



Cash to Cashless Economy: Consumer Perceptions of Digital Transactions in Kathmandu

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Abstract

Background: Nepal's rapid growth in mobile banking, e wallets, and QR payments is reshaping urban financial behavior, yet adoption remains uneven due to infrastructural, behavioral, and trust barriers.

Objective: This study examines how performance expectancy, effort expectancy, social influence, and facilitating conditions shape consumer perceptions of digital transactions in Kathmandu Valley.

Methodology: Using a quantitative design, a structured questionnaire was administered to 391 users of eSewa, Khalti, IME Pay, and Fonepay. Data were analyzed in SPSS via descriptive statistics, reliability tests, and multiple regression.

Findings: All four factors positively and significantly influence consumer perceptions; performance expectancy and facilitating conditions are the strongest predictors. Users value convenience and efficiency but cite connectivity issues, security concerns, and low digital literacy among older adults as constraints.

Conclusion: Digital payments are viewed as efficient, yet infrastructural and behavioral challenges impede a full cashless transition. Enhancing reliability, security, and user awareness is critical.

Implication: Policymakers, banks, and fintech firms should prioritize infrastructure, regulation, and financial literacy to build a secure, inclusive digital payment ecosystem.

Keywords: cashless economy, digital transactions, consumer perception, technology acceptance, Kathmandu valley, financial inclusion

Introduction

In the modern era, the advancement of financial technology (FinTech) has significantly transformed global financial systems, paving the way for economies to transition from traditional cash based mechanisms to digital and cashless modes of transaction. Digital payment systems have emerged as an efficient, convenient, and transparent means of

conducting monetary exchanges, enabling users to perform transactions without the physical exchange of cash (Yang et al., 2021). The rapid adoption of digital technologies has transformed consumer behavior and financial institutions' operations, changing how individuals understand, manage, spend, save, transfer, and interact with money while making financial activities more convenient, accessible, efficient, and integrated into daily life.

The movement toward a cashless economy has gained momentum globally as governments and financial organizations increasingly emphasize digital transformation to enhance financial inclusion and transparency. Digital transactions, including mobile banking, internet banking, e wallets, and QR based payment systems, are now central to this economic shift. Studies have shown that consumer perception plays a crucial role in determining the success of these systems, as adoption depends largely on trust, perceived usefulness, and technological convenience (Joshi et al., 2021; Luarn & Lin, 2005; Yang et al., 2021). However, despite these technological advancements, concerns related to transaction security, privacy, and system reliability continue to affect consumer confidence and adoption rates (Luarn & Lin, 2005; Yoezer, 2023).

In Nepal, the transition toward a cashless economy is still in its developing phase. While digital payment platforms such as eSewa, Khalti, IME Pay, and Fonepay have expanded access to online financial services, cash transactions remain dominant in everyday commerce. The adoption of digital financial systems has been encouraged by the Nepal Rastra Bank through its Digital Payment Promotion Strategy, yet infrastructural challenges, digital illiteracy, and inconsistent internet connectivity hinder widespread usage (Budiarti et al., 2021; Kamal et al., 2023; Yoezer, 2023). Although digital transactions are gaining popularity in urban centers like Kathmandu Valley, the overall pace of adoption varies across demographic and socio economic groups.

Recent studies have examined consumer attitudes toward digital payments and identified multiple determinants that influence their acceptance. It is noted that perceived ease of use, reliability, and social influence are key factors shaping consumer perception (Joshi et al., 2021; Yang et al., 2021). Conversely, it was found that while factors such as convenience and speed enhance adoption, issues of data security and privacy remain critical obstacles (Yoezer, 2023).

Furthermore, Chaveesuk et al. (2022) highlighted the acceleration of digital transaction adoption during the COVID 19 pandemic, indicating how external circumstances can influence consumer behavior and reliance on financial technology (Chaveesuk et al., 2022).

