderate positive correlation with the customer satisfaction (R = 0.542, P = 0.000). Among the five factors, reliability exhibits the strongest positive correlation with customer satisfaction (R = 0.655, P = 0.000), signifying that customers highly value consistent and dependable mobile banking services. Security also maintains a moderate positive correlation with customer satisfaction (R = 0.580, P = 0.000). Additionally, privacy shows a moderate positive relationship with customer satisfaction (R = 0.474, P = 0.000). Overall, these findings suggest that all five factors play a crucial role in shaping customer satisfaction in mobile banking. While efficiency, ease of use, security, and privacy contribute positively, reliability emerges as the most significant factor influencing customer satisfaction. Therefore, commercial banks in Sri Lanka should focus on enhancing the reliability of their mobile banking services while also improving efficiency, ease of use, security, and privacy to ensure a more satisfying customer experience.

Source : Processed data (2025)

The regression analysis results provide insights into the influence of efficiency, ease of use, reliability, security, and privacy on customer satisfaction in mobile banking. The findings are based on the significance (p-value) and beta (β) values of each independent variable, which determine whether the null hypothesis (H_0) is rejected or accepted. According to Frost (2020), the significance value (p-value) in regression analysis helps to determine whether an independent variable has a statistically significant impact on the dependent variable and p-value below 0.05 typically indicates statistical significance.

Table 8. *Hypothesis Testing Summary*

Beta	Sig.	Hypothesis	Result	Final Decision
.193	.000	H_0: There is no significant impact of efficiency on customer satisfaction in mobile banking.	Rejected	H_1 Supported
		H_1: There is a significant positive impact of efficiency on customer satisfaction in mobile banking.	Accepted	
.054	.325	H_0: There is no significant impact of ease of use on customer satisfaction in mobile banking.	Accepted	H_2 Not Supported
		H_2: There is a significant positive impact of ease of use on customer satisfaction in mobile banking.	Rejected	
.394	.000	H_0: There is no significant impact of reliability on customer satisfaction in mobile banking.	Rejected	H_3 Supported
		H_3: There is a significant positive impact of reliability on customer satisfaction in mobile banking.	Accepted	
.200	.000	H_0: There is no significant impact of security on customer satisfaction in mobile banking.	Rejected	H_4 Supported
		H_4: There is a significant positive impact of security on customer satisfaction in mobile banking.	Accepted	
.028	.571	H_0: There is no significant impact of privacy on customer satisfaction in mobile banking.	Accepted	H_5 Not Supported
		H_5: There is a significant positive impact of privacy on customer satisfaction in mobile banking.	Rejected	

6. Discussion

Efficiency and Customer satisfaction in Mobile Banking

Users of mobile banking services perceive it as a more efficient way to manage their banking activities compared to traditional methods. This is largely attributed to the extensive range of features and services offered by mobile banking, including the ability to check account balances, review transaction histories, and perform fund transfers. Studies highlight that this increased efficiency often translates into higher levels of customer satisfaction when compared to traditional banking services (Zavareh et al., 2012). This study also suggests that the relationship between efficiency and customer satisfaction is statistically significant. This implies that efficiency is a significant positive factor influencing customer satisfaction in mobile banking. Customers who experience more efficient mobile banking services tend to have higher satisfaction levels. This finding aligns with research conducted by Dias and Dissanayaka (2023), emphasizing the crucial role of the positive relationship between efficiency and customer satisfaction.

However, it is important to note that not all studies align with this positive view. Some researchers argue that efficiency, particularly when overly focused on automation and self-service features, may have a negative impact on customer satisfaction. This could be due to factors such as a lack of personalized interactions, technical glitches, or perceived difficulties in using the technology (Salihu & Metin, 2017). These contrasting perspectives highlight the need to further examine how mobile banking efficiency influences customer satisfaction across different demographic and user groups.

Ease of Use and Customer satisfaction in Mobile Banking

The simplicity and ease of use of innovative products and services are among the most significant factors influencing customer satisfaction (Karjalutoto, 2002; Menson, 2010). Furthermore, mobile banking applications are designed to be straightforward, requiring no additional skills for operation; users simply need to install the application on their mobile devices to access its functionalities (Sharma & Singh, 2013). An efficient and user-friendly process increases the likelihood of customer satisfaction with mobile banking services (Adesinasi, 2012). The results of the previous studies conducted by Kahandawa and Wijayanayake (2014) and Melto et al (2021) revealed that there is a significant impact on ease of use and customer satisfaction.

However, the results of the study reveals that ease of use does not have a statistically significant impact on customer satisfaction in mobile banking. This finding align with the study conducted by Fianto et al (2021) as the result of the study was found that there is no significant impact on ease of use and customer satisfaction. Although ease of use is generally considered an important factor in the adoption of mobile banking platforms, the findings suggest that in this study, ease of use alone does not significantly influence customer satisfaction. This could indicate that other factors, such as security or reliability, may play a more dominant role in shaping customer satisfaction in mobile banking.

