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Key Drivers of Customer Satisfaction in Nepalese Mobile Banking Services



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ABSTRACT

This study aims to explore the factors influencing customer satisfaction with mobile banking services of Nepalese commercial banks. The quantitative research method included descriptive, relational, and causal designs. A response of descriptive, correlational analysis and regression was conducted with IBM SPSS. There were 384 responses from commercial banks. Frequency, percentage, mean, median, mode, standard deviation, variance, correlation, and regression were used to evaluate structured questionnaire data. The result showed that service quality and perceived usefulness have positive and significant impact on mobile banking services. In contrast, customer support and assistance has insignificant and negative relationship with mobile banking services. Regression analysis identified service quality as having the highest impact on customer satisfaction, followed by perceived usefulness, while customer support and assistance has a negligible effect. The study emphasises the importance of service quality and perceived usefulness in enhancing customer satisfaction with mobile banking services.

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1. Introduction

In the modern digital age, mobile technology has had a profound impact on various sectors, especially banking. The proliferation of mobile phones and the widespread use of the internet have drastically altered how individuals interact with financial institutions. One of the most significant developments in the banking industry over the past few decades has been the rise of mobile banking

services. With the advent of smartphones and mobile applications, customers are now able to conduct various banking transactions on the go, anytime and anywhere, without the need to visit a physical bank branch. The convenience and accessibility of mobile banking have revolutionized customer experiences and interactions with financial institutions, thereby changing the landscape of the banking sector (Nazar, 2022).

Understanding customer satisfaction in the context of mobile banking services is crucial for financial institutions, as it provides insight into the effectiveness of their services and helps identify areas for improvement (Alalwan et al., 2017). Satisfied customers are more likely to continue using mobile banking services, recommend them to others, and develop a strong sense of loyalty towards their banks. In contrast, dissatisfied customers may switch to competitors, potentially leading to customer attrition and damaging the bank's reputation (Kumar & Nagarajan, 2019). Given the competitive nature of the banking sector and the increasing importance of digital services, understanding what drives customer satisfaction with mobile banking is more relevant than ever.

Mobile banking can be defined as the provision of banking services through mobile devices such as smartphones and tablets. These services include activities like checking account balances, transferring funds, paying bills, and accessing other financial services, all through mobile banking applications. The development and integration of mobile banking technology have enabled customers to manage their finances without the limitations of physical branch visits. From the ability to conduct transactions at any time and from anywhere to instant access to account information, mobile banking has empowered customers to make informed financial decisions with ease (Derashri et al., 2022). The rising importance of mobile banking services in the modern world can be attributed to advancements in technology, the growing penetration of smartphones, and the increasing demand from customers for onthe-go financial services.

Customer satisfaction plays an essential role in the success of mobile banking services. It is well-established that satisfied customers tend to remain loval to the services they use and are less likely to switch to competitors. Loyalty in the banking sector is crucial because it leads to a higher customer lifetime value, reduced marketing costs, and more positive word-of-mouth, which can bring in new customers (Yeory et al., 2016). Customer satisfaction in mobile banking, therefore, is closely linked to the quality of service provided by banks, the usefulness and ease of use of mobile banking applications, and the overall customer experience. With this in mind, banks must understand the factors that contribute to customer satisfaction in order to tailor their services to meet customer expectations and foster loyalty.

The availability of mobile banking services has played a significant role in enhancing customer satisfaction by providing users with greater convenience and accessibility. Prior to the advent of mobile banking, customers had to visit a physical branch to complete most banking transactions, such as transferring funds or paying bills. The introduction of mobile banking eliminated this necessity, offering customers the ability to conduct transactions at any time, from anywhere. This transformation has not only reduced transaction times but has also allowed customers to have greater control over their financial activities (Dhakal & Thakuri, 2023).

As a result, mobile banking has become a cornerstone of the banking experience, particularly for individuals seeking fast and efficient banking solutions.

Moreover, mobile banking offers a personalized experience for customers. which further enhances their satisfaction. By using data analytics and artificial intelligence, banks can offer targeted services, such as personalized financial advice, tailored offers, and custom notifications that meet individual customer needs (Gavilanes et al., 2023). This level of customization, combined with the convenience of mobile contributes banking, significantly customer satisfaction. However, the quality of service offered through mobile banking is not solely dependent on convenience and personalization. The reliability, security, and user interface of mobile banking platforms are also critical factors in determining customer satisfaction (Thakuri et al., 2023).