Against this background, Kathmandu Valley represents a dynamic and suitable environment to explore the transition from cash to cashless financial behavior. The region's growing exposure to digital technologies, coupled with diverse consumer demographics, provides a rich setting for examining user perceptions and behavioral intentions. Therefore, this study seeks to analyze how performance expectancy, effort expectancy, social influence, and facilitating conditions influence consumer perceptions of digital transactions in Kathmandu Valley, thereby contributing to a broader understanding of Nepal's movement toward a digital economy.

The increasing global shift from traditional cash-based economies to digital transaction systems has brought significant transformation to financial behavior, yet the pace and pattern of this transition vary widely among countries. In Nepal, efforts toward establishing a cashless economy have gained attention in recent years as part of broader financial digitalization initiatives. Despite the rapid expansion of mobile banking, e-wallets, and QR-based payment systems, cash remains the predominant mode of exchange for most individuals and businesses. This persistence of cash usage raises questions about consumer readiness, trust, and perception toward digital transactions (Yang et al., 2021).

While digital transactions offer numerous benefits—such as convenience, security, and transparency—their success depends heavily on consumers' perceptions and willingness to adopt new technologies. Studies have shown that factors including performance expectancy, effort expectancy, social influence, and facilitating conditions determine user acceptance and

continued use of digital payment platforms (Joshi et al., 2021; Luarn & Lin, 2005; Yang et al., 2021). However, empirical evidence in the context of Nepal remains limited. Although institutions like Nepal Rastra Bank have introduced strategic initiatives to promote digital payment systems, user adoption has been hindered by concerns about data security, transaction failures, and inadequate digital literacy (Budiarti et al., 2021; Kamal et al., 2023; Yoezer, 2023).

Existing research in other countries has revealed mixed findings regarding consumer perceptions of digital transactions. For instance, perceived security is identified as a key determinant of mobile banking adoption (Luarn & Lin, 2005), while security was not statistically significant in influencing users' attitudes toward digital payments in other contexts (Yoezer, 2023). These inconsistencies underscore the importance of context-specific research, particularly in developing economies where infrastructural, social, and behavioral factors interact in complex ways.

In Nepal's urban context—especially within Kathmandu Valley—the use of digital payment systems is increasing due to greater access to smartphones and internet connectivity. Yet, a significant proportion of consumers continue to rely on cash, reflecting uncertainty, lack of awareness, or skepticism about digital platforms. Understanding the determinants that shape these perceptions is essential for policymakers and service providers aiming to promote a cashless financial ecosystem. Therefore, this study seeks to examine how performance expectancy, effort expectancy, social influence, and facilitating conditions influence consumer perceptions of digital transactions in Kathmandu Valley.

Research Objective

The main objective of this study is to analyze consumers' perceptions toward digital transactions in Kathmandu Valley and to identify the factors that influence their acceptance and usage. Specifically,

the study aims to examine how performance expectancy, effort expectancy, social influence, and facilitating conditions affect users' perceptions and behavioral intentions toward adopting digital payment systems.

Literature Review

The transformation from a cash based to a cashless economy has been widely studied across global and regional contexts, focusing on the behavioral, technological, and institutional determinants of digital transaction adoption. Previous studies have consistently shown that user perception plays a crucial role in determining the level of acceptance and continued use of digital financial systems. The effectiveness of digital transactions depends on the consumer's perception of trust, ease of use, and system security, highlighting that positive perceptions enhance both satisfaction and adoption (Joshi et al., 2021; Luarn & Lin, 2005; Yang et al., 2021).

Similarly, it was found that consumer intention is shaped by perceived usefulness, convenience, and reliability of digital platforms, suggesting that these factors directly influence behavioral intention toward digital transactions (Joshi et al., 2021; Yang et al., 2021). Contrastingly, it was reported that while convenience and speed significantly contribute to adoption, perceived security had no statistically significant effect in some contexts, illustrating that the importance of influencing variables varies with context (Yoezer, 2023). However, other studies identified security and trust as primary determinants of technology adoption, underscoring the need for strong institutional mechanisms to maintain confidence in digital financial systems (Luarn & Lin, 2005; Yang et al., 2021).