Reliability and Customer satisfaction in Mobile Banking

As emphasized by Fernando and Kumari (2022), ensuring reliability in mobile banking services involves monitoring and assessing the bank's overall service system, particularly the mobile interface and back-end operations. This includes reviewing the accuracy and efficiency of processes that directly impact customers' banking experience, such as transaction processing and information retrieval. Dias and Dissanayake (2023) found in their study that there is a significant impact on reliability and customer satisfaction.

This study's finding align with the prior studies as it is suggesting that reliability has a strong positive impact on customer satisfaction in mobile banking. This result emphasizes that customers value reliable mobile banking platforms. Reliability can be defined in terms of the system's uptime, consistency in service delivery, and the absence of service disruptions. For mobile banking platforms, providing a stable, dependable experience is critical for maintaining high levels of customer satisfaction. Therefore, investing in the backend infrastructure to ensure the platform's stability is essential to fostering customer trust and satisfaction.

Security and Customer satisfaction in Mobile Banking

Security is one of the most crucial aspects of any mobile banking platform. Customers are highly concerned about the safety of their personal and financial information. Security operates on the premise that one party trusts the other to build a solid and long-term relationship and provide guarantees and safeguards. This trust is essential to building a strong foundation for customer interactions (Barnes & Corbitt, 2003).

The study validates previous studies that security is playing a crucial role in influencing the adoption of mobile banking services (Alawan et al., 2017; Bhatt, 2016). According to Fernando and Kumari, (2022), Fianto et al (2021) and Changchit et al (2017) found in their studies that there is a significant positive impact of security on customers' satisfaction with mobile banking. This study also suggests that security has a positive and significant impact on customer satisfaction in mobile banking. Therefore, investing in advanced security protocols, such as encryption, two-factor authentication, and regular security audits, can greatly enhance the customer experience. Ensuring robust security measures can help build customer trust and lead to higher satisfaction with the platform.

Privacy and Customer satisfaction in Mobile Banking

Privacy plays a key role in influencing customer satisfaction with mobile banking. Customers are more likely to trust and use mobile banking services when they can be assured that their information is protected, making privacy a cornerstone of a positive banking experience. According to Fernando and Kumari (2022), Liu et al (2004) and Islam (2014) found in their studies that there is a significant positive impact on privacy and customer satisfaction with mobile banking.

This study reveals that privacy does not have a statistically significant impact on customer satisfaction in mobile banking. Despite the growing concern for privacy in digital transactions, the results suggest that, in this study, privacy may not be a major driver of customer satisfaction in mobile banking. This could indicate that users are more focused on factors such as security, reliability, and efficiency when assessing their satisfaction with mobile banking services. However, this does not diminish the importance of privacy, as it could still play an indirect role in customer trust and long-term loyalty. This findings align with the prior study conducted by Changchit et al (2017) as his study suggests that privacy does not play crucial role of mobile banking usage.

7. Conclusion

In Sri Lanka, various banks have introduced mobile banking products to encourage digital banking adoption. However, the success of these products has been inconsistent, making it crucial to understand the factors that influence customer satisfaction with mobile banking services. This study aimed to examine the impact of mobile banking on customer satisfaction in commercial banks in Sri Lanka, focusing on key factors such as efficiency, ease of use, reliability, security, and privacy.

The findings revealed that mobile banking plays a significant role in shaping customer satisfaction, with efficiency, reliability, and security emerging as the most influential factors. The correlation analysis confirmed that all five factors (efficiency, ease of use, reliability, security, and privacy) had a positive relationship with customer satisfaction, with reliability exhibiting the strongest correlation. This finding underscores the importance of providing stable and dependable mobile banking services to enhance customer trust and satisfaction. The regression analysis provided deeper insights into the significance of each factor's impact on customer satisfaction. This finding highlights that customers expect mobile banking services to be fast, reliable, and secure, making these three factors crucial for banks aiming to improve their mobile banking platforms. However, ease of use and privacy did not show a significant impact on satisfaction.

Based on these findings, it can be concluded that Sri Lankan banks must prioritize reliability, security, and efficiency to enhance mobile banking experiences. Ensuring uninterrupted service, minimizing transaction failures, and strengthening security measures will be essential in building customer trust. Although ease of use and privacy did not have a statistically significant impact, banks should continue to refine their interfaces for better user experience and reinforce data protection policies to maintain customer confidence.

In summary, this study provides valuable insights into the role of mobile banking in driving customer satisfaction in commercial banks in Sri Lanka. It emphasizes the need for banks to focus on reliability, security, and efficiency, while also considering technological advancements to enhance customer experiences. Future research could explore additional factors such as customer support, personalization, and emerging fintech innovations to provide a more comprehensive understanding of mobile banking satisfaction in the Sri Lankan context.

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