





# “Factors influencing the use of digital payment services and customer satisfaction in banking sector: An implication for technological innovation”

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# FACTORS INFLUENCING THE USE OF DIGITAL PAYMENT SERVICES AND CUSTOMER SATISFACTION IN BANKING SECTOR: AN IMPLICATION FOR TECHNOLOGICAL INNOVATION

## Abstract

The purpose of this study is to investigate how digital payment services affect customer satisfaction in commercial banks of Nepal. Employing a quantitative design, it evaluates crucial determinants such as perceived usefulness, security, privacy, trust, and ease of use to understand their role in shaping consumers' satisfaction with digital payment services. A structured online questionnaire was distributed in 2025 to users of digital banking services. Out of 460 questionnaires, 386 valid responses were collected, giving a response rate of 83.91%. The dataset was analyzed using descriptive statistics to outline respondent characteristics, while Pearson correlation and multiple linear regression were employed to identify significant relationships among the study variables. To ensure the reliability and validity of the measurements, reliability tests were conducted, and the Shapiro-Wilk normality test was applied to assess data distribution. The respondent demographics show that 53.63% of participants were female, whereas 46.37% were male. The finding shows that perceived usefulness ( $p = 0.001$ ), privacy ( $p = 0.000$ ), trust ( $p = 0.000$ ) and ease of use ( $p = 0.000$ ) were found through multiple regression analysis to have statistically significant positive effects on customer satisfaction, while security had no significant effect ( $p = 0.713$ ). A strong overall fit was indicated by the model's ability to explain 56.2% of the variance in customer satisfaction ( $R^2 = 0.562$ ). This emphasizes the crucial role digital payment services play in boosting customer satisfaction in banking sector of Nepal.

## Keywords

digital payment, customer satisfaction, perceived usefulness, trust, privacy, ease of use

## JEL Classification

D12, M15, M31, L96

## INTRODUCTION

Rapid technological progress has transformed traditional payment methods. Digital options such as online banking, mobile wallets, and card payments now offer faster, more convenient, and more secure transactions. In Nepal, digital banking has strongly influenced consumer behavior, creating higher demand for professional and personalized services. According to research, 68% of consumers are "a little satisfied" with e-banking, and 93% feel it is more cost-effective than traditional banking (Sah, 2023). Effort anticipation, habit, and enabling conditions all affect digital bank adoption but the best indicator of acceptability is habit (Gautam & Sah, 2023). Banks should pay attention to customer trust and service quality, building up reputation in digital banking products (Subedi & Tamang, 2023). Hence, e-banking products including mobile banking and internet banking have brought major changes to commercial and retail bank transactions in Nepal (Adhikari, 2024). The present situation has transformed entirely because of digitization and technical progress, necessitating

that clients automate their financial services (Behl et al., 2024). It has now come to be viewed as a necessary part of business strategy to send customers service in their hands (Bajpai et al., 2022). The rapid use of digital technology is changing completely the landscape of consumer financial transactions. More people than ever are using smartphones and internet, so more of them can be reached session in person (Akhlaq et al., 2022). However, as the pandemic forced entities toward digital platforms in ways people may have initially resisted, service levels improved, and costs fell (B. Joshi & P. Joshi, 2023). The popularity of smartphones and easy access to online networks made public digital payment more convenient and secure (Pathak, 2024). Many users still struggle with trust and security when using digital payment systems. While digital payment service has advantages, its information-based nature can lead to glitches, login issues, and changes in service providers (Trani & Tran, 2024). Further analysis of digital payment service and its effect on customer satisfaction is needed in the context of banking sector. Many customers remain cautious due to concerns about usefulness, security, privacy, trust, and ease of use. Identifying how these issues affect satisfaction helps reveal potential gaps as usage grows and offers clearer insight into customer experience, efficiency, and innovation.

## 1. LITERATURE REVIEW AND HYPOTHESES

Digital payment services have become an essential component of modern financial systems, offering improved speed, convenience, and operational efficiency compared to traditional cash-based transactions. As digital transformation accelerates, understanding the drivers behind user adoption and satisfaction has gained considerable importance. Customer satisfaction with digital payment platforms is shaped by a combination of technological readiness, perceived value, and system performance. Analyzing these factors is particularly relevant in emerging economies, where digital literacy levels and trust in online systems are still evolving. Sthapit and Bajracharya (2019) explored how customers perceive the netting of business schools among students in Kathmandu. Their research revealed that undergraduate students are influenced by marketing strategies and Internet-related factors in their willingness to support local educational institutions. The authors noted that younger consumers tend to prioritize diminished perceived risks and heightened awareness of the perceived benefits of service offerings when considering the adoption of e-banking. Singh (2023) explores the opportunities of digital transformation to increase consumer convenience and value add by experiential immersion. In addition, based on the 2017 Global Findex, the study finds perceived usefulness to be the most important factor that motivates customers to adopt this technology. Sah (2023) investigated consumer and perception of internet banking in the presence of Nepalis studied. Researchers took into consider-