During the COVID 19 pandemic, it was observed that a notable increase in the adoption of cashless payments occurred due to the need for contactless and hygienic financial alternatives, suggesting that external conditions can accelerate behavioral change toward digital payment usage

(Chaveesuk et al., 2022; Chaudhary & Mishra, 2023). In the South Asian context, it was indicated that perceived ease of use, technological awareness, and government initiatives significantly affect users' willingness to adopt financial technologies (Budiarti et al., 2021; Kamal et al., 2023; Mishra, 2023; Mishra & Mishra, 2024).

The collective findings from these studies affirm that the adoption of digital transactions is influenced by multiple interrelated factors—technological accessibility, user trust, effort expectancy, and social encouragement (Yang et al., 2021; Joshi et al., 2021; Luarn & Lin, 2005). Despite such international evidence, empirical studies in Nepal remain limited, and the understanding of consumer behavior within its socio economic context requires further exploration (Mishra, 2026; Chaudhary & Mishra, 2023). Therefore, this study adopts a theoretical framework based on performance expectancy, effort expectancy, social influence, and facilitating conditions to analyze how these factors influence consumer perception toward digital transactions in Kathmandu Valley.

A digital economic framework organizes the economy around enabling digital infrastructure, platforms, financial services, business ecosystems, skills, and a trust environment so that digital technologies translate into productivity, innovation, and fiscal gains. In public financial management, this framework is operationalized through AI and blockchain, which enhance forecasting, compliance monitoring, fraud detection, real time auditing, and transparent procurement—thereby strengthening accountability and reducing leakages in government spending (Celestin et al., 2025). AI's capacity for anomaly detection and predictive analytics directly supports fraud prevention and regulatory oversight in emerging markets, aligning with the trust and compliance pillars of the digital economy (Celestin et al., 2026a). In management accounting, integrating AI, big data, and predictive analytics optimizes business decisions and resource allocation, reflecting the digital business and skills pillars of the framework (Celestin et al.,

2026b). Behavioral accounting further enriches this framework by explaining how cognitive biases and decision environments shape financial choices that drive corporate strategy, thereby informing the design of digital decision-support systems and governance (Celestin et al., 2026c). On the regulatory and tax side, transfer pricing analysis highlights the challenges of multinational tax avoidance and the need for data driven, coordinated policy responses—key elements of the digital economy's trust and institutional capabilities pillar (Celestin et al., 2026d). Finally, green fintech adoption pathways and constraints in Africa illustrate how digital financial services and sustainable finance can be embedded within the same data driven architecture, advancing inclusion and sustainability goals under a coherent digital economic framework (Celestin et al., 2026e).

Methodology

This study employs a quantitative research design to examine the determinants influencing consumer perceptions of digital transactions in Kathmandu Valley. The quantitative approach allows for the systematic collection, measurement, and statistical analysis of data, enabling the identification of patterns and relationships between variables. The study focuses on four independent variables—performance expectancy, effort expectancy, social influence, and facilitating conditions—drawn from the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). Consumer perception toward digital transactions serves as the dependent variable.

A descriptive and analytical research design has been adopted to capture both the general attitudes of consumers and the specific factors affecting their perceptions. The descriptive component assists in presenting the demographic and behavioral characteristics of the respondents, while the analytical component explores the causal relationships between the variables. The study is cross-sectional in nature, as data were collected at a single point in time to represent the existing

perceptions of digital transaction users within Kathmandu Valley.

Primary data were obtained through a structured questionnaire administered to individuals who use digital transaction platforms such as eSewa, Khalti, IME Pay, Fonepay, and mobile banking services. The questionnaire was designed using a five-point Likert scale to measure respondents' level of agreement on statements related to the four constructs. Convenience sampling was used due to the absence of a complete sampling frame for digital transaction users; however, efforts were made to include diverse respondents from banks, shopping centers, and market areas within the metropolitan region to ensure representativeness.