The increasing demand for mobile banking services, driven by technological advancements and the availability of mobile internet, has led to a surge in the adoption of mobile banking applications globally. As more customers embrace these services. banks are under greater pressure to ensure that their mobile banking platforms meet customer expectations. While many banks have successfully developed robust mobile banking applications, issues such as security risks, poor user interface design, and technical glitches continue to pose challenges to customer satisfaction. Security concerns, in particular, are a significant barrier to the

widespread adoption of mobile banking, as customers are often wary of the safety of their personal and financial information when conducting transactions through mobile apps (D. & K.P., 2018).

Despite the numerous benefits of mobile banking, banks must address these challenges in order to maintain high levels of customer satisfaction. Enhancing the security of mobile banking applications, ensuring smooth and reliable service delivery, and optimizing the user interface are essential for improving the overall customer experience. Technological innovations, such as AI-driven chatbots, advanced encryption methods, and biometric authentication, have been implemented by banks to enhance the security and usability of their mobile banking services (Jahan & Shahria, 2021). These advancements not only address customer concerns but also improve the overall quality of the service, which in turn contributes to higher customer satisfaction.

However, despite the growing body of research on mobile banking and customer satisfaction, several gaps remain in the literature that warrant further investigation. While many studies have explored the factors influencing customer satisfaction in mobile banking, few have addressed the role of emerging technologies, such as artificial intelligence, block chain, and machine learning, in shaping customer perceptions and experiences with mobile banking. Additionally, limited research has been conducted on the impact of cultural and demographic factors on customer satisfaction with mobile banking

services. Understanding these factors is crucial, as customer satisfaction may vary across different geographic regions and cultural contexts (Suki, 2013).

Furthermore, while studies have shown the positive impact of mobile banking on customer satisfaction, there is a lack of longitudinal research examining how customer satisfaction evolves over time as mobile banking services continue to improve. A better understanding of this dynamic would provide valuable insights into the long-term effectiveness of mobile banking platforms and highlight areas where continuous improvements can be made (Jayawardhena & Foley, 2000). Given the rapid pace of technological advancements, banks must remain agile and responsive to customer needs in order to maintain a competitive edge in the digital banking landscape.

The role of mobile banking services in enhancing customer satisfaction is a complex and multifaceted issue that requires further exploration. The proliferation of mobile technology has significantly transformed the banking sector, offering customers greater convenience, accessibility, and control over their financial activities. However, in order to ensure sustained customer satisfaction and loyalty, banks must focus on delivering high-quality services that meet customer expectations in terms of security, reliability, and user experience. As mobile banking continues to evolve, understanding the factors that influence customer satisfaction and addressing the challenges that exist will be key to the continued success of mobile banking services.

Objective of the study

The objective is to gain understanding of customers' satisfaction regarding mobile banking services. This study helps to investigate the relationship between service quality, customer support and assistance, perceived usefulness and customer satisfaction towards mobile banking services of Commercial Banks of Nepal. The specific objectives are:

- To examine the role of mobile banking services in enhancing customer satisfaction among users of commercial banks in Nepal.
- To investigate the relationship between service quality, customer support and assistance, perceived usefulness and customer satisfaction.
- To analyze the impact of service quality, customer support and assistance, perceived usefulness on customer satisfaction.

2. Literature review

The theories reviewed in this study are technology acceptance model and value percept theory.

Technology acceptance model

The Technology Acceptance Model (TAM) suggests that user acceptance of technology, including mobile banking, is primarily driven by perceived usefulness and perceived ease of use, which in turn influence behavioral intention and actual system usage (Marikyan

& Papagiannidis, 2023). When mobile banking users perceive the platform as both useful and easy to navigate, they are more likely to adopt and engage with the technology regularly (D. & K.P., 2018). Service quality and customer support play a crucial role in shaping these perceptions, as high-quality service enhances the perceived usefulness of mobile banking by ensuring reliability, responsiveness, and effective problem resolution. Furthermore, accessible and efficient customer support can improve perceived ease of use, fostering greater user satisfaction. Thus, the positive relationship between service quality, customer support, perceived usefulness. customer and satisfaction highlights the importance of both functional and support elements in driving customer adoption and loyalty in mobile banking systems.