ation the factors that influenced perception most, and which would cause customers to perceive usefulness of a service as high and attach greater importance to its dimension. Thakuri et al. (2023) also examined the factors contributing to satisfaction with mobile banking services with an emphasis on important antecedents. The results from their study indicated that overall consumer expectations such as responsiveness, security, convenience and accuracy are among the determinants of users' satisfaction levels. Dangol and Kautish (2019) studied the IT security implications for e-payment systems in Nepal from public's perspective. According to their survey results, improving security level of e-payment is the top priority. Limbu (2024) analyzed consumer satisfaction towards internet banking service in the context of Nepal while investigating the factors led to such satisfaction. The study found that the security mechanism must be designed properly to establish trust for online financial transactions among the users.

Subedi and Bhandari (2024) explored the impact of internet banking on customer satisfaction in Nepalese commercial banks. Their conclusion was that safety consideration had the strongest impact on what factors influence customer satisfaction. Further, Singh (2023) investigated customer adoption of digital technology in digital banking and highlights that trust in the use of digital banking systems play a significant role in the decision to embrace these technological artefacts. Utomo and Yasirandi (2024) delved into the fast-paced development of financial technology, with a snapshot on digital wallets in the financial arena. They conclud-

ed that what people fear most is how much of their personal and private information will be protected or not in digital wallet applications. Muhtasim et al. (2022) pointed out that privacy is an essential factor for producing digital wallet service user satisfaction, since the security of personal information is significantly associated with customer satisfaction. Rumangkit et al. (2023) highlighted the significance of privacy awareness on e-wallet user happiness, and hence digital wallet service providers should always remain committed to ensuring strong data protection. Susanto et al. (2023) found that convenience, security, and usefulness positively affect customer satisfaction in Indonesia's digital banking, and this satisfaction strongly promotes customer loyalty. Dhungana et al. (2023) reported that convenience, accessibility, and security drive customer adoption of digital financial services in Pokhara, while privacy concerns still matter. They emphasized that strengthening security, improving awareness, and enhancing user experience can boost adoption. Limbu (2024) studied on customer satisfaction regarding internet-banking services in Nepal into three levels: high, medium, and low. This classification aims to identify the primary elements influencing customer contentment. The findings indicated that the most significant factor affecting satisfaction with online banking services was user-friendliness. Likewise, Subedi and Bhandari (2024) evaluated the effects of internet banking service on customer satisfaction in Nepali commercial banks, finding that the main reason customers were satisfied was that the online services were easy to use. Singh (2023) scrutinized the application of digital technologies in digital banking operations. Through this study, it is seen that the most decisive step, which prompts users to put aside their traditional manner of saving and investing money, is ease of use. Sah (2023) analyzed consumer attitudes and behavior intentions regarding internet banking in Nepal, proving convinced that ease of use has a largely decisive influence over people's positive perception towards internet bank. Building on this understanding, the study seeks to investigate the key factors affecting the use of digital payment services and their impact on customer satisfaction in the Kathmandu Valley. The results are anticipated to yield useful insights and practical strategies, contributing to policy discussions on how banks can optimally structure and enhance their digital payment systems.

To examine the elements that affect customer satisfaction regarding digital payment services within the banking sector, this research proposed the following hypotheses:

- H1: Perceived usefulness significantly influences customers' satisfaction in digital payment services.*
- H2: Security significantly affects customers' satisfaction in digital payment services.*
- H<sub>3</sub>: Trust significantly affects customers' satisfaction in digital payment services.*
- H4: Privacy significantly influences customers' satisfaction in digital payment services.*
- H5: Ease of use significantly affects customers' satisfaction in digital payment services.*

## 2. METHODOLOGY

Descriptive and analytical research methods are employed in this study to examine the impact of digital payment services on customer satisfaction within Nepalese commercial banks. The survey aims to encompass all commercial banking customers who are presently utilizing digital payment services. For this research, the authors employed quantitative methodology and acquired primary data themselves. In 2025, 460 online surveys were sent out, resulting in a collection of 386 fully completed and valid responses. This yielded a response rate of 83.91%. The questionnaire was developed using a standardized Likert scale format: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). The questionnaire was divided into two sections, beginning with demographic data collected through closed-ended questions, followed by sections covering perceived usefulness, security, trust, privacy, ease of use, and overall satisfaction with digital payments. The Shapiro-Wilk test was used to assess the normality of the data, and histograms were used to visually check for any skewed observations. The statistical analysis relied on Cronbach's Alpha to assess the internal reliability and consistency of measurement scales. The potential relationship between variables was identified using Pearson correlation

analysis. Descriptive statistics provided an overview of the data, while multiple linear regression was employed to test hypotheses concerning relationships between independent and dependent variables.

