



## Customer Satisfaction with Mobile Banking Services in Nepalese Commercial Banks

**Joginder Goet** (Corresponding author)

Asst. Professor, Shanker Dev Campus, T.U. *Email: goetj15@gmail.com*

**Kiran Kharel**

Freelance Researcher. *Email: kharelkiran35@gmail.com*

### Article Info:

Received: 12 Aug 2022

Revised: 14 Oct 2022

Accepted: 22 Oct 2022

### DOI:

<https://doi.org/10.3126/md.v25i2.57424>

### Keywords:

*Security,  
Convenient,  
Communication,  
Customer satisfaction,  
Time-saving.*

### ABSTRACT

*This study aims to examine the effects of convenience, communication, time-saving, and security on how satisfied customers are with Nepalese commercial banks' mobile banking services. The study used a descriptive and causal-comparative research design to estimate the relationship between customer satisfaction and the convenience, communication, time-saving, and security factors affecting customer satisfaction with mobile banking. The research depends on the information obtained from a self-administered questionnaire survey. Four hundred twenty questionnaires were issued to the customers of 21 commercial banks, and 395 questionnaires were eventually gathered for analysis. The findings show a positive and significant correlation between convenience, communication, time-saving, and security with customer satisfaction. Convenience, communication, and time-saving significantly and positively impact customer satisfaction, and security does not affect customer satisfaction. This study is helpful for Nepalese Commercial Bank management who desire to manage their mobile banking services efficiently.*

## 1. INTRODUCTION

The beginning of mobile banking services has revolutionized the banking industry, offering convenience, accessibility, and efficiency to customers. As the adoption of mobile banking continues to grow worldwide, it has become imperative for commercial banks in Nepal to understand the factors influencing customer satisfaction in this rapidly evolving landscape. Customer satisfaction is a critical determinant of the success of mobile banking services, as it directly impacts customer loyalty, trust, and overall profitability for the banks (Shakya, 2016). Thus, identifying and comprehending the factors affecting customer satisfaction in mobile banking services is paramount for banks operating in Nepal. Several studies have been conducted in different countries to explore the factors influencing customer satisfaction in mobile banking. These studies have highlighted various determinants, including service quality, ease of use, security, reliability, perceived

usefulness, and trust (Paudel et al., 2020). However, it is crucial to investigate these factors within the specific context of Nepalese commercial banks, such as customer satisfaction.

In Nepal, commercial banks have made significant efforts to introduce and promote mobile banking services to their customers. The increasing penetration of smartphones and internet connectivity has created opportunities for customers to access banking services conveniently through mobile applications. However, despite these advancements, challenges and unique characteristics of the Nepalese market might impact customer satisfaction. One such challenge is the digital divide, which refers to the gap between individuals with access to and can effectively use digital technologies and those without (Parajuli et al., 2020). In Nepal, the digital divide is still prevalent, with a significant portion of the population having limited access to smartphones, internet connectivity, and digital literacy. This situation might hinder the adoption and usage of mobile banking services, ultimately affecting customer satisfaction (Shakya, 2016).

Various debates and research studies have been conducted on consumers' perceptions of banking communication in Nepal. It can be observed that Nepalese banks have been employing information technology as a medium of communication and that it is always evolving so that banks may deliver information to consumers about the various products/services offered by banks. Though several studies have been undertaken in communication, banking, and customer satisfaction, no comprehensive research has been conducted that considers all of these elements. In Nepal, research on how customers perceive banking communication remains a noble and successful field of investigation. According to Kharel et al. (2019), every stakeholder has the right to get relevant information, interact, and communicate. It has also been observed that banks' responsiveness to delivering information about various financial products, services, and updates would enhance client satisfaction with their communication services. As a result, this study aims to examine consumers' perceptions of banking communication in Nepalese commercial banks.

All users must find mobile banking apps convenient, and in terms of security, banks should be held accountable for illegal users who automatically gain access to mobile banking. If the bank offers the above advantages and amenities, it will help grow its clientele, increase its profitability, strengthen its position, and boost transactions. This study aims to bridge the existing knowledge breach by examining the factors affecting customer satisfaction with mobile banking services in Nepalese commercial banks by seeking the answer of how satisfied customers are as a whole, what is the connection between customer satisfaction and convenience, communication, time-saving, and security?

By identifying and understanding the influence of factors like convenience, communication, time savings, and security, banks can develop effective strategies to enhance customer satisfaction and drive the adoption and usage of mobile banking services. The findings of this research will contribute to the existing literature on mobile banking and provide valuable insights for commercial banks in Nepal to improve their mobile banking offerings and customer satisfaction levels.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

The theory of customer satisfaction is a widely studied concept in marketing and consumer behavior. It revolves around the idea that when customers perceive their experiences with a product or service to be positive, their overall satisfaction increases, leading to higher loyalty and repeat business. Customer satisfaction is determined by the gap between customers' expectations and their perceptions of the actual product or service performance. If the perceived performance exceeds expectations, customers are more likely to be satisfied (Oliver, 1980). Customers have a range within which they are willing to accept variations in product or service performance without experiencing significant dissatisfaction

(Zeithaml et al., 1996). Also, Kano (1984) found that categorizes product attributes into different groups based on their impact on customer satisfaction, distinguishing between basic, performance, and delight attributes.

### **Customer Satisfaction**

Gumelar et al. (2020) conducted a study to explore the impact of mobile banking technology on customer satisfaction. Their findings revealed several significant relationships: mobile banking services were found to influence trust significantly, mobile banking was positively associated with satisfaction, and trust was also found to impact satisfaction significantly. Moreover, the study identified trust as an intervening variable that mediates the influence of mobile banking on customer satisfaction. These results shed light on the intricate dynamics between mobile banking services, trust, and customer satisfaction, highlighting the importance of building trust in fostering satisfying mobile banking experiences. Majumdar and Pujari (2021) studied an exploratory endeavor to unravel the diverse mobile banking app usage patterns in the United Arab Emirates (UAE). Their study made a substantial contribution to the existing literature by employing a categorical analysis, which allowed for a comprehensive understanding of consumers' behavior and usage patterns. By identifying distinct consumer segments based on their usage level, the researchers unveiled valuable insights for banking professionals in the UAE, enabling them to craft targeted marketing initiatives, enhance information technology infrastructure, and refine customer service practices in their empirical investigation. Metlo et al. (2021) analyzed the profound impact of mobile banking on customer satisfaction in the banking sector.

Through meticulous analysis, they discerned that perceived usefulness, ease of use, credibility, and customer attitude collectively substantially influence customer satisfaction. The findings shed light on the crucial role of these factors in shaping customers' perceptions and overall satisfaction with mobile banking. Rajaobelina et al. (2021) conducted a comprehensive assessment to explore the intricate relationship between brand attachment, mobile banking service quality, and positive word-of-mouth (WOM) recommendations. Their study revealed a noteworthy association between brand attachment and three dimensions of mobile service quality—value-added features, security/privacy, and interactivity—ultimately leading to positive WOM. Interestingly, the dimension of usability assumed the role of interactivity in this particular case. Their findings illuminate the significance of brand attachment in fostering positive WOM and the pivotal role of service quality in shaping customers' perceptions and recommendations.

### **Convenience**

Convenience refers to how well mobile banking can meet user needs. It might include utility, simplicity of usage, etc. (Kabir, 2013). Ngaida (2020) analyzed the impacts of electronic banking on customer satisfaction in the Tanzanian banking industry, focusing on the case of Kenya Commercial Bank (KCB). The study discovered that e-banking services have significantly contributed to increased customer satisfaction, primarily due to the convenience and accessibility they offer. Despite challenges such as poor network coverage and low awareness of e-banking applications, the study revealed that KCB's e-banking technology has successfully met customer expectations.

*H<sub>1</sub>: There is a significant impact of Convenient on Customer Satisfaction with Mobile Banking.*

### **Communication**

Though banks and their services have advanced in Nepalese commercial banks, client satisfaction in communication remains a problem (Gautam & Dhital, 2004). Furthermore, Shrestha (2018) noted that successful updating and listening to clients contributes to customer happiness and loyalty towards the bank, although people still believe that bank workers need communication training. Furthermore, Gautam and Dhital

(2004) revealed that knowing consumers and having customers comprehend what banks want to accomplish strongly impacted bank performance. Similarly, Sapkota et al. (2018) examined the role of information and communication technology in the Nepalese banking industry, demonstrating the benefits and drawbacks of adopting ICT in Nepalese banks. Gaire (2018) found that communication influences customer satisfaction and that banks should constantly assess and analyze their communication strategies and practices.

*H2: There is a significant impact of Communication on Customer Satisfaction with Mobile Banking.*

### **Time-saving**

Zhang and Kim (2020) found a positive correlation between efficiency in mobile banking services and increased customer satisfaction. Time-saving features have been linked to enhanced user experience, loyalty, and increased adoption rates of mobile banking applications. The findings of the study reveal a strong positive correlation between time-saving features and customer satisfaction in mobile banking. Customers highly value the convenience of performing transactions quickly, checking their account balances effortlessly, and accessing financial information on the go. The study also identifies specific time-saving features that significantly impact customer satisfaction (Parajuli et al., 2020).

*H3: There is a significant impact of Time-saving on Customer Satisfaction with Mobile Banking.*

### **Security**

Mobile banking providers have adopted various security measures to safeguard customer data and transactions. Research by Dey et al. (2018) highlighted the significance of multi-factor authentication, encryption, and secure communication protocols as effective means to bolster security and protect user information from unauthorized access. Customers' perceptions of mobile banking security significantly influence their overall satisfaction and continued usage of such services. Studies conducted by Cho and Lee (2017) reveal that customers' perceived security positively correlates with their satisfaction levels, underscoring the importance of instilling trust and confidence in users.

*H4: There is a significant impact of Security on Customer Satisfaction with Mobile Banking.*

## **3. RESEARCH METHODS**

This study used descriptive and causal-comparative research techniques to address the fundamental issues related to variables affecting consumer satisfaction with mobile banking services in commercial banks in Nepal. The structured and tested questionnaire of Hamza and Shamsudin (2020) has been used to gather information and look for sufficient data about customer satisfaction with mobile banking services in commercial banks in Nepal. While the regression analysis employed in the study offers both the size and direction of the association between the variables, the correlation analysis displays the direction of the relationship between variables.

This study uses customers from various banks and financial institutions as the population. Data are gathered from mobile banking customers of all commercial banks in Nepal. According to Hair et al. (2014), the minimum sample size for models with up to seven constructs, which is the case for this study, must also have a sample size of 150. A sample of 395 responses was collected from randomly selected mobile banking users of various commercial banks, and it is presumed to comply with the sample size standards for academic research. A random sampling technique was used to select the response to administer the questionnaire. Each sampled person received a structured questionnaire online through Google Forms. In respectfully asking participants to rate their level of agreement and disagreement on a five-point Likert scale, the scale ranged from 1 to 5 (1 being strongly disagreed to 5 being strongly agreed). Within a week of the initial delivery,

numerous follow-ups were conducted. The Statistical Package for Social Science (SPSS) and Microsoft Excel programs were used to analyze and interpret the data after all completed questionnaires were collected from respondents. Depending on the intricacy of the problem, such as the Likert scale. The analysis was followed by presenting the data and making conclusions and interpretations. The Cronbach's alpha of customer satisfaction was 0.842, convenience was 0.794, communication was 0.826, time-saving 0.738, and security has 0.763. Therefore, Cronbach's alpha is utilized to evaluate the research study's validity and reliability.

#### 4. RESULTS AND DISCUSSION

This section of the analysis comprises all the statistical tests conducted to confirm the theories and establish the importance of consumer participation. A demographic profile gives information about the respondent's profile. The Pearson correlation test was conducted to see the correlations between the independent and dependent variables. A direct link, where one increases in response to an increase in the other, is shown by a positive correlation. An inverse of the preceding is revealed by a negative correlation, nevertheless.

The distribution of respondents by gender, of which, in terms of percentage, 69.2 percent are male, and 30.8 percent are female. Similarly, 59.3 percent were of the age group 16-25, 33.1 percent were of the age group 25-35, 4.1 percent were of the age group 35-45, and 3.5 percent were of the age of 45 and above. In the same way, the frequencies of qualification up to High School, Intermediate, Bachelor, Master, and above are 33.7 percent, 13.4 percent, 43 percent, and 9.9 percent, respectively.

**Table 1**  
*Correlation Analysis*

	CS	CON	COM	TS	SEC
CS	1	0.825**	0.359	0.578**	0.741**
CON		1	0.745**	0.528	0.624**
COM			1	0.569**	0.692**
T.S.				1	0.823**
SEC					1

*Note:* C.S. means customer satisfaction, CON means convenience, COM means communication, T.S. means time-saving, and SEC means security.

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

Table 1 shows the relationship between dependent and independent variables. The correlation coefficients provided insights into the relationships between customer satisfaction and the other variables. Customer satisfaction exhibits a strong positive correlation with convenience (0.825), indicating that as customer satisfaction increases, there is a high likelihood of experiencing greater levels of convenience. Similarly, customer satisfaction also shows a strong positive correlation with security (0.741), suggesting that higher levels of customer satisfaction are associated with increased security. Furthermore, there is a moderate positive correlation between customer satisfaction and time-saving (0.578), indicating that a tendency for time-saving also increases as customer satisfaction increases. However, the correlation between customer satisfaction and communication is relatively weak (0.359), suggesting a less pronounced relationship than the other variables. In summary, the given correlation coefficients demonstrate that customer satisfaction has the strongest positive relationship with convenience, followed by security, time-saving, and communication, highlighting the varying degrees of association between these variables.

**Table 2**  
*Regression Output*

Model	Beta	t-value	p-value	VIF
(Constant)	0.606	2.373	0.019	
CON	0.762	4.058	0.000	1.942
COM	0.411	3.796	0.000	1.644
TS	0.430	4.025	0.000	2.038
SEC	0.524	0.242	0.809	1.118
R- Square	0.824			
F	18.021			
Sig(F)	0.000			

*Note:* C.S. means customer satisfaction, CON means convenience, COM means communication, T.S. means time-saving, and SEC means security.

Based on the regression findings, the following regression has been developed:

$$CS = 0.606 + 0.762CON + 0.411COM - 0.430TS + 0.524SEC$$

The coefficients (Beta) indicate the estimated change in customer satisfaction associated with a one-unit change in each independent variable while holding other variables constant. For instance, convenience shows a beta value of 0.762, suggesting that a one-unit increase in convenience is associated with a 0.762 increase in customer satisfaction, all else equal. According to research conducted by Parajuli et al. (2020), all m-banking dimensions (convenience, communication, and time-saving) affect the use of m-banking, which in turn affects user satisfaction with m-banking and customer engagement.

In the same way, this study found that convenient, communication, and time-saving significantly impact the customer satisfaction of Nepalese commercial banks. Similarly, Devkota et al. (2020) found that the security of Islamic mobile banks significantly impacts customer satisfaction. But this study suggests that the security of Nepalese commercial banks insignificantly impacts customer satisfaction. Zhang and Kim (2020) found that the characteristics of financial services (convenience and security) significantly influence the increase in customer satisfaction. Similarly, in this study, financial services (convenience) significantly influence the increase in customer satisfaction. The p-values, which represent the probability of observing the coefficients assuming no relationship, are all below 0.05, indicating that the impact of convenient, communication, and time-saving on customer satisfaction was statistically significant. The R-square value of 0.824 suggests that the independent variables in the model can explain approximately 82.4 percent of the variation in customer satisfaction. Furthermore, the F-value of 18.021 with a p-value of 0.000 demonstrates that the regression model as a whole is highly significant.

## 5. CONCLUSION AND IMPLICATIONS

The consumers' perceptions of banking communication in Nepalese commercial banks have been analyzed in this study. The study showed that the four independent variables are important, but only security has an insignificant relationship with customer satisfaction with the mobile banking service. It also shows that customer satisfaction is strongly influenced by convenience, time-saving, and effective communication. These factors play significant roles in predicting customer satisfaction. On the other hand, security may not directly impact overall satisfaction in the context of this specific regression model. Also, the study's findings investigated the impact of certain factors (Convenient, Communication, Time-saving, and security) and customer satisfaction. The study aimed to determine whether these factors had a significant impact on customer satisfaction or not. According to the study's results, convenience, communication, and time-saving impact on

customer satisfaction was statistically significant. This means these factors had a notable and measurable effect on customer satisfaction. It suggests that when customers perceive a service or product as convenient, experience effective communication, and save time in their interactions, their satisfaction levels will likely increase.

On the other hand, the study found that the impact of security on customer satisfaction was statistically insignificant. This means that security did not have a significant effect on customer satisfaction in the context of the study. It implies that customers' perceived security did not strongly influence their satisfaction levels.

It suggests that when customers perceive a service or product as convenient, experience effective communication, and save time in their interactions, their satisfaction levels will likely increase. On the other hand, the study found that the impact of security on Customer Satisfaction was statistically insignificant. This means that security did not have a significant effect on customer satisfaction in the context of the study. It implies that customers' perceived security did not strongly influence their satisfaction levels.

In conclusion, the findings from the correlation and regression analyses highlight the key factors that significantly influence customer satisfaction. Customers who perceive a service as convenient, time-saving, and accompanied by clear communication are more likely to be satisfied. Convenience emerges as a critical driver of customer satisfaction. Customers who perceive a service as convenient are more likely to be satisfied. Customers who experience clear and efficient communication, such as polite, kind, and communicative ways, are more likely to be satisfied. This highlights the importance of maintaining open lines of communication with customers, providing timely and accurate information, and addressing their concerns promptly. In the same way, time-saving features positively impact customer satisfaction. Likewise, the analysis suggests that security, while important, may not directly and significantly impact customer satisfaction. While ensuring the security of customer data and transactions is essential, it may not be the primary driver of overall satisfaction because this study has not found a significant impact on customer satisfaction. Businesses should balance providing robust security measures and focusing on other key factors influencing customer satisfaction.

Businesses should prioritize improving convenience, time-saving features, and communication strategies to enhance customer satisfaction and maintain a competitive edge. The study also provides the most significant factor affecting commercial banks' mobile banking service. Future research may also be conducted to identify elements beyond security, convenience, time-saving, and effective communication. It is also possible to taste the moderating variable, which can modify these factors and impact commercial banks' mobile banking offerings. A similar study can be done to determine the distinction between national and international banking sectors in the international banking sector.

## REFERENCES

- Cho, J., & Lee, J. (2017). Mobile Banking Security and Customer Satisfaction: The Mediating Role of Perceived Security. *International Journal of Mobile Communications*, 15(4), 360-380.
- Dey, S., Chakraborty, A., Chatterjee, S., Datta, S., & De, D. (2018). Enhancing Mobile Banking Security using Multi-Factor Authentication. *In Proceedings of the 11th International Conference on Security of Information and Networks*, 18(1), 115-122.
- Gaire, AKS (2018). Effectiveness of Internet banking system and client's satisfaction: Evidence from Surkhet. *Nepal Journal of Multidisciplinary Research*, 1(1), 10-21.
- Gautam, T. & Dhital M. S. (2004). Customer satisfaction in Nepalese commercial banks. *Journal of Management and Development Review*, 1(2), 1-18.

- Gumelar, A., Nasution, M. I., Oesman, I. F., Ramadini, F., & Irfan, M. (2020, March). Technology mobile banking on customer Satisfaction. In *Journal of Physics: Conference Series* (Vol. 1477, No. 7, p. 072020). IOP Publishing.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*.
- Kabir, M. R. (2013). Factors influencing the usage of mobile banking: Incident from a developing country. *World Review of Business Research*, 3(3), 96-114.
- Kano, N. (1984) Attractive quality and must-be quality, Hinshitsu Quality. *The Journal of Japanese Society for Quality Control*, 14, 39–48.
- Kharel, S, S Magar, N Chaurasiya, S Maharjan and CP Rijal (2019). Transparency and accountability in the Nepalese corporate sector: A critical assessment. *Quest Journal of Management and Social Sciences*, 1(1), 1–25.
- Majumdar, S., & Pujari, V. (2021). Exploring the usage of mobile banking apps in the UAE: a categorical regression analysis. *Journal of Financial Services Marketing*, 1-13.
- Metlo, M. Y., Hussain, N., Saqib, G., Phulpoto, K., & Abro, S. (2021). Impact of mobile banking on customer satisfaction. *International Journal of Management (IJM)*, 12(1).
- Ngaida, A. (2020). An Analysis of the Impacts of Electronic Banking on Customer Satisfaction in the Tanzanian Baking Industry: A Case of Kenya Commercial Bank (Doctoral dissertation, Mzumbe University).
- Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Parajuli, S., Paudel, U. R., & Devkota, N. (2020). Banking communications: A perceptual study of customer relations. *South Asian Journal of Social Studies and Economics*, 8(3), 23-34.
- Paudel, U. R., Parajuli, S., Devkota, N., & Mahapatra, S. K. (2020). What Determines Customers' Perception of Banking Communication? An Empirical Evidence from Commercial Banks of Nepal. *Global Economy Journal*, 20(04), 1-21.
- Rajaobelina, L., Tep, S. P., Arcand, M., & Ricard, L. (2021). The relationship of brand attachment and mobile banking service quality with positive word-of-mouth. *Journal of Product & Brand Management*.
- Sapkota, N, N Paudel, DK Subedi, R Bhattarai and R Shrestha (2018). Role of information communication technology (ICT) in the Nepalese banking industry. *American Scientific Research Journal for Engineering, Technology, and Sciences*, 42(1), 75–88.
- Shakya, A. (2016). Impact of online banking on customer satisfaction and firm performance in Nepalese Commercial banks. *Nepalese Journal of Management*, 3(1), 32-44.
- Shrestha, P (2018). Service quality and customer satisfaction: Evidence of Nepalese banks. *NCC Journal*, 3(1), 121–133.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Zhang, L., & Kim, H. (2020). The influence of financial service characteristics on use intention through customer satisfaction with mobile fintech. *Journal of System and Management Sciences*, 10(2), 82.