Value percept theory

The Value-Percept Disparity (VPD) theory offers valuable insights into customer satisfaction by focusing on the gap between a consumer's Ideal Value (IV) the expected quality or performance of a product or service and the Actual Value (AV) they experience after using it. When the perceived actual value falls short of or exceeds the ideal expectations, a perceptual discrepancy (PD) is created, influencing overall satisfaction (Juwel Rana, 2022). In the context of mobile banking, this theory suggests that customers evaluate the service based on both their expectations (IV), such as ease of use and usefulness, and their actual experiences (AV), which are influenced by service quality and customer support. When the actual experience aligns with or surpasses expectations driven by reliable service quality and effective customer support — customers perceive the service as more valuable, leading to higher satisfaction. Conversely, if there is a significant perceptual discrepancy where service quality or support fails to meet expectations, customer satisfaction may decline. Therefore, the relationship between service quality, customer support, perceived usefulness, and satisfaction can be understood through the lens of VPD, where minimizing the gap between IV and AV enhances user satisfaction and fosters brand loyalty.

Bohara (2024) investigated the factors influencing customer satisfaction with mobile banking services in Nepalese commercial banks, focusing on service quality, system availability, security, ease of use, and website features as independent variables, with customer satisfaction as the dependent variable. Based on primary data from 120 respondents across 15 Nepalese commercial banks, the study employed correlation and regression analyses to assess the significance of these factors. The findings revealed that all five independent variables service quality, system availability, security, ease of use, and website features positively impact customer satisfaction. Specifically, the study indicated that higher service quality, better system availability, stronger security, more userfriendly systems, and improved website features all contribute to increased customer satisfaction.

Wibowo (2022) examined the

interrelationships among customer satisfaction, product quality, and service quality. The study emphasized that high product quality often leads to increased customer satisfaction, which in turn can reduce complaint levels and enhance customer loyalty. This paper also discusses the critical role of service quality, noting that it significantly impacts customer perceptions and satisfaction levels. By synthesizing various studies, the article identified gaps in the existing literature and proposes hypotheses for future research, particularly in the context of marketing management. Overall, study contributed valuable insights into the dynamics of customer satisfaction underscores and the importance maintaining high standards in both product and service quality to foster positive customer experiences.

Hallencreutz and Parmler (2019) evaluated the economic and social benefits of competition requires assessing both financial and nonfinancial aspects. Among these, customer satisfaction stands out as one of the most widely recognized non-financial performance indicators. High levels of customer satisfaction are linked to a stronger company image, better retention of market share, enhanced customer loyalty, reduced complaints, and improved financial performance. This paper presented a longitudinal quantitative study based on customer perception data from the Swedish market research firm Svenskt Kvalitetsindex AB. Using PLS-SEM analysis, the study identified key latent variables that drive customer satisfaction over time. Findings revealed a significant shift in the last decade, with service quality replacing product quality as a critical driver of customer satisfaction across various industries and sectors.

Jun and Palacios (2016) assessed the key dimensions of mobile banking (m-banking) service quality, with a focus on customer perceptions. Used the critical incident technique, the study uncovers 17 dimensions of m-banking service quality, categorized into two groups: m-banking application quality (including content, accuracy, ease of use, speed, aesthetics, security, diverse features, and mobile convenience) and m-banking customer service quality (such as reliability, responsiveness, competence, courtesy, credibility, access, communication, understanding, and continuous improvement). The study highlighted five critical dimensions mobile convenience, accuracy, diverse mobile application service features, ease of use, and continuous improvement as the main drivers of customer satisfaction and dissatisfaction.

Aryal et al., (2024) explored the factors influencing customer adoption of mobile banking in Nepal using the Unified Theory of Acceptance and Use of Technology (UTAUT) framework. Guided by a positivist philosophy, the study adopts a quantitative approach with deductive reasoning and an explanatory research design to examine relationships cause-and-effect between variables. Data was collected through a survey of 193 participants, primarily students and teachers from KUSOM, representing a diverse customer base of Nepalese commercial bank mobile banking users. The findings highlighted several key determinants of mobile banking adoption, including perceived usefulness, ease of use, service quality, trust, and perceived cost, which positively influence adoption. In contrast, perceived risk and awareness were found to have a negative or insignificant impact, respectively. The study concluded that challenges such as distrust, perceived risks, and low awareness hinder mobile banking adoption in Nepal, underscoring the need for

improved communication, enhanced security, and better user education to encourage wider adoption.

Research Framework

The increasing popularity and usage of mobile banking services have vital role in customer satisfaction in the banking industry. This chapter explains the determinants of customer satisfaction regarding the mobile banking services. The research framework of the study is in *Figure 1*.