A total of 398 questionnaires were distributed, of which 395 were returned, and 391 valid responses were included in the final analysis after screening for completeness and consistency. The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics such as mean and standard deviation were employed to summarize respondents' profiles and general perceptions. Reliability analysis using Cronbach's Alpha was performed to ensure internal consistency of the measurement scales. Furthermore, multiple regression analysis was applied to assess the influence of the independent variables on consumer perception toward digital transactions.

Table 1

Variables and Their Definition

Construct	Variable	Items
Performance Expectation (PE)	Perceived usefulness	I think digital transaction would be a helpful tool for my daily tasks.
	Transaction speed	I could complete my financial transactions more rapidly if I used digital transaction.
	Time-saving	It would save me time to accomplish other things in my daily life if I used digital transactions.
	Convenience	My convenience would increase with digital transaction.
	Task efficiency	Many everyday tasks will be completed more quickly using a digital transactions system.
Effort Expectation (EE)	Clarity of interaction	My use of digital transactions would be clear and simple.
	Learning ease	I would have no trouble learning how to utilize digital transaction.
	Ease of use	I think using digital transaction method to pay is simple.
	User-friendliness	Digital transactions are simple and user-friendly.
Social Influence (SI)	Social influence perception	People who have behavioral influence on me would advise me to utilize digital transactions when available.
	Significance of others' opinion	People who matter to me would advise me to utilize digital transaction for payments when available.
	Social support	I may get help from people I care about while using digital transactions. (when available)
	Opinion appreciation	Individuals whose viewpoints I value tend to like the digital transactions method.
Facilitating Conditions (FC)	Resource availability	The fast internet and contemporary gadgets required to utilize the digital transactions method are available.

Construct	Variable	Items
	Knowledge and competence	I'm knowledgeable enough to use the digital transactions method.
	Availability of assistance	To assist with the challenges of the digital transaction system, a dedicated person (or group) is available.
	Customer support satisfaction	The digital transaction system is supported by reliable and accessible customer support services that can aid in case of any issues or challenges.
	Integration and accessibility	The digital transaction system is seamlessly integrated into the existing infrastructure, making it easy to access and use across various platforms and devices.
Customer Perception (CP)	Convenience and time saving perception	I perceive digital translation services as a convenient and time-saving option for my financial transactions.
	Acceptance and flexibility appreciation	I appreciate the wide acceptance of digital transactions across various merchants and establishments, providing me with flexibility in payment options.
Customer Perception (CP)	Transaction tracking and monitoring value	I value the ability to track and monitor my transactions easily through digital transactions records or digital receipts.
	Image and innovation perception	I perceive digital transaction as a modern and innovative way to make payments, reflecting positively on my personal image and tech-savviness.
	Checkout experience enhancement	Digital transaction systems offer a seamless and efficient checkout process, enhancing my overall shopping experience.

Note. Adapted and rephrased from Maharjan et al. (2024)

Secondary data were obtained from journals, reports of the Nepal Rastra Bank, government publications, and relevant academic studies to support the analysis and provide theoretical grounding. The integration of both primary and secondary data ensured a comprehensive understanding of the behavioral and institutional context surrounding Nepal's transition toward a cashless economy. Overall, the research methodology provides a structured framework for empirically investigating the determinants of consumer perceptions toward digital transactions in Kathmandu Valley.

Results and Discussion

This study analyzes primary data collected from 391 respondents in Kathmandu Valley to examine factors influencing consumer perceptions of digital transactions. Using SPSS, it assesses the effects of performance expectancy, effort expectancy, social influence, and facilitating conditions on consumer perception. Descriptive and inferential analyses are applied to explain behavioral tendencies, identify significant relationships, and provide insights into the transition toward a cashless economy in Nepal.

Table 2*Descriptive Statistics for All Samples*

Variables/Statistics	Mean	Median	Std. Deviation	Variance
Performance Expectation	4.11	4.00	0.661	0.437
Effort Expectation	4.11	4.00	0.690	0.476
Social Influence	4.03	4.00	0.668	0.447
Facilitating Conditions	4.05	4.00	0.689	0.474
Customer Perception	4.13	4.20	0.675	0.455
Clarity of interaction				

Note. Field Survey (2025)

The descriptive analysis was based on data collected from 391 valid respondents from Kathmandu Metropolitan City to examine factors influencing consumer perceptions toward digital transactions. The respondents were predominantly young adults, particularly those between 20 and 40 years of age, indicating that younger populations constitute an important segment of digital payment users. Both male and female respondents participated in the study in relatively balanced proportions, providing adequate gender representation in the sample. A substantial proportion of respondents reported frequent use of digital payment platforms, including eSewa, Khalti, IME Pay, and Fonepay, for bill payments, online shopping, fund transfers, and other routine financial activities. This pattern reflects the increasing integration of digital payment systems into everyday economic activities in urban Nepal.

The data were analyzed using SPSS through descriptive statistics, reliability analysis, correlation analysis, and regression analysis. The study examined four independent variables—performance expectancy, effort expectancy, social influence, and facilitating conditions—and their relationship with the dependent variable, consumer perception toward digital transactions. The descriptive findings indicate that respondents generally held positive perceptions of digital payment systems. Most respondents agreed that digital transactions save time, reduce transaction-related difficulties, and provide greater convenience

than traditional cash-based payment methods. These findings are consistent with previous studies that have identified convenience, usefulness, and efficiency as important factors influencing consumers' adoption and continued use of digital payment technologies (Budiarti et al., 2021; Yang et al., 2021).

The reliability analysis demonstrated that the measurement scales achieved Cronbach's alpha values above the generally accepted threshold of 0.70, indicating satisfactory internal consistency among the constructs. Correlation analysis further revealed statistically significant and positive relationships between performance expectancy, effort expectancy, social influence, facilitating conditions, and consumer perception. This suggests that consumers are more likely to develop favorable perceptions toward digital transactions when they perceive digital payment systems as useful, easy to use, socially supported, and adequately facilitated by technological infrastructure. These findings are consistent with the technology acceptance literature, which emphasizes perceived usefulness and ease of use as important determinants of technology-related behavioral intentions (Luarn & Lin, 2005).

The regression results further indicated that all four independent variables had statistically significant effects on consumer perception, with performance expectancy and facilitating conditions emerging as the strongest predictors. Respondents

particularly emphasized efficient system performance, network stability, accessibility, and technical support as important factors in developing confidence in digital payment platforms. This finding is consistent with evidence that perceived usefulness and enabling conditions significantly contribute to consumers' readiness to adopt digital transactions (Joshi et al., 2021; Yoezer, 2023). Similarly, Yang et al. (2021) found that perceived benefits and other technology-related factors play an important role in consumers' intention to adopt e-wallets.

Despite the generally positive perceptions, a small proportion of respondents reported concerns regarding internet disruptions, transaction failures, and other technical problems. Such concerns indicate that limitations in digital infrastructure and service reliability may continue to constrain the wider adoption of digital payment systems. Previous research has likewise emphasized the importance of reliable digital infrastructure and service quality in sustaining consumers' continued

use of digital payment services (Chaveesuk et al., 2022). Moreover, the growing use of financial technology as an alternative payment mechanism demonstrates the broader transformation of traditional financial transactions in the digital era (Budiarti et al., 2021).

Overall, the findings indicate that consumers in Kathmandu Metropolitan City are increasingly receptive to digital financial practices. Performance expectancy, effort expectancy, social influence, and facilitating conditions collectively contribute to favorable consumer perceptions toward digital transactions. However, infrastructural limitations, transaction reliability, awareness gaps, and concerns related to digital security remain important challenges. Therefore, strengthening digital infrastructure, improving transaction reliability, enhancing user awareness, and providing effective technical support may further accelerate the transition from cash-based transactions toward a more digitally oriented payment ecosystem in Nepal.

Table 3

Relationship Between Variables for All Samples

Variables	Performance Expectation	Effort Expectation	Social Influence	Facilitating Conditions	Customer Perception
Performance Expectation	1				
Effort Expectation	.809** (0.001)	1			
Social Influence	.749** (0.001)	.775** (0.001)	1		
Facilitating Conditions	.751** (0.001)	.782** (0.001)	.834** (0.001)	1	
Customer Perception	.763** (0.001)	.764** (0.001)	.796** (0.001)	.831** (0.001)	1
Hypotheses result	Rejected at 0.01 level	Rejected at 0.01 level	Rejected at 0.01 level	Rejected at 0.01 level	

Note. Calculation based on Field Survey (2025)

Overall, the analysis reveals that Kathmandu's urban consumers are gradually transitioning toward digital modes of financial

interaction, driven by technological accessibility and growing social acceptance. However, the persistence of infrastructural challenges, digital

illiteracy, and perceived security risks suggests that a fully cashless economy remains a long-term goal. Continuous awareness programs, improved

service reliability, and trust-building mechanisms will be essential in fostering a more inclusive and sustainable digital financial ecosystem in Nepal.

Table 4

Impact of Variables for All Samples

Coefficients ^a	Unstandardized Coefficients		t	Sig.	F	Sig.	Model Result	Adjusted R2	Hypotheses result
	B	Std. Error							
(Constant)	0.323	0.114	2.834	0.005	294.886	0.001	Model is fit		
Performance Expectation	0.207	0.047	4.379	0.000					Null hypothesis rejected at 0.01
Effort Expectation	0.108	0.048	2.245	0.025					Null hypothesis rejected at 0.05
Social Influence	0.213	0.050	4.223	0.000					Null hypothesis rejected at 0.01
Facilitating Conditions	0.409	0.049	8.260	0.000					Null hypothesis rejected at 0.01

Note. a. Dependent Variable: Customer Perception. Calculation based on Field Survey (2025)

The finding that facilitating conditions exerted the strongest influence on consumer perception toward digital transactions is particularly relevant to the broader development of technology-enabled urban systems. Reliable technological infrastructure, network connectivity, system accessibility, and technical support are fundamental to ensuring that consumers can use digital payment services efficiently and confidently. This finding is consistent with the growing emphasis on technologically enabled infrastructure in smart-city development, where integrated digital systems are increasingly viewed as important mechanisms for improving efficiency, accessibility, and service delivery (Vasuki et al., 2026a). In addition, the increasing application of artificial intelligence and digital technologies in organizational and supply-chain systems demonstrates that technological resilience and supportive digital infrastructure are important for sustaining operational efficiency and improving performance (Vasuki et al., 2026b). Therefore, the significant influence of facilitating conditions in the present study suggests that

consumers' perceptions of digital transactions are shaped not only by the functionality of payment applications but also by the wider technological environment within which these services operate.

The significant effect of social influence further indicates that digital transaction behavior is embedded within social and interpersonal networks. Consumers may be more willing to adopt and use digital payment systems when their family members, friends, colleagues, and other trusted individuals encourage or demonstrate their use. This finding is particularly meaningful in the Nepalese context, where social relationships and community networks can influence economic participation and access to opportunities. Evidence from other Nepalese economic settings demonstrates that social and community relationships can contribute to employment opportunities and financial benefits (Timilsina et al., 2024). Although the context of that study differs from digital financial transactions, its findings provide broader support for the importance of social networks in shaping

economic participation. Thus, the significant role of social influence in the present study suggests that digital payment adoption should be understood not solely as an individual technological decision but also as a socially embedded process.

Performance expectancy was also found to have a significant positive effect on consumer perception, indicating that consumers are more likely to develop favorable perceptions when digital transactions provide clear functional benefits. Time savings, transaction efficiency, convenience, accessibility, and reduced dependence on physical cash can increase the perceived value of digital payment systems. This finding is consistent with the consumer-oriented perspective of marketing management, which emphasizes the importance of understanding consumer needs, expectations, and perceived value when developing products and services (Kala & Mishra, 2024). In the context of digital payments, consumers are therefore more likely to perceive a system favorably when its practical benefits are clearly observable in their everyday financial activities.

Similarly, the significant relationship between effort expectancy and consumer perception demonstrates the importance of simplicity and ease of use in digital payment adoption. Consumers may be more receptive to digital transactions when payment applications are easy to understand, navigate, and operate without requiring extensive technical knowledge. The finding implies that technological sophistication alone does not guarantee positive consumer perceptions; rather, digital services must translate technological capabilities into simple and convenient user experiences. User-friendly interfaces, straightforward transaction procedures, clear instructions, rapid confirmation, and accessible customer support can consequently strengthen consumers' perceived ease of use and overall evaluation of digital payment systems.

The combined significance of performance expectancy, effort expectancy, social influence, and

facilitating conditions provides important evidence for understanding consumer perception through the UTAUT framework. The results suggest that digital transaction acceptance is multidimensional, involving functional benefits, perceived simplicity, social encouragement, and the availability of supporting technological conditions. The findings also demonstrate that these dimensions are interconnected within the broader digital ecosystem. For example, a highly functional payment application may not generate favorable consumer perceptions if network connectivity is unreliable, while adequate infrastructure alone may not encourage adoption if consumers perceive the system as complicated or lack social encouragement to use it. Consequently, improving digital transaction adoption requires simultaneous attention to technological, individual, and social dimensions.

The absence of statistically significant gender differences across the study variables provides further insight into the nature of digital transaction adoption in Kathmandu Valley. The similarity in perceptions between male and female respondents suggests that the determinants of digital transaction perception identified in this study operate relatively consistently across gender groups. This finding may reflect the increasing normalization of digital payment technologies in everyday financial activities, reducing the extent to which gender differentiates consumers' perceptions of digital transactions. From a policy perspective, this result supports the development of inclusive digital financial initiatives that emphasize common consumer needs such as accessibility, reliability, usability, security, and awareness rather than relying extensively on gender-specific approaches.

The findings also have implications for the development of Nepal's broader digital financial ecosystem. The strong influence of facilitating conditions indicates the need for continued investment in reliable digital infrastructure, network stability, platform interoperability,

technical assistance, and transaction security. The relevance of technologically enabled infrastructure is also reflected in research on smart-city systems, where digital technologies are associated with improvements in operational efficiency and service delivery (Vasuki et al., 2026a). Similarly, the growing application of artificial intelligence and digital technologies highlights the importance of technological innovation and resilience in sustaining organizational and operational performance (Vasuki et al., 2026b). These broader technological developments reinforce the argument that the successful expansion of digital financial services depends on a resilient and continuously evolving digital infrastructure.

The findings concerning social influence also have implications for digital financial literacy and awareness initiatives. Since consumers' perceptions are significantly influenced by their social environment, awareness programs may be more effective when they incorporate community-based learning, peer experiences, trusted representatives, and interpersonal communication. Rather than treating digital financial adoption solely as an individual learning process, financial institutions and service providers can recognize the role of families, peer groups, educational institutions, workplaces, and community organizations in disseminating information and building confidence. The significance of social networks in influencing economic participation, as demonstrated in the Nepalese context by Timilsina et al. (2024), further supports the relevance of community-oriented approaches.

Furthermore, the significant effects of performance expectancy and effort expectancy indicate that digital payment providers should focus on developing services that create observable consumer value while minimizing complexity. Consumer feedback can play an important role in identifying usability problems, service gaps, and changing expectations. A consumer-insight-

oriented approach, consistent with the principles of marketing management, can assist service providers in aligning digital payment features with users' needs and expectations (Kala & Mishra, 2024). This may involve improving interface design, simplifying transaction procