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# Customer Satisfaction with E-banking Services: A Case Study of Undergraduate Students

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**Abstract:** *The growth of e-banking has been accelerated by digital platforms that enable customers to access financial services remotely. Increased smartphone usage and internet accessibility have driven higher adoption, particularly among students and general consumers. Customer satisfaction, influenced by factors such as security, reliability, and convenience, is crucial to the success of online banking services. This study aims to assess the impact of security, reliability, and convenience on customer satisfaction with e-banking services. A causal-comparative research design was employed, targeting undergraduate students from Pokhara University who use e-banking services. A total of 209 students were selected through convenience sampling. Primary data was collected via a structured questionnaire based on a five-point Likert scale. Correlation and regression analyses were used to interpret the data and derive conclusions. The study identifies a significant relationship between security, reliability, convenience, and customer satisfaction with e-banking services. Notably, security and convenience are key determinants of customer satisfaction, whereas reliability has a comparatively minor influence. These findings suggest that banks and financial institutions (BFIs) should prioritize enhancing the security, reliability, and ease of use of their digital platforms. Additionally, government support in developing secure network infrastructure is essential for optimizing customer satisfaction with online banking. Future research could explore other influencing factors using larger sample sizes and alternative methodologies.*

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**Keywords:** customer satisfaction, security, reliability, convenience

## I. INTRODUCTION

Electronic banking (e-banking) refers to the use of digital platforms to conduct financial transactions, enabling customers to access banking services without visiting physical

branches. This innovation has revolutionized the financial sector by providing greater convenience, enhanced speed, and improved efficiency (Khan et al., 2023). The global adoption of e-banking has been driven by technological advancements, increased internet penetration, and heightened customer expectations for secure and reliable services (Kaur et al., 2021). E-banking integrates features such as 24/7 accessibility, mobile banking applications, and personalized services, catering to the dynamic needs of users and fostering customer satisfaction.

The evolution of e-banking can be traced back to the late 20th century when banks began adopting electronic systems to enhance efficiency and reduce operational costs. The introduction of automated teller machines (ATMs) in the 1960s marked the initial phase of e-banking, followed by telephone banking and electronic fund transfers in the 1980s (Alsudairi & Alaundairi, 2012). The advent of the internet in the 1990s further revolutionized the banking sector, enabling online banking services that allowed customers to access their accounts, transfer funds, and pay bills remotely (Kumbhar, 2011). The 21st century has witnessed rapid advancements in mobile banking and blockchain technologies, which have further enhanced the security, speed, and convenience of banking services (Ranjan, 2024).

Globally, e-banking has become a cornerstone of the financial industry. Developed nations have embraced digital banking solutions to provide seamless and efficient services to their customers. Countries such as the United States, the United Kingdom, and Germany have integrated advanced technologies like artificial intelligence and machine learning (ML) to offer personalized financial services (Sasono et al., 2021). In emerging economies, the adoption of e-banking has been accelerated by increasing smartphone penetration and improved internet connectivity. For example, India has implemented innovative digital payment systems like Unified Payments Interface (UPI), which has transformed the way banking services are delivered (Shah, 2011). Similarly, African nations like Kenya have leveraged mobile banking platforms like M-Pesa to extend financial services to unbanked populations (Chiguvu, 2023).

In Nepal, the e-banking sector is steadily growing, driven by advancements in information technology and increasing consumer demand for digital financial services. The introduction of Internet and mobile banking has enabled Nepali banks to offer 24/7 services, reducing the need for physical visits to branches. Banks have adopted features like biometric authentication, real-time notifications, and secure payment gateways to enhance customer satisfaction and trust (Kaur et al., 2021). Despite these advancements, challenges such as limited internet penetration in rural areas, low financial literacy, and security concerns remain significant barriers to the widespread adoption of e-banking in Nepal (Nupur, 2010).

The integration of information and communication technology (ICT) has transformed the banking industry by enabling the delivery of efficient, secure, and customer-centric services. ICT has facilitated the development of online platforms that offer a wide range of banking services, including account management, loan applications, and fund transfers. These

innovations have not only improved operational efficiency but also enhanced customer experiences by providing convenience and accessibility (Widayanti & Alam, 2024).

In Nepal, the adoption of e-banking among students and general consumers is growing, particularly due to the increasing availability of smartphones and internet access. Empirical studies suggest that students prefer e-banking for its convenience, allowing them to manage finances efficiently while balancing academic commitments. Factors such as security, reliability, and user-friendliness play a critical role in influencing customer satisfaction and trust (Amin, 2007). Moreover, the ability of digital banking platforms to automate routine tasks and reduce transaction costs has made e-banking an attractive option for young users (Sasono et al., 2021).

Despite the growing adoption of e-banking, existing research has not adequately explored a clear connection between online banking services and customer satisfaction among undergraduate students. Thus, the study was conducted to examine the impact of security, reliability, and convenience on customer satisfaction with e-banking services among undergraduate students in Kathmandu. By addressing existing research gaps, it seeks to provide valuable insights for financial institutions to tailor their services effectively, ensuring they meet the specific needs of this growing and dynamic demographic.

## II. LITERATURE REVIEW

**Theoretical review.** Customer satisfaction in e-banking can be understood through the Theory of Reasoned Action (TRA), as outlined by Sadeghi and Farokhian (2011). TRA suggests that individuals' attitudes and subjective norms shape their behavioral intentions, which subsequently drive their actions. In the context of e-banking, customer satisfaction depends on perceptions of security, reliability, and convenience. Security ensures the protection of sensitive data, fostering trust and positive attitudes toward e-banking platforms. Reliability, defined by consistent and accurate service delivery, builds confidence in the system. Convenience, reflected in the ability to conduct transactions anytime and anywhere, significantly enhances user satisfaction, aligning with rising expectations shaped by technological advancements (Firdous & Farooqi, 2017).

As customer expectations continue to rise, these three factors—security, reliability, and convenience—have become crucial in determining satisfaction with e-banking services. When users perceive that their expectations are met through robust security measures, dependable functionality, and seamless accessibility, they develop favorable attitudes toward digital banking. This aligns with TRA's assertion that attitudes, shaped by beliefs and experiences, influence behavioral intentions. Financial institutions must focus on strengthening these areas to increase adoption rates and sustain customer satisfaction (Shakya, 2016; Firdous & Farooqi, 2017).

**Empirical review.** Empirical studies confirm that multiple factors, including security, reliability, and convenience, shape customer satisfaction in e-banking. Security is a primary determinant, as it directly impacts customer trust. Banu et al. (2019) highlighted that Indian banks have integrated user-friendly online banking systems with advanced security features to combat cyber threats and meet customer expectations. Strong security measures prevent fraud and encourage adoption, a finding supported by Mwiya et al. (2022), who observed that customers perceiving high security are more likely to trust and engage with online banking platforms. Similarly, Raja et al. (2019) emphasized the importance of integrating modern payment methods with secure systems to ensure seamless transactions. Moreover, Gautam and Sah (2023) and Ayinaddis et al. (2023) found that internet banking security and privacy concerns significantly impact customer trust and satisfaction. Lamsal (2022) further confirmed that security, responsiveness, efficiency, and ease of use all influence customer satisfaction with online banking services.

Reliability is another key factor affecting customer satisfaction. Lamsal (2022) stated that reliability—defined by consistent, accurate, and error-free service—outweighs other determinants such as responsiveness and efficiency. Tien et al. (2021) found that customers show high satisfaction levels when they perceive online banking to be reliable. Similarly, Sharma and Singh (2023) argued that reliability enhances the overall value of e-banking services, particularly in competitive markets where trust is essential. Zeleke and Chauhan (2022) further established that reliability, assurance, and tangibility positively impact customer satisfaction.

Convenience also plays a crucial role in shaping customer satisfaction. Ismail and Alawamleh (2017) observed that customers prioritize services that save time and effort, enabling them to access their accounts anytime and anywhere. Gautam and Sah (2023) identified user-friendliness, website functionality, and accessibility as key aspects of convenience that enhance the overall customer experience. Similarly, Zeleke and Chauhan (2022) confirmed the strong relationship between convenience and satisfaction, alongside service quality dimensions such as responsiveness and assurance. Almansour & Elkrggli (2023) further asserted that convenience significantly contributes to positive customer experiences with online banking services.

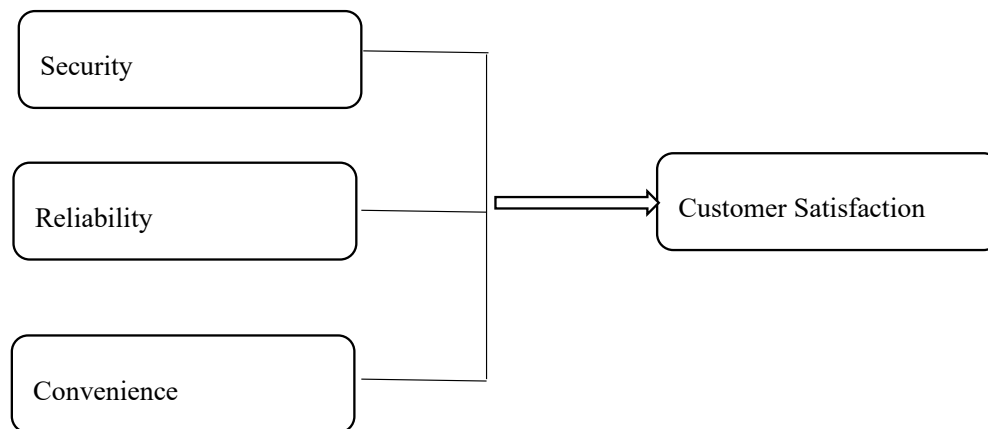
**Research gap.** Despite extensive research on customer satisfaction in e-banking, significant gaps remain, particularly regarding the perspectives of specific demographic groups such as undergraduate students. Most studies have focused on the general population or banking customers at large, overlooking the unique expectations and behaviors of younger users, who are technologically adept but may have varying levels of financial literacy (Lamsal, 2022; Ismail & Alawamleh, 2017). Additionally, while security, reliability, and convenience are well-documented determinants of satisfaction (Banu et al., 2019; Mwiya et al., 2022), limited empirical research explores how these factors specifically influence undergraduate students'

satisfaction with e-banking. Furthermore, the interplay between financial literacy and the perceived reliability of e-banking platforms among students has been largely unexamined, leaving a gap in understanding how educational interventions could enhance their satisfaction. Addressing these gaps will provide valuable insights into how financial institutions can optimize e-banking services for this rapidly growing and dynamic user segment.

**Conceptual framework.** *Figure 1* is the conceptual framework of the study. The conceptual framework illustrates the relationship between key factors influencing customer satisfaction in e-banking. Security, reliability, and convenience serve as independent variables, directly affecting customer satisfaction, which is the dependent variable. The framework highlights how these three factors collectively determine customer satisfaction levels in digital banking. This model provides a foundation for analyzing the impact of these determinants on users' overall banking experience and satisfaction. Security ensures the protection of user data, fostering trust in e-banking services. Reliability reflects the system's consistency and accuracy, influencing user confidence. Convenience enhances accessibility and ease of transactions, increasing user engagement. The variables under study are operationalized as follows:

**Figure 1**

*Conceptual framework of the study*



**Customer satisfaction.** Customer satisfaction is the degree to which a good or service fulfills or exceeds a customer's expectations (Manandhar & Timilsina, 2023). Customers are given confidence by a user-friendly interface, strong security measures, and always being reachable via desktop or mobile phone, which is essential to make the customers satisfied.

**Security.** Security is a way of ensuring, safeguarding against, and deterring hackers from acquiring sensitive records and customer information (Li, et al., 2021). Maintaining online banking security is vital for preserving confidential information about customers, sustaining confidence, and adhering to regulations.

**Reliability.** The user's reliance on the banking institution's online service's ability to keep up with its obligations and maintain website updates has been recognized as a reliability (Mwiya, et al., 2022). As it concerns online banking, reliability is characterized as the seamless, flawless, and consistent operation of banking services.

**Convenience.** Convenience is an essential ingredient for banks to thrive in the global market by leveraging their competitive advantage based on convenience, which allows concerned institutions to acquire a significant market share by providing simple and accessible service (Thakuri, et al., 2023). Convenience appears as versatility for users to succeed the accounts and complete transactions from any location, backed by an easy-to-use interface that makes navigating and using easier.

**Research hypothesis.** The study's hypotheses are grounded in the growing significance of e-banking among undergraduate students, where security, reliability, and convenience play crucial roles in shaping customer satisfaction. Security ensures data protection, fostering trust and confidence in digital transactions. Reliability reflects the system's consistency and accuracy, influencing users' dependence on e-banking services. Convenience, characterized by accessibility and ease of use, enhances overall user experience. Given the increasing reliance on digital banking, this study examines the impact of these factors on customer satisfaction among undergraduate students, testing the proposed hypotheses to understand their influence on the adoption and perception of e-banking services.

*H1:* There is an impact of security on customer satisfaction among undergraduate students.

*H2:* There is an impact of reliability on customer satisfaction among undergraduate students.

*H3:* There is an impact of convenience on customer satisfaction among undergraduate students.

### III. RESEARCH METHODOLOGY

The study employed a descriptive research design to examine the demographic characteristics of participants and their overall satisfaction with e-banking services. Additionally, a causal-comparative research design was used to assess the impact of security, reliability, and convenience on customer satisfaction. The target population comprised undergraduate students from Pokhara University (PU) who actively use e-banking services. A total of 245 students were selected using a convenience sampling method, allowing for efficient data collection from readily accessible and willing participants. This sampling approach was chosen for its feasibility and cost-effectiveness in targeting students familiar with e-banking. Primary data was gathered through a structured questionnaire incorporating a five-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree," enabling respondents to express their perceptions of security, reliability, convenience, and overall satisfaction. The data collection process was conducted in April 2024, with 245 questionnaires distributed. Out of these, 209 valid responses were received, achieving a response rate of 85.3%. To

ensure a comprehensive analysis, various statistical techniques were employed, including cross-tabulation, mean, standard deviation, independent t-tests, correlation analysis, and regression analysis. These methods facilitated the interpretation of relationships among variables and provided insights into the factors influencing customer satisfaction with e-banking services. The findings of this study contribute to a deeper understanding of student preferences and expectations regarding digital banking, aiding financial institutions in enhancing their e-banking platforms to better serve this demographic.

**Reliability analysis.** Before conducting the analysis, it is essential to ensure the reliability of the measurement items. In accordance with Gliem and Gliem (2003), Cronbach's Alpha was utilized to assess the reliability and validity of each question in the dataset. This reliability analysis is crucial in determining the internal consistency of the variables under study, ensuring that the questionnaire items effectively measure the intended constructs. A high Cronbach's Alpha value indicates strong internal consistency, validating the use of the selected items for further statistical analysis. The reliability of the items in the present study is demonstrated in *Table 1*.

**Table 1**

*Reliability results*

S.N.	Variables	Cronbach's Alpha Coefficient
1	Security	0.822
2	Reliability	0.803
3	Convenience	0.851
4	Customer Satisfaction	0.886

*Table 1* presents the Cronbach's Alpha values for each variable, demonstrating the internal consistency of the measurement items. The Cronbach's Alpha for security is 0.822, indicating a strong level of reliability. Similarly, the reliability variable has a coefficient of 0.803, which exceeds the acceptable threshold of 0.7, confirming its consistency. Convenience exhibits an even higher Cronbach's Alpha value of 0.851, reflecting strong internal consistency. Lastly, customer satisfaction has the highest reliability coefficient at 0.886, suggesting excellent internal consistency. These results collectively indicate that the items used in the study are reliable and effectively measure their respective constructs.

#### IV. RESULTS AND DISCUSSION

This section presents the findings of the study, followed by an in-depth discussion of their implications. The analysis focuses on the impact of security, reliability, and convenience on customer satisfaction with e-banking services among undergraduate students. Various statistical techniques, including correlation and regression analysis, were applied to interpret the relationships among these variables.

**Table 2***Gender distribution*

	Frequency	Percent
Female	93	44.5
Male	116	55.5
Total	209	100

*Table 2* presents the gender distribution of respondents. It indicates that male students (55.5%) participated more than female students (44.5%), suggesting that males are more engaged in e-banking services than females. The disparity in participation reflects a possible trend where male students have a higher inclination toward using digital banking solutions.

**Table 3***Usage of e-banking services among respondents*

	Frequency	Percent
No	2	1
Yes	207	99
Total	209	100

*Table 3* illustrates the usage of e-banking services among respondents. A vast majority (99%) confirmed they use e-banking, while only 1% reported not using it. This overwhelming adoption rate signifies that e-banking is widely accepted and preferred by undergraduate students, likely due to its accessibility and efficiency compared to traditional banking.

**Table 4***Online banking services utilized*

	Frequency	Percent
Inter-account transfer	35	16.7
Interbank Transfer	48	23
Online bill Payment	106	50.7
Others	20	9.6
Total	209	100

*Table 4* highlights the types of online banking services utilized by respondents. The most common service used is online bill payment (50.7%), followed by interbank transfers (23%) and inter-account transfers (16.7%). A smaller proportion (9.6%) used other services. These results suggest that students primarily use e-banking for transactional purposes, particularly for bill payments.



Table 5 presents the descriptive statistics of the key study variables. Security (Mean = 3.75) and convenience (Mean = 3.67) show relatively higher importance in determining customer satisfaction (Mean = 3.70), while reliability (Mean = 3.35) is rated lower. This suggests that while reliability is a factor, students prioritize security and ease of use in their banking experiences.

**Table 5**  
*Descriptive statistics*

Variables	Mean	Std. Deviation
Security	3.75	0.87
Reliability	3.35	0.88
Convenience	3.67	0.86
Customer Satisfaction	3.70	0.90

Table 6 displays the results of the independent sample t-test, analyzing differences in perceptions between male and female respondents regarding security, reliability, convenience, and customer satisfaction. The table depicts no difference in perception of security across males and females, as the p-value is 0.69, greater than 0.05. Likewise, it shows no difference in reliability across males and females, as the p-value is greater than 0.05, i.e., 0.398. Meanwhile, the table illustrates no difference in convenience across males and females, as its p-value is also greater than 0.05, i.e., 0.32. Ultimately, there is no difference in customer satisfaction with online banking services across males and females, as the p-value is 0.451, greater than 0.05

**Table 6**  
*Independent sample t-test*

Variables	Group	N	Mean	SD	p-value
Security	Male	116	3.73	0.88	0.69
	Female	93	3.78	0.86	
Reliability	Male	116	3.31	0.91	0.398
	Female	93	3.41	0.84	
Convenience	Male	116	3.61	0.88	0.32
	Female	93	3.73	0.43	
Customer Satisfaction	Male	116	3.65	0.91	0.451
	Female	93	3.75	0.88	

**Correlation analysis.** The study examines customer satisfaction as the dependent variable, with security, reliability, and convenience as the independent variables. To determine the relationship between these variables, Karl Pearson's correlation coefficient was employed, unveiling the association between customer satisfaction and the factors of security, reliability, and convenience.

**Table 7**

*Relationship between variables*

Variables	Security	Reliability	Convenience	Satisfaction
Security	1			
Reliability	.661**	1		
Convenience	.770**	.731**	1	
Satisfaction	.760**	.662**	.788**	1

Table 7 presents the correlation coefficient of 0.760, which signifies a strong positive relationship between security and customer satisfaction. This finding suggests that higher security levels are associated with greater customer satisfaction. Additionally, the correlation coefficient between customer satisfaction and reliability is 0.662, while the correlation coefficient between customer satisfaction and convenience is 0.788. These results indicate that reliability and convenience also share a positive relationship with customer satisfaction, albeit with varying degrees of strength.

**Regression analysis.** To further analyze the impact of security, reliability, and convenience on customer satisfaction, a regression analysis was employed. Table 8 reports an  $R^2$  value of 0.684, indicating that 68.4% of the variance in customer satisfaction can be explained by security, reliability, and convenience. The F-statistic value of 147.931 with a p-value of less than 0.001 confirms that the model is statistically significant at a 5% significance level. The results indicate that security ( $p < 0.001$ ) and convenience ( $p < 0.001$ ) significantly impact on customer satisfaction, while reliability ( $p = 0.065$ ) does not hold statistical significance. These findings suggest that security and convenience are pivotal factors in shaping customer satisfaction, whereas reliability plays a minimal role.

Based on the analysis of the collected data, the findings reveal that the relationship between security and customer satisfaction (H1) is supported, indicating that higher security levels in e-banking services positively influence customer satisfaction. On the other hand, the relationship between reliability and customer satisfaction (H2) is not supported, suggesting that reliability does not have a significant impact on customer satisfaction in the context of e-banking services for undergraduate students. Lastly, the relationship between convenience and customer satisfaction (H3) is supported, meaning that greater convenience in using

e-banking services leads to higher customer satisfaction. These findings highlight the importance of security and convenience in shaping customer satisfaction, while the role of reliability appears less critical in this context.

**Table 8**

*Model summary*

	Coefficient	Sig.	R2	F statistic	Hypothesis result
(Constant)	0.292	0.08			
Security	0.36	<.001	0.684	147.931 (<0.001)	Supported
Reliability	0.112	0.065			Not supported
Convenience	0.458	<.001			Supported

Value in parenthesis is significant value

The regression equation is expressed as:

$$Y = 0.292 + 0.36X_1 + 0.112X_2 + 0.458X_3 + e$$

Where:

Y = Customer Satisfaction

X<sub>1</sub> = Security

X<sub>2</sub> = Reliability

X<sub>3</sub> = Convenience

e = Error term

**Discussion.** The study's findings highlight the significant role of security in influencing customer satisfaction in online banking. These results align with Lamsal (2022), who confirmed that security, responsiveness, efficiency, and ease of use significantly impact on customer satisfaction with online banking services. Similar findings were reported by Firdous and Farooqi (2017), who observed a positive correlation between security and customer satisfaction. Moreover, the research supports the conclusions of Gautam and Sah (2023) and Ayinaddis et al (2023), who emphasized the substantial influence of security and privacy on internet banking.

Regarding reliability, the study reveals that it does not significantly impact customer satisfaction, a finding that is largely consistent with Mwiya et al. (2022), who observed that customers generally express satisfaction with the bank's reliability in online services. Tien et al. (2021) similarly noted that customers reported high satisfaction with banking reliability. However, this finding contrasts with Zeleke and Chauhan (2022), who argued that reliability, assurance, and tangibility have a positive impact on customer satisfaction.

The study also finds that convenience plays a crucial role in enhancing customer satisfaction. This aligns with the findings of Zeleke and Chauhan (2022), who reported that convenience, empathy, tangibility, and responsiveness positively influence customer satisfaction. The results are also similar to those of Almansour and Elkrggli (2023), who emphasized the importance of convenience in providing a satisfactory e-banking experience. Furthermore, Ismail and Alawamleh (2017) found that the high convenience of e-banking services contributed to their widespread adoption among Jordanian consumers.

## V. CONCLUSION AND IMPLICATIONS

This study highlights the critical role of security and convenience in shaping customer satisfaction with e-banking services among undergraduate students. The strong positive correlation between security and customer satisfaction underscores the necessity for e-banking platforms to implement stringent security measures, such as encryption, multi-factor authentication, and fraud detection systems, to foster a safe and trustworthy banking environment. Similarly, the significant impact of convenience emphasizes the importance of user-friendly, accessible platforms that enhance the overall banking experience for students. In contrast, the study found no significant relationship between reliability and customer satisfaction in this context. While reliability remains a fundamental aspect of service quality, it appears to be less decisive in influencing satisfaction among undergraduate users of e-banking services. This suggests that service providers should prioritize improving security and convenience rather than focusing predominantly on reliability. These findings indicate that customer expectations in digital banking are increasingly driven by security and ease of use rather than traditional service reliability. Financial institutions should align their strategies accordingly to enhance customer satisfaction and drive greater adoption of e-banking services. The study contributes to both theoretical and practical discussions in the digital banking sector, offering insights into the key factors that influence customer satisfaction and guiding service providers in optimizing their e-banking offers.

These insights contribute to both theoretical understanding and practical applications in the digital banking sector, emphasizing areas that require attention for enhancing user experience and satisfaction. The study's findings are consistent with the Theory of Reasoned Action (TRA), which posits that security and convenience significantly shape customer satisfaction in e-banking. Enhanced security fosters trust, while greater convenience improves the user experience, leading to higher satisfaction. However, the absence of a significant relationship between reliability and customer satisfaction suggests that reliability may be less critical for undergraduate users, who may prioritize security and ease of use over service dependability.

## REFERENCES

- Almansour, B. Y., & Elkrggli, S. (2023). Factors influencing customer satisfaction on e-banking services: A Study of Libyan Banks. *International Journal Technology, Innovation, and Management*, 3(1), 35-42. doi:10.54489/ijtim.v3i1.211
- Alsudairi, M. A., & Alaundairi, M. A. (2012). E-service quality strategy: Achieving customer satisfaction in online banking. *Journal of Theoretical and Applied Information Technology*, 38(1), 6-24.
- Amin, H. (2007). An empirical investigation on consumer acceptance of internet banking in Islamic Bank. *Labuan Bulletin of International Business & Finance*, 5(1), 41-65.
- Ayinaddis, S. G., Taye, B. A., & Yirsaw, B. G. (2023). Examining the effect of electronic banking service quality on customer satisfaction and loyalty: An implication for technological innovation. *Journal of Innovation and Entrepreneurship*, 12(22), 1-18. doi:10.1186/s13731-023-00287-y
- Banu, A. M., Mohamed, N. S., & Parayitam, S. (2019). Online banking and customer satisfaction: Evidence from India. *Asia-Pacific Journal of Management Research and Innovation*, 15(2), 68-80. doi:10.1177/2319510X19849730
- Chiguvu, D. (2023). Analysis of the effectiveness of e-customer service platform on customer satisfaction at ABSA, Botswana. *International Journal of Research in Business and Social Science*, 12(1), 57-71. doi:https://doi.org/10.20525/ijrbs.v12i1.2283
- Firdous, S., & Farooqi, R. (2017). Impact of internet banking service quality on customer satisfaction. *Journal of Internet Banking and Commerce*, 22(1), 2-17.
- 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*, 1-14. doi:10.1177/21582440231185580
- Gliem, J. A. & Gliem, R. R. (2003). Meta-analysis of alpha Cronbach's coefficient. *Midwest Research to Practice Conference in Adult, Continuing, and Community Education*
- Ismail, L. B., & Alawamleh, M. (2017). The impact of online banking on customer satisfaction in Jordan. *Journal of Organisational Studies and Innovation*, 4(2), 1-13.
- Kaur, B., Kiran, S., Grima, S., & Apoga, R. R. (2021). Digital banking in Northern India: The risks on customer satisfaction. *Risks*, 9(11), 1-18. doi:10.3390/risks9110209
- Khan, F. N., Arshad, M. U., & Munir, M. (2023). Impact of e-service quality on e-loyalty of online banking customers in Pakistan during the Covid-19 pandemic: mediating role of e-satisfaction. *Future Business Journal*, 9(23), 1-12. doi:10.1186/s43093-023-00201-8
- Kumbhar, V. M. (2011). Factors affecting customer satisfaction in e-banking: Some evidence from Indian banks. *Management Research and Practices*, 3(4), 1-14.

- Lamsal, B. P. (2022). Internet banking services and customer satisfaction in Nawalpur district. *The Journal of Madhyabindu Multiple Campus*, 7(1), 1-10.
- Li, F., Lu, H., Hou, M., Kangle, C., & Darbandi, M. (2021). Customer satisfaction with bank services: The role of cloud services, security, e-learning and service quality. *Elsevier*, 64(1), 1-11. doi:10.1016/j.techsoc.2020.101487
- Manandhar, R. B., & Timilsina, J. (2023). Online shopping and customer satisfaction in college-level students in Kathmandu valley. *The Journal of Business and Management*, 7(2), 76-88.
- Mwiya, B., Katai, M., Bwalya, J., Kayekesi, M., Sekela, K., Kasanda, E., Mwenya, D. (2022). Examining the effects of electronic service quality on online banking customer satisfaction: Evidence from Zambia. *Cogent Business & Management*, 9(1), 1-23. doi:10.1080/23311975.2022.2143017
- Nupur, J. M. (2010). E-banking and customers' satisfaction in bangladesh: An analysis. *International Review of Business Research Papers*, 6(4), 145-156.
- Raja, M., Gopalakrishnan, M. M., Reddy, R. V., & Subbarao, A. N. (2019). Customer satisfaction on online banking services offered by selected private and public sector banks in Chennai city. *Journal of Management*, 6(2), 310-319. <https://ssrn.com/abstract=3526120>
- Ranjan. R (2024). The evolution of digital banking: impacts on traditional financial institutions. *International Journal of Progressive Research In Engineering Management And Science*, 4(9), 753-763. <https://www.researchgate.net/publication/388081587>
- Sadeghi, T., & Farokhian, S. (2011). The role of behavioral adoption theories in online banking services. *Middle-East Journal of Scientific Research*, 7(3), 374-380.
- Sasono, I., Jebaedi, A. D., Novitasari, D., Wiyono, N., Riyanto, R., Oktabrianto, O., Waruwu, H. (2021). The impact of e-service quality and satisfaction on customer loyalty: empirical evidence from internet banking users in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(4), 465-473. doi:10.13106/jafeb.2021
- Shah, A. (2011). Factors influencing online banking customer satisfaction and their importance in improving overall retention levels: An Indian banking perspective. *Information and Knowledge Management*, 1(1), 45-54.
- 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.
- Sharma, A., & Singh, R. (2023). Reliability in digital banking: A competitive advantage. *International Journal of Financial Research*, 14(2), 112-129.

- Thakuri, N. Dhakal, A., Danuwar, R 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, DOI: 10.3126/idjina.v2i1.55964
- Tien, N. H., Anh, D. B., Dung, H. T., On, P. V., Anh, V. T., Dat, N. V., & Tam, B. Q. (2021). Factors impacting customer satisfaction at Vietcom bank in Vietnam. *Himalayan Economics and Business Management*, 2(4), 44-51. doi:10.47310/Hjebm2021.v2i04.006
- Widayanti, A., & Alam, I. A. (2024). The influence of e-banking and service quality on loyalty in customers of bank bri unit bukit Kemuning Lampung Utara. *Formosa Journal of Multidisciplinary Research*, 3(2), 305-316. doi:10.55927/fjmr.v3i2.8262
- Zelege, S., & Chauhan, S. (2022). The effect of electronic banking services on customer satisfaction: Evidence from commercial banks of Ethiopia operating in Hawassa City Administration. *Journal of Positive School Psychology*, 6(8), 3228-3246.

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