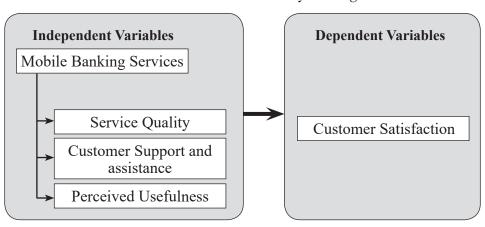


Figure 1 Research framework of the study

Hypothesis of the study

Based on framework and objectives of research, the present study seeks to test the following hypothesis:

- H₀₁: There is no significant impact of service quality on customer satisfaction.
- H₀₂: There is no significant impact on customer support and assistance on customer satisfaction.
- H₀₃: There is no significant on perceived usefulness on customer satisfaction.
- $H_{04:}$ There is no significant relationship

between service quality and customer satisfaction.

- H_{05:} There is no significant relationship between customer support and assistance and customer satisfaction.
- ${
 m H_{06:}}$ There is no significant relationship between perceived usefulness and customer satisfaction.

Model specification

We must build the direct link between the independent and dependent variables (i.e., regress Y on X).

 $Y = \beta 0 + \beta 1X1 + \beta 2 X 2 + \beta 3 X 3 + e$ Where,

Y = Customer Satisfaction

 $X_1 = Service quality$

 X_2 = Customer support and assistance

 X_3 = Perceived usefulness

 β_0 = Intercept of the dependent variable

e = error term and

 β_1 , β_2 , and β_3 are the beta coefficients of independent variables.

3. Methodology

This study adopted a quantitative research design to effectively address the research and hypotheses, objectives employing descriptive, relational, and causal research designs. The research is guided by positivism research philosophy. The positivism research philosophy use a deductive research approach, which uses pre-existing theory to generate hypotheses. The target population consisted of Nepalese bank customers, and a non-probability sampling method was applied for participant selection. Specifically, convenience sampling was used, which allowed for easy availability of participants with minimal effort, suitable for the study's context and resource constraints. The study utilized questionnaires to collect data from a representative population sample. The study utilized regression, mean, median, mode, correlation and standard deviation.

The measurement scale of the data in this study is crucial for determining how responses are categorized and analyzed. Survey items are measured on an ordinal scale, while numerical values or Likert scale responses

are treated as interval. Categorical variables, like gender or age group, are measured using a nominal scale to classify respondents into distinct categories. The statistical software SPSS and Excel are utilized to perform all the tests and models.

The study used 384 samples with 95% confidence and 5% error margin by using following formula.

$$n = \frac{z^2 \cdot p \left(1 - p\right)}{e^2}$$

Where,

Z: Z-score

n: Sample size

p: Estimated proportion

e: Margin of error

The sample size formula was selected because it is designed to estimate sample size for proportion-based studies, ensuring a 95% confidence level and 5% margin of error, commonly used in descriptive research. By assuming maximum variability (p = 0.5), it provides a conservative estimate, ensuring the sample size is large enough for reliable and representative results, even with the limitations of convenience sampling.

Cronbach's alpha is used to test both its reliability and validity. This study employed Cronbach's alpha to determine whether or not the primary data is reliable. A coefficient greater than or equal to 0.7 is acceptable and a good indicator of construct reliability, a general rule that applies across the board. All the variable coefficients are more than the coefficient 0.7, which depicts the reliability and validity of data.

4. Data presentation and analysis

The data presented provides a breakdown of the sample based on gender, age, and education level. In terms of gender, a majority of respondents are female, with 257 individuals (66.9%), while male respondents make up 127 individuals (33.1%). This indicates a higher participation of females in the survey.

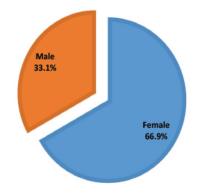


Figure 1: Respondents' distribution according to their gender

Regarding age, the figure 2 exhibits that the largest group is those below 25 years, comprising 206 individuals (53.6%) of the sample. The next largest group is individuals aged 25-35 years, with 160 respondents (41.7%).

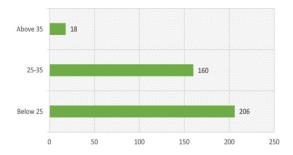


Figure 2: Respondents' distribution according to their age

A small portion of the sample, 18 respondents (4.7%), are above 35 years. This suggests that the survey is predominantly reflective of younger individuals.

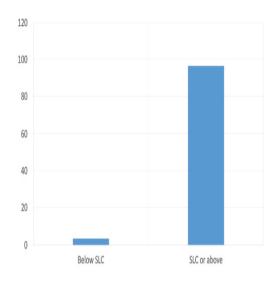


Figure 3: Respondents' distribution according to their education qualification

In terms of education, a significant majority of respondents, 371 individuals (96.6%), have SLC or above education. Only a small number of respondents, 13 individuals (3.4%), have education below the SLC level. This shows that the sample is primarily composed of individuals with a relatively high level of education.

Frequently used features of mobile banking

The table shows that the most frequent use of mobile banking is fund transfers, with 62.5% of respondents (240) using it for this purpose.

Table 1

Frequently used features of mobile banking

| Frequent Use | Frequency | Percent | Cumulative Percent |
|-----------------|-----------|---------|--------------------|
| Balance inquiry | 33 | 8.6 | 8.6 |
| Fund transfer | 240 | 62.5 | 71.1 |
| Utility payment | 111 | 28.9 | 100.0 |
| Total | 384 | 100.0 | |

Utility payments are the second most common use, cited by 28.9% (111) of users, while balance inquiries are the least frequent, with only 8.6% (33) of respondents. This indicates that mobile banking is primarily used for transactional activities like transferring funds and paying bills, reflecting its convenience for financial tasks.

Descriptive statistics on all samples

Table 2

Descriptive statistics on all samples

The statistics show that customer satisfaction is high, with users reporting consistent positive experiences (mean of 4.242 and low variation). Service quality is moderately satisfactory (mean of 3.775), with some variation in user responses. Customer support and assistance received a moderate score (mean of 3.653), but there is greater variation, indicating mixed experiences, especially with the lower mode (3.370).

| Statistics/ Variables | N | Mean | Median | Mode | Std. Deviation |
|---------------------------------|-----|-------|--------|-------|----------------|
| Customer satisfaction | 384 | 4.242 | 4.242 | 4.240 | 0.007 |
| Service quality | 384 | 3.775 | 3.853 | 3.530 | 0.161 |
| Customer support and assistance | 384 | 3.653 | 3.631 | 3.370 | 0.216 |
| Perceived usefulness | 384 | 3.636 | 3.672 | 3.080 | 0.317 |

Perceived usefulness has a similar moderate mean (3.636), but a high standard deviation (0.317) suggests considerable differences in how useful users find the service. Overall, while customer satisfaction is strong, areas like support and perceived usefulness show more variability and could be improved. Overall, while customer satisfaction with mobile banking is high and consistent, there are areas such as service quality, customer

support, and perceived usefulness that show more variability, with some users expressing dissatisfaction and others feeling the service could be more useful. These areas may require attention to enhance the overall user experience.

Correlation analysis

The correlation analysis reveals significant and strong relationships between customer satisfaction, service quality, customer support, and perceived usefulness in mobile banking which is shown in Table 3. Customer satisfaction shows a robust positive correlation with service quality (0.703), meaning that higher service quality is closely associated with greater customer satisfaction. There is also a moderate positive correlation

between satisfaction and customer support (0.496), suggesting that improved support services contribute to increased satisfaction. Additionally, satisfaction correlates moderately with perceived usefulness (0.582), indicating that users who find mobile banking more useful report higher satisfaction levels.

Table 3

Correlation analysis

| Variables | Customer satisfaction | Service quality | Customer support and assistance | Perceived Usefulness |
|---------------------------------|-----------------------|-----------------|---------------------------------|-------------------------|
| Customer satisfaction | 1 | | | |
| Service quality | .703** | 1 | | |
| | (0.000) | | | |
| Customer support and assistance | .496** | .639** | 1 | |
| | (0.000) | (0.000) | | |
| Perceived Useful- ness | .582** | .620** | .684** | 1 |
| | (0.000) | (0.000) | (0.000) | |

^{**}Correlation is significant at the 0.01 level (2-tailed).

Service quality is positively related to both customer support (0.639) and perceived usefulness (0.620), showing that better service quality enhances both support experiences and the perceived value of the app. Customer support is also strongly linked to perceived usefulness (0.684), suggesting that effective support helps improve users' perceptions of the app's utility. In conclusion, these findings highlight the importance of improving service quality, customer support, and perceived usefulness in boosting customer satisfaction, with all three factors

working together to enhance the overall mobile banking experience.