The demographic profile of respondents is presented in Table 1. Among the people who took part in the study, 53.63% identified as female and 46.37% as male, indicating a well-balanced gender distribution. Similarly, age group of 16-24 years comprises the largest portion of respondents, making up 60.10% (232). The 25-34 age group follows at 29.79% (115), while age groups (35-44, 45-54, 55 and above) have significantly fewer participants, accounting for a combined total of 10.10%. Likewise, the sample is mostly educated at the Bachelor's level, representing 70.73% (273) of the participants. Fewer participants have higher qualifications, such as Master's (23.83%, 92), M. Phil. (0.78%, 3), or Ph.D. (1.30%, 5), while 3.37% (13) reported other qualifications.

**Table 1.** Demographic profile

| Category variables |                     | Frequency | %     |
|--------------------|---------------------|-----------|-------|
| Gender             | Female              | 207       | 53.63 |
|                    | Male                | 179       | 46.37 |
| Age                | 16-24               | 232       | 60.10 |
|                    | 25-34               | 115       | 29.79 |
|                    | 35-44               | 27        | 6.99  |
|                    | 45-54               | 11        | 2.85  |
|                    | 55 and above        | 1         | 0.26  |
|                    | Ethnicity           | Brahmin   | 107   |
| Chhetri            |                     | 101       | 26.17 |
| Magar              |                     | 8         | 2.07  |
| Newar              |                     | 98        | 25.39 |
| Others             |                     | 72        | 18.65 |
| Family status      | High                | 8         | 2.07  |
|                    | Low                 | 9         | 2.33  |
|                    | Middle              | 369       | 95.60 |
| Qualification      | Bachelor's level    | 273       | 70.73 |
|                    | M. Phil.            | 3         | 0.78  |
|                    | Master's level      | 92        | 23.83 |
|                    | Others              | 13        | 3.37  |
|                    | Ph.D.               | 5         | 1.30  |
| Occupation         | Government services | 12        | 3.11  |
|                    | Private sector      | 99        | 25.65 |
|                    | Self-employed       | 25        | 6.48  |
|                    | Student             | 244       | 63.21 |
|                    | Unemployed          | 6         | 1.55  |
|                    | Total               | 386       | 100   |

### 3. RESULTS

The finding of the results shows that among 386 respondents, with 53.63% female and 46.37% male, indicating a balanced gender distribution. Ethnically, the largest groups were Brahmin (27.72%), Chhetri (26.17%), and Newar (25.39%), reflecting the typical urban demographic of the Kathmandu Valley of Nepal. A significant majority belonged to middle-income families (95.60%). Educationally, most participants were well-qualified, with 70.73% holding a bachelor's degree and 23.83% a master's degree, indicating that higher education levels may contribute to greater use of digital payment services. The summary of descriptive statistics of digital payment service is mentioned in Table 2.

Table 2 provides a detailed descriptive statistical summary on 6 variables (PERU, SEC, TRU, PRI, ETU and CSTDPS) of a sample of 386 partakers is detailed in Table 2. Each of those variables is measured in a 1.00 (minimum) to 5.00 (maximum) scale. The average scores of all variables range from 3.70 (CSTDPS) to 4.19 (SEC), which indicates that the responses, on average, are oriented towards relatively high points of scales. SEC, which has the highest mean of 4.19, indicates that this variable receives higher-level scores on overall ratings compared to other variables and CSTDPS with a mean of 3.70 shows lower but still moderate level of agreement or satisfaction. The responses exhibit moderate variability and are clustered around the mean, as evidenced by standard deviations that range from 0.57 to 0.66 across different variables. The presence of negative skewness values indicates that the data are positively skewed, revealing that most participants assigned higher scores. For instance, PERU has a skewness of -1.73, reflecting a significant negative skew, while SEC's skewness of -1.34 indicates a milder yet still skewed distribution. The kurtosis values reveal differences in the "peakedness" of the data, with PERU showing a high kurtosis of 5.67, which indicates a distribution that is sharply peaked with long tails, suggesting that most responses are concentrated around the mean. In contrast, PRI has the lowest kurtosis at 1.36, pointing to a flatter distribution and potentially more evenly distributed responses. Intermediate kurtosis levels are observed in variables such as SEC (4.61), TRU

**Table 2.** Descriptive statistics digital payment services

| Variables | Mean | Std. deviation | Skewness | Kurtosis | Min  | Max  |
|-----------|------|----------------|----------|----------|------|------|
| PERU      | 4.12 | 0.65           | -1.73    | 5.67     | 1.00 | 5.00 |
| SEC       | 4.19 | 0.58           | -1.34    | 4.61     | 1.00 | 5.00 |
| TRU       | 3.76 | 0.57           | -0.73    | 3.28     | 1.00 | 5.00 |
| PRI       | 3.76 | 0.66           | -0.71    | 1.36     | 1.00 | 5.00 |
| ETU       | 3.99 | 0.64           | -1.03    | 3.13     | 1.00 | 5.00 |
| CSTDPS    | 3.70 | 0.64           | -0.60    | 2.14     | 1.00 | 5.00 |
| N         | 386  |                |          |          |      |      |

**Table 3.** Correlation matrix

| Variables | PERU   | SEC    | TRU    | PRI    | ETU    | CSTDPS |
|-----------|--------|--------|--------|--------|--------|--------|
| PERU      | 1      | -      | -      | -      | -      | -      |
| SEC       | .495** | 1      | -      | -      | -      | -      |
| TRU       | .500** | .364** | 1      | -      | -      | -      |
| PRI       | .387** | .305** | .508** | 1      | -      | -      |
| ETU       | .522** | .521** | .516** | .475** | 1      | -      |
| CSTDPS    | .529** | .409** | .621** | .555** | .627** | 1      |

Note: \*\*. Correlation is significant at the 0.01 level.

(3.28), and ETU (3.13), highlighting variations in peakedness and tail thickness. Overall, there is a discernible inclination towards higher values and differences in the distribution and concentration of responses across all variables, reflecting a general trend towards elevated ratings. The data reveal a diverse range of concentration and distribution patterns.

Table 3 represents correlation coefficients among only six variables. The results for PERU show that it had a moderate positive relationship of 0.495\*\* with SEC and 0.500\*\* with TRU, as PERU increases so do both SEC and TRU. The relationship between PERU and PRI is slightly weaker at 0.387\*\*, but still significant, in other words, there is a moderate positive relationship. TRU and PRI are strongly related with a coefficient of 0.508\*\*. In the same way, ETU shows relatively strong positive relationships with other variables. It has coefficients of 0.522\*\* when correlated to PERU, 0.521\*\* for SEC and 0.516\*\* on TRU – this follows a pattern in which an increasing ETU value increases any one of these three other variables similarly. The correlation between CSTDPS and ETU is 0.627\*\*, indicating an extremely strong positive relationship; while correlations are of similar strength for CSTDPS with TRU (0.621\*\*), PRI (0.555\*\*) and SEC (0.409\*\*), respectively.

Shapiro-Wilk normality test findings presented in Table 4. Since all the p-values for CSTDPS, PERU,

SEC, TRU, PRI, and ETU are higher than 0.05, so it can be concluded that these variables follow a normal distribution. With this information available, the data from the collected variables exhibit a normal distribution.

**Table 4.** Shapiro-Wilk test

| Variables | Statistic | df  | Sig. |
|-----------|-----------|-----|------|
| PERU      | 0.866     | 386 | 0.05 |
| SEC       | 0.904     | 386 | 0.05 |
| TRU       | 0.938     | 386 | 0.05 |
| PRI       | 0.953     | 386 | 0.05 |
| ETU       | 0.922     | 386 | 0.05 |
| CSTDPS    | 0.954     | 386 | 0.05 |

**Table 5.** Reliability analysis

| Variables | Full form  | Cronbach's Alpha | N of items |
|-----------|--|------------------|------------|
| PERU      | Perceived usefulness                                   | 0.819            | 5          |
| SEC       | Security   | 0.804            | 5          |
| TRU       | Trust  | 0.770            | 5          |
| PRI       | Privacy  | 0.836            | 5          |
| ETU       | Easiness to use  | 0.865            | 5          |
| CSTDPS    | Customer satisfaction through digital payment services | 0.820            | 5          |

Table 5 represents the Cronbach's Alpha coefficient, which showed that all the values were over the permissible level of 0.7. The scale items of constructs in questionnaires range from 0.770 to 0.865, which is consistent in the study. Therefore, the data are satisfactory for further analysis pur-

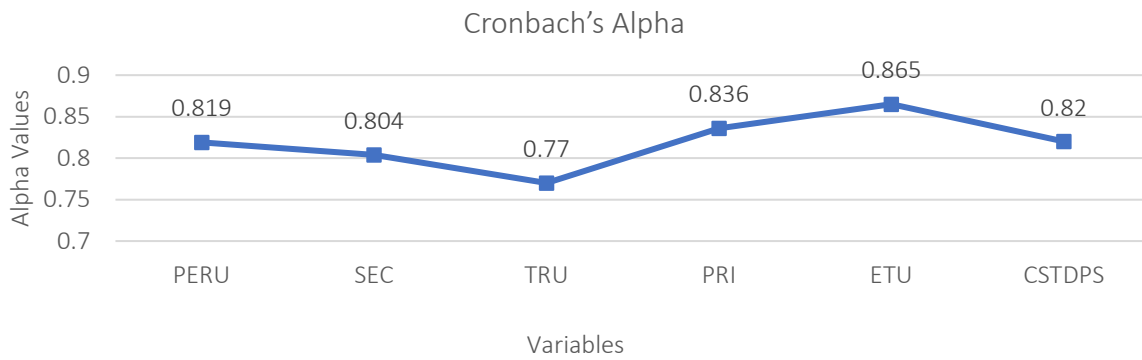


Figure 1. Reliability analysis

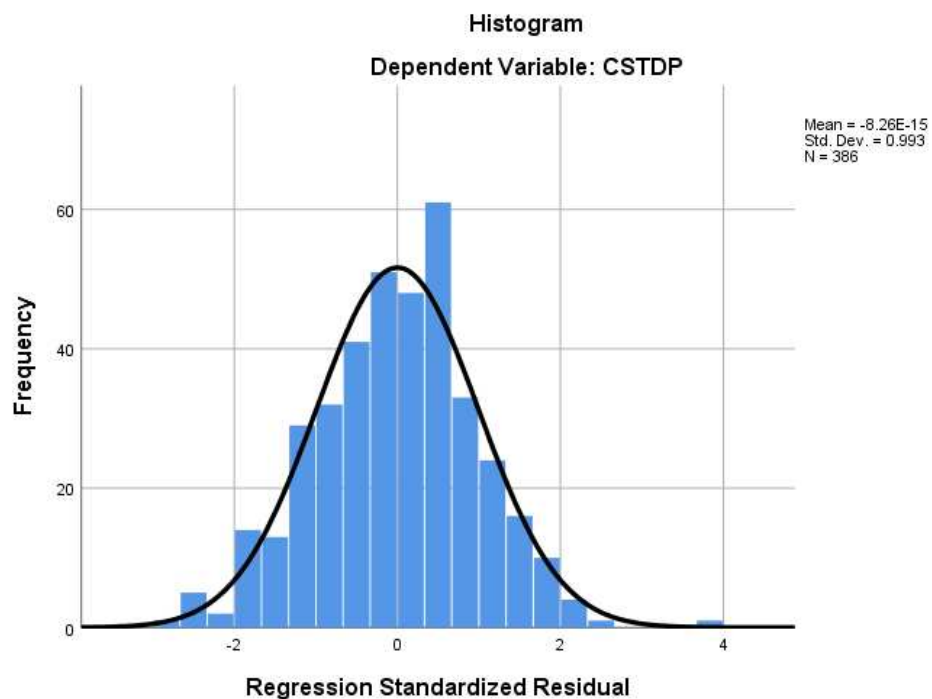


Figure 2. Histogram of dependent variable

poses (Coopers & Schindler, 2006; Hinton et al., 2004). The reliability analysis is also presented in Figure 1.

Figure 2 shows the histogram of customer satisfaction through digital payment. The histogram of standardized residuals for CSTDPS shows an approximately normal distribution, closely following the normal curve. The mean is near zero, indicating no bias, and the standard deviation is

close to one, confirming appropriate spread. These results suggest that the normality assumption for residuals is met, supporting the reliability of the regression analysis.

Table 6 provides a comprehensive overview of the model's performance in explaining the variance of the dependent variable. The independent variables accounted for approximately 56.2% of the variance in CSTDPS, which based on R-square value

Table 6. Model summary – satisfaction of customer

| Model | R    | R-square | Adjusted R-square | Std. error of the estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| 1     | .749 | 0.562    | 0.556             | 0.42378                    | 2.164         |

**Table 7.** ANOVA

|   | Model      | Sum of squares | df  | Mean square | F      | Sig. |
|---|------------|----------------|-----|-------------|--------|------|
| 1 | Regression | 87.452         | 5   | 17.490      | 97.392 | .000 |
|   | Residual   | 68.244         | 380 | 0.180       |        |      |
|   | Total      | 155.696        | 385 |             |        |      |

**Table 8.** Regression analysis

| Variables  | Unstandardized coefficients |            | Standardized coefficients | t      | Sig.  | Collinearity statistics |       |
|------------|-----------------------------|------------|---------------------------|--------|-------|-------------------------|-------|
|            | B                           | Std. error | Beta                      |        |       | Tolerance               | VIF   |
| (Constant) | -0.081                      | 0.190      |                           | -0.428 | 0.669 |                         |       |
| PERU       | 0.139                       | 0.043      | 0.143                     | 3.249  | 0.001 | 0.599                   | 1.669 |
| SEC        | 0.017                       | 0.046      | 0.015                     | 0.368  | 0.713 | 0.659                   | 1.517 |
| TRU        | 0.317                       | 0.049      | 0.284                     | 6.450  | 0.000 | 0.596                   | 1.678 |
| PRI        | 0.201                       | 0.040      | 0.209                     | 5.058  | 0.000 | 0.675                   | 1.481 |
| ETU        | 0.298                       | 0.046      | 0.299                     | 6.493  | 0.000 | 0.543                   | 1.840 |

Note: Dependent variable: consumer satisfaction through digital payment services (CSTDPS).

of 0.562 is a good fit. Thus, the selection of predictor variables for the optimal model indicates that overfitting is not present. The adjusted R-square value of 0.556 suggests a slight reduction in the R-square. Additionally, the Durbin-Watson statistic, which is 2.164, shows that there is no autocorrelation among the residuals. Overall, the fit of the model is satisfactory.

Table 7 displays the results obtained from the ANOVA analysis. The analysis shows that  $p < 0.000$  and  $F = 97.392$ , leading to the conclusion that the model is highly significant.

Table 8 shows the outcomes of a multiple regression analysis that was done to determine the impact of five independent variables on consumer satisfaction through digital payment service (CSTDPS). These variables are PRU, SEC, TRU, PRI, and ETU. There is no baseline effect when all predictors are zero, as the constant term, which has an unstandardized coefficient of -0.081, is not statistically significant ( $p = 0.669$ ). Statistically significant positive effects on consumer satisfaction were observed among the predictors PERU ( $\beta = 0.139$ ,  $p =$

0.001), TRU ( $\beta = 0.317$ ,  $p < 0.001$ ), PRI ( $\beta = 0.201$ ,  $p < 0.001$ ), and ETU ( $\beta = 0.298$ ,  $p < 0.001$ ). This indicates that customers are more satisfied with digital payment systems when they experience improvements in perceived usefulness, trust, privacy, and ease of use. On the other hand, SEC demonstrates a little and insignificant impact ( $\beta = 0.017$ ,  $p = 0.713$ ). Because the Variance Inflation Factor (VIF) values are within acceptable ranges (1.481 to 1.840) and the tolerance values are within acceptable ranges (0.543 to 0.675), the collinearity statistics show that multicollinearity is not an issue.

Hypothesis testing summary is presented in Table 9.

## 4. DISCUSSION

The regression results indicate that perceived usefulness, trust, privacy, and ease of use significantly and positively influence customer satisfaction, supported by their low p-values and notable beta values. Ease of use and trust were the most influential variables, highlighting their importance in determining user satisfaction. Perceived usefulness

**Table 9.** Hypothesis testing results

| Symbol | Hypothesis   | p-value | Results  |
|--------|--|---------|----------|
| H1     | Perceived usefulness significantly influences customers' satisfaction in digital payment services. | 0.001   | Accepted |
| H2     | Security significantly affects customers' satisfaction in digital payment services.                | 0.713   | Rejected |
| H3     | Trust significantly affects customers' satisfaction in digital payment services.                   | 0.000   | Accepted |
| H4     | Privacy significantly influences customers' satisfaction in digital payment services.              | 0.000   | Accepted |
| H5     | Ease of use significantly affects customers' satisfaction in digital payment services.             | 0.000   | Accepted |

and privacy also played meaningful roles in the model. However, security showed no significant effect on the customers' satisfaction. The analysis of the first hypothesis (*H1*), which stated that perceived usefulness positively impacts customer satisfaction in digital payment service, turned out to be statistically significant ( $p < 0.005$ ). Thus, the proposed hypothesis is accepted. It also indicates that perceived usefulness plays an important role in increasing customer satisfaction, consistent with previous research. This finding reflects the results of Sthapit and Bajracharya (2019) who believe that placing increasing importance on perceived usefulness reduces the thinking about risks and therefore makes it easier to attract customers. Additionally, Singh (2023) proposed that in digital banking sector, perceived usefulness has a significant effect on customer decision. The analysis of the second hypothesis (*H2*), which proposed that security positively influences customer satisfaction in digital payment service, revealed an insignificant relationship ( $p > 0.713$ ). This suggests that the hypothesis is rejected. Thus, the study concluded that in Internet banking, security vampires do not really benefit from the viewpoint users. This result contradicted Limbu (2014), who found that digital banking platforms found security to be vital in building customer confidence. Likewise, Subedi and Bhandari (2024) discovered that a secure setting brings about greater satisfaction as well as wider distribution of online banking services. Similarly, the third hypothesis (*H3*) stated that trust significantly affects customers' satisfaction in digital payment services, found to be significant ( $p < 0.005$ ). Thus, formulated hypothesis is accepted, the study found that trust is a major

reason for customer satisfaction. This result supports earlier research, i.e., Limbu (2024) studied that first to point out that lack of trust scares customers away from digital finance. Singh (2023) found it as an important factor affecting buying inclination in the sector. Sah (2023) also showed that trust is the most influential element affecting users' perceptions about online banking. The fourth hypothesis (*H4*), which stated that privacy has a positively significant impact on customer satisfaction of digital payment service. Therefore, the posited hypothesis is accepted ( $p < 0.005$ ) and indicates privacy as fundamental to the market for enhancing customer satisfaction. Utomo and Yasirandi (2024) emphasized that privacy has an impact on user satisfaction. In their research, they found that customers aspire to grant their personal data within digital wallet systems for their priority. Muhtasim et al. (2022) put much stress on the theme of privacy impact on digital wallet services. The fifth hypothesis (*H5*) posited that ease of use positively influences customer satisfaction with a digital payment service. Therefore, the formulated hypothesis is accepted ( $p < 0.0001$ ), and ease of use does significantly contribute to customer satisfaction in digital banking services. The result underscores Limbu's (2024) contention that ease of use is among the most important standpoints of online banking satisfaction. Similarly, ease of use was an indispensable prerequisite for online banking satisfaction, according to Subedi and Bhandari (2024), advised banks to make their sites more user friendly. Singh (2023) discovered that ease of use was a critical consideration in the user's final choice of bank.

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## CONCLUSION

This study aimed to examine the determinants influencing the adoption of digital payment services and to assess their effect on customer satisfaction in Nepalese commercial banks. The findings reveal that ease of use, trust, privacy, and perceived usefulness exert a positive and statistically significant impact on customer satisfaction. Among these variables, ease of use was identified as the strongest predictor, emphasizing the critical role of simple, intuitive, and accessible digital interfaces in enhancing user experience. Trust also significantly influenced satisfaction, highlighting the importance of dependable and credible digital transaction systems. Privacy emerged as another important factor, reflecting users' strong concerns regarding the safeguarding and proper use of their personal data. Additionally, perceived usefulness positively contributed to customer satisfaction, suggesting that users prefer digital payment services that efficiently meet their financial needs and simplify transaction activities. Notably, security was not found to have a statistically significant influence on customer satisfaction. This may

indicate that users regard security as a standard or assumed feature of digital payment services, or that they place greater emphasis on convenience and ease of use than on explicit security measures. The study suggests that the successful implementation of digital payment systems in Nepal largely relies on enhancing ease of use, trust, privacy, and functional effectiveness, particularly for young and educated users. Therefore, banks, financial institutions, and policymakers are encouraged to strengthen the digital payment ecosystem to foster greater adoption, higher levels of customer satisfaction, and long-term participation in the digital economy.

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## REFERENCES

- Adhikari, N. B. (2024). Impact of Electronic Banking on Customer Satisfaction in Nepalese Commercial Banks. *Kalika Journal of Multidisciplinary Studies*, 6(1), 66-77. <https://doi.org/10.3126/kjms.v6i1.72383>
- Akhlaq, N., Khan, T., & Khan, F. (2022). Role of fintech in bridging financial inclusion GAP: during and post-COVID 19 world. *International Journal of Humanities, Law and Social Sciences*, IX(1), 110-130. Retrieved from [https://www.researchgate.net/publication/366291499\\_ROLE\\_OF\\_FINTECH\\_IN\\_BRIDGING\\_FINANCIAL\\_INCLUSION\\_GAP\\_DURING\\_AND\\_POST-COVID\\_19\\_WORLD](https://www.researchgate.net/publication/366291499_ROLE_OF_FINTECH_IN_BRIDGING_FINANCIAL_INCLUSION_GAP_DURING_AND_POST-COVID_19_WORLD)
- Bajpai, S., Mazhar, S. S., Khan, F. S., Prakash, G., & Singh, A. (2022). Empirical study on customer satisfaction with the services of the Life Insurance Corporation at Lucknow. *Journal of Information and Optimization Sciences*, 43(7), 1871-1883. <https://doi.org/10.1080/02522667.2022.2128538>
- Behl, A., Pereira, V., Nigam, A., Wamba, S., & Sindhwani, R. (2024). Knowledge development in non-fungible tokens (NFT): a scoping review. *Journal of Knowledge Management*, 28(1), 232-267. <https://doi.org/10.1108/JKM-12-2022-0937>
- Coopers, D. R., & Schindler, P. S. (2006). *Business Research Methods* (9th ed.). Mac Grow – Hill. Publishing Co. Ltd. New Delhi. India.
- Dangol, S., & Kautish, S. (2019). IT security related issues and challenges in electronic payment system in Nepal: A study from customer's perspective. *LBEF Research Journal of Science, Technology and Management*, 1(2), 85-103. Retrieved from [https://www.researchgate.net/publication/338006887\\_IT\\_SECURITY\\_RELATED\\_ISSUES\\_AND\\_CHALLENGES\\_IN\\_ELECTRONIC\\_PAYMENT\\_SYSTEM\\_IN\\_NEPAL\\_A\\_STUDY\\_FROM\\_CUSTOMER'S\\_PERSPECTIVE](https://www.researchgate.net/publication/338006887_IT_SECURITY_RELATED_ISSUES_AND_CHALLENGES_IN_ELECTRONIC_PAYMENT_SYSTEM_IN_NEPAL_A_STUDY_FROM_CUSTOMER'S_PERSPECTIVE)
- Dhungana, B. R., Adhikari, A., Ojha, D., Ranabhat, D., Lamichhane, K., & Acharya, S. (2023). Customer perception toward digital financial services: A case of Pokhara, Nepal. *Butwal Campus Journal*, 6(1), 1-11. <https://doi.org/10.3126/bcj.v6i1.62573>
- Gautam, D. K., & Sah, G. K. (2023). Online banking service practices and its impact on e-customer satisfaction and e-customer loyalty in developing country of South Asia-Nepal. *Sage Open*, 13(3). <https://doi.org/10.1177/21582440231185580>
- Hinton, P., McMurray, I., & Brownlow, C. (2004). *SPSS explained* (2nd ed). New York, NY: Routledge. <https://doi.org/10.3126/dristikon.v13i1.56056>
- Joshi, B. R., & Joshi, P. R. (2023). Digital Banking in Nepal: Embracing the Potential During the COVID-19 Pandemic. *Journal of Durgaxmi*, 2(1), 1-13. <https://doi.org/10.3126/jdl.v2i1.65390>

11. Limbu, B. (2024). *Satisfaction Levels of Customers with Online Banking Sectors in Nepal*. Retrieved from <https://urn.fi/URN:NBN:fi:amk-2024060922366>
12. Muhtasim, D. A., Tan, S. Y., Hassan, M. A., Pavel, M. I., & Susmit, S. (2022). Customer satisfaction with digital wallet services: An analysis of security factors. *International Journal of Advanced Computer Science and Applications*, 13(1), 195-206. <https://dx.doi.org/10.14569/IJAC-SA.2022.0130124>
13. Pathak, A. (2024). Digital payment in Nepal: an overview and recommendations. *Rupandehi Campus Journal*, 4(1), 25-34. <https://doi.org/10.3126/rcj.v4i1.62916>
14. Rumangkit, S., Billman, A., & Gunawan, Z. (2023). Analysis of The Factors Influencing Electronic Wallet User Satisfaction Based on The Self-Awareness. In *Proceedings of 2023 International Seminar on Intelligent Technology and Its Applications (ISITIA)* (pp. 654-659). IEEE. <https://doi.org/10.1109/ISITIA59021.2023.10221147>
15. Sah, G. K. (2023). Consumers' Attitudes and Behavioural Intentions on Internet Banking in Nepal. *Dristikon: A Multidisciplinary Journal*, 13(1), 83-96. <https://doi.org/10.3126/dristikon.v13i1.56056>
16. Singh, C. (2023). *Adoption of Digital Technologies by Customers for Digital Banking*. Retrieved from <https://urn.fi/URN:NBN:fi:amk-2023060722758>
17. Sthapit, A., & Bajracharya, N. (2019). Customer Perception towards Adoption of e-banking Services in Kathmandu: A Survey of Business School Students. *Journal of Business and Social Sciences Research*, 4(1), 13-26. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3599689](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3599689)
18. Subedi, D. P., & Bhandari, D. R. (2024). Online Banking Services and Customer Satisfaction in Nepalese Commercial Banks. *Jurnal Buana Teknologi Pendidikan [Buana Journal of Educational Technology]*, 1(2), 56-69. Retrieved from <https://jurnal.unipasby.ac.id/jurnalbuanatep/article/view/9250>
19. Subedi, P. P., & Tamang, A. (2023). Factors Influencing Consumer Adoption of Online Banking in Nepal. *Journal of Nepalese Business Studies*, 16(1), 99-111. <https://doi.org/10.3126/jnbs.v16i1.62386>
20. Susanto, S. A., Manek, M. V., Setiawan, R. A., & Mustikasari, F. (2023). Customer experience in digital banking: The influence of convenience, security, and usefulness on customer satisfaction and customer loyalty in Indonesia. *Devotion: Journal of Research and Community Service*, 4(8), 1671-1685. <https://doi.org/10.59188/devotion.v4i8.544>
21. Thakuri, N., Dhakal, A., Danuwar, R. K., Baral, D. K., & Koirala, A. (2023). 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. Retrieved from <https://nepjol.info/index.php/idjina/article/view/55964>
22. Trani, A. H., & Tran, D. A. (2024). Customer experience and satisfaction with digital banking services. *Proceedings of International Conference on Business, Economics, Social Sciences, and Humanities*, 7, 548-555. <https://doi.org/10.34010/icobest.v7i.565>
23. Utomo, R. G., & Yasirandi, R. (2024). Securing Digital Wallet Loyalty: Unveiling the Impact of Privacy and Security. *Scientific Journal of Informatics*, 11(2), 287-302. <https://doi.org/10.15294/sji.v11i2.2423>