Impact of variables for all samples

The table 4 reveals key factors influencing customer satisfaction in mobile banking. The constant value of 1.784 represents the baseline customer satisfaction level when all independent variables are zero. Among the predictors, service quality has the most significant impact, with a standardized beta coefficient of 0.573 and a p-value of 0.000, indicating a strong positive relationship

between service quality and customer Perceived satisfaction. usefulness also positively affects customer satisfaction, with a standardized beta of 0.261 and a significance level of 0.000, meaning customers who find mobile banking useful are more satisfied.

Table 4 Coefficient

| Coefficientsa | Unstandardized Coefficients | | Standardized Coefficients | | G: - |
|---------------------------------|--------------------------------|-------|------------------------------|--------|-------|
| Coemcientsa | | Std. | | - ι | Sig. |
| | В | Error | Beta | | |
| (Constant) | 1.784 | 0.355 | | 5.028 | 0.000 |
| Service quality | 0.313 | 0.026 | 0.573 | 11.859 | 0.000 |
| Customer support and assistance | -0.019 | 0.021 | -0.049 | -0.942 | 0.347 |
| Perceived Usefulness | 0.110 | 0.022 | 0.261 | 5.112 | 0.000 |

a. Dependent Variable: Customer satisfaction

However, customer support and assistance does not significantly impact satisfaction, as shown by a beta value of -0.049, a t-value of -0.942, and a p-value of 0.347. This suggests that changes in customer support do not notably affect satisfaction levels. Overall, the findings emphasize that service quality and perceived usefulness are key drivers of satisfaction, while customer support has no significant direct effect.

The ANOVA table 5 assesses the overall

significance of the regression model that predicts customer satisfaction based on service quality, perceived usefulness, and customer support and assistance. The model accounts for a total sum of squares of 575.906, with 305.559 attributed to the regression (explained variance) and 270.347 representing the residual (unexplained variance). The mean square for regression is calculated as 101.853, while the residual mean square is 0.711.

Table 5 Anova

| ANOVAa | Sum of Squares | df | Mean Square | F | Sig. |
|------------|-------------------|-----|-------------|---------|-------|
| Regression | 305.559 | 3 | 101.853 | 143.165 | .000b |
| Residual | 270.347 | 380 | .711 | | |
| Total | 575.906 | 383 | | | |

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Perceived Usefulness, Service quality, Customer support and assistance

The model produces an F-statistic of 143.165, accompanied by a p-value of 0.000, indicating statistical significance at the 0.01 level. These results demonstrate that the predictors significantly contribute to explaining variations in customer satisfaction. The high F-value and the very low p-value underscore that the regression model fits the data well and that the predictors collectively play a meaningful role in determining Table 6

customer satisfaction.

The table 6 presents the model summary for predicting customer satisfaction using perceived usefulness, service quality, and customer support and assistance as predictors. The correlation coefficient (R) is 0.728, indicating a strong positive relationship between the predictors and customer satisfaction.

Model summary

| Model | R | | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|------|----------------------|----------------------------|
| 1 | .728ª | .531 | .527 | .84347 |

a. Predictors: (Constant), Perceived Usefulness, Service quality, Customer support and assistance

The R Square value of 0.531 suggests that 53.1% of the variance in customer satisfaction is explained by the model. The Adjusted R Square value, slightly lower at 0.527, accounts for the number of predictors in the model, providing a more accurate measure of explained variance for the population. The standard error of the estimate is 0.84347, indicating the average distance that observed values fall from the regression line.

Discussion

The study reveals a complex interplay between customer satisfaction and the various dimensions of mobile banking services in Nepal. The relationship between service quality, customer support and assistance, perceived usefulness and customer satisfaction with the technology acceptance model and value percept theory

is significant and supported the above results. The result is consistent with the service quality, perceived usefulness, and ease of use are critical determinants of customer satisfaction, aligning with findings from prior authors (Bohara, 2024; Wibowo, 2022). The convenience afforded by mobile banking allowing users to perform transactions anytime and anywhere has been shown to significantly enhance customer experiences and foster loyalty (Dhakal & Thakuri, 2023). Moreover, the integration of advanced technologies such as artificial intelligence for personalization further contributes to customer satisfaction by tailoring services to individual needs (Gavilanes et al., 2023). This positive correlation underscores the necessity for banks to prioritize high-quality service delivery and user-friendly interfaces to meet evolving customer expectations. Conversely,

the study also highlights challenges that can undermine customer satisfaction, particularly concerning security concerns and system reliability.

While many customers appreciate the convenience of mobile banking, apprehensions about the safety of their personal and financial information remain prevalent (Dhakal & Thakuri, 2023). This is consistent with findings from other studies that suggest security issues can act as significant barriers to mobile banking adoption (D. & K.P., 2018). Furthermore, while high service quality is associated with increased customer satisfaction, lapses in reliability or poor user interface design can lead to dissatisfaction and attrition (Thakuri et al., 2023). These contrasting results emphasize the need for banks to not only enhance service quality but also address security and usability concerns comprehensively to maintain competitive advantage in an increasingly digital landscape.

5. Conclusion and implications

This study provides significant insights into the factors influencing customer satisfaction with mobile banking services in Nepalese commercial banks. The results demonstrate that service quality and perceived usefulness has positive and significant impact on mobile banking services. In contrast, customer support and assistance has insignificant and negative relationship on mobile banking services. The analysis identified service quality as having the highest impact on customer satisfaction, followed by perceived usefulness, while customer support and assistance has a negligible effect.

Among these, service quality emerged as the most impactful factor, with features such as user-friendly apps, real-time updates, and robust security playing pivotal roles in enhancing user experience. While perceived usefulness, particularly in terms of app accessibility and informative notifications, also contributed positively to customer satisfaction, customer support was found to have a lesser direct influence. However, users expressed a strong preference for 24/7 support for urgent issues, highlighting the importance of responsive customer service. The study further identified challenges, including server reliability during peak times, which require attention to optimize overall user satisfaction and performance.

The study underscore the need for banks to focus on enhancing service quality to ensure customer satisfaction with mobile banking platforms. Efforts should be directed towards improving server reliability, especially during high-demand periods, and ensuring seamless app accessibility. Additionally, while customer support does not directly influence satisfaction, providing timely and effective support, particularly around security concerns, will foster trust and customer loyalty. Banks should also emphasize the perceived usefulness of mobile banking apps by improving notifications and addressing accessibility issues to better meet customer needs. By prioritizing these factors. including robust infrastructure, user-friendly design, and round-the-clock support, mobile banking providers can enhance customer experiences, retain existing users, and attract new customers, ultimately driving long-term satisfaction and loyalty. Finally, comparative studies between Nepal and other developing countries could highlight unique factors affecting customer satisfaction in the Nepalese circumstances and inform more targeted strategies for increasing mobile banking services.

References

- Alalwan, A., Dwivedi, Y., Rana, N., & Williams, M. (2017). Customer satisfaction with mobile banking: The impact of innovation and trust. *Technological Forecasting and Social Change*, 125, 115-126.
- Bohara, Y. (2024). Factors affecting customer satisfaction of mobile banking in Nepalese commercial banks. *Nepalese Journal of Management*, 11(2), 208–227. https://doi.org/10.3126/njm.v11i2.68867
- D., S., & K.P., V. (2018, Jan). Customer Satisfaction on Adoption of Mobile Banking Services: A Study with Special Reference to State Bank of India (SBI). *Journal of Business and Management*, 20(1), 44-50. Retrieved from https://www.iosrjournals.org/
- Derashri, P., Patel, D., & Patel, R. (2022, Mar). A Study on Mobile Banking and Its Impact on Customer Satisfaction. *International Journal of Research Publication and Reviews*, *3*, 280-284. Retrieved from https://www.ijrpr.com/
- Dhakal, A., & Thakuri, N. (2023). Factor Affecting Customer Satisfaction of Mobile Banking Services of Commercial Bank in Kathmandu Valley. *Interdiciplinary Journal of Innovation in Nepalese Academia*, 2, 52. https://doi.org/10.3126/idjina.v2i1.55964
- Gavilanes, M., Sánchez, H., Enrique, F., & Henry, A. (2023, Aug). Customer Satisfaction In Mobile Banking: A Literature Review Of Key Factors. *Remittancesreview*, 8. Retrieved from https://remittancesreview.com/
- Gokul Kumar, S., & Nagarajan, S. (2019, June). Customer Satisfaction on Mobile Banking: A Study With Reference to Selected Districts of Tamilnadu. *International Journal of Research and Scientific Innovation*, VI(VI), 149-154. Retrieved from www. rsisinternational.org
- Hallencreutz, J., & Parmler, J. (2019). Important drivers for customer satisfaction from product focus to image and service quality. *Total Quality Management & Business Excellence*, 32(5–6), 501–510. https://doi.org/10.1080/14783363.2019.1594756

- Jahan, N., & Shahria, G. (2021, Dec 20). Factors effecting customer satisfaction of mobile banking in Bangladesh: a study on young users' perspective. *South Asian Journal of Marketing*, 3(1). https://doi.org/10.1108/SAJM-02-2021-0018
- Jayawardhena, C., & Foley, P. (2000). Changes in the banking sector: The case of Internet banking in the UK. *Internet Research*, 10(1), 19-30.
- Jun, M. and Palacios, S. (2016). Examining the key dimensions of mobile banking service quality: an exploratory study. *International Journal of Bank Marketing*, 34(3), 307-326. https://doi.org/10.1108/IJBM-01-2015-0015
- Juwel Rana. (2022, Oct 31). Retrieved from REVE Chat: https://www.revechat.com/blog/customer-satisfaction-theory/
- Kvartalynyi Nazar. (2022, Dec 20). Retrieved from inoxoft.com: https://inoxoft.com/blog/what-is-mobile-banking-advantages-and-disadvantages-of-mobile-banking/
- Marikyan, D., & Papagiannidis, S. (2023). Technology Acceptance Model: A review. In Davis, *TheoryHub Book*. Creative Commons. Retrieved from http://open.ncl.ac.uk/
- Prasad Aryal, N. ., Bahadur Hamal, J. ., & Kumar Singh, G. . (2024). Determinants of Customers' Adoption of Mobile Banking in Nepalese Commercial Banks. *Nepalese Journal of Insurance and Social Security*, 7(1), 126–134. https://doi.org/10.58665/njiss.68
- Suki, N. (2013). Customers' attitudes toward mobile banking adoption in Malaysia. *Journal of Internet Banking and Commerce*, 18(2), 1-15.
- Thakuri, N., Dhakal, A., Danuwar, R., & Baral, D. K. (2023, June). Factor Affecting Customer Satisfaction of Mobile Banking Services of Commercial Bank in Kathmandu Valley. *Interdisciplinary Journal of Innovation in Nepalese Academia*, 2(1), 34-52. https://doi.org/10.3126/idjina.v2i1.55964
- Wibowo, Y. I. (2022). Literature review customer satisfaction determination and level of complaint: Product quality and service quality. *Dinasti International Journal of Digital Business Management*, *3*(4), 683-692.https://doi.org/10.30996/jem17. v3i4.3459
- Yeo, S. F., Lim, K. B., Tan, S. H., & Goh, M. L. (2016). Understanding Customer Satisfaction of Internet Banking: A Case Study In Malacca. *Procedia Economics and Finance*, *37*, 80-85. https://doi.org/10.1016/S2212-5671(16)30096-X

Appendices

The table clearly explains respondents' profiles based on the banks of respondents. As evident from table there were 384 respondents for the study. Respondents were from public banks, joint venture banks, and private bank.

Respondent-affiliated bank

| Name of Bank | Frequency | Percent | Cumulative Percent |
|----------------------------------|-----------|---------|-----------------------|
| Everest Bank Ltd | 74 | 19.3 | 19.3 |
| Nic Asia Bank Ltd | 47 | 12.2 | 31.5 |
| Nabil Bank Ltd | 38 | 9.9 | 41.4 |
| Rastriya Banijya Bank Ltd | 26 | 6.8 | 48.2 |
| Nepal Investment Mega Bank Ltd | 21 | 5.5 | 53.6 |
| Global Ime Bank Ltd | 26 | 6.8 | 60.4 |
| NMB Bank Ltd | 13 | 3.4 | 63.8 |
| Prime Commercial Bank Ltd | 32 | 8.3 | 72.1 |
| NMB Bank Ltd | 13 | 3.4 | 75.5 |
| Siddhartha Bank Ltd | 7 | 1.8 | 77.3 |
| Standard Chartered Bank Ltd | 7 | 1.8 | 79.2 |
| Prabhu Bank Ltd | 6 | 1.6 | 80.7 |
| Citizens Bank Ltd | 6 | 1.6 | 82.3 |
| Nepal Bank Ltd | 12 | 3.1 | 85.4 |
| Kumari Bank Ltd | 6 | 1.6 | 87.0 |
| Sanima Bank Ltd | 12 | 3.1 | 90.1 |
| Himalayan Bank Ltd | 20 | 5.2 | 95.3 |
| Agriculture Development Bank Ltd | 6 | 1.6 | 96.9 |
| Nepal SBI Bank Ltd | 12 | 3.1 | 100 |
| Total | 384 | 100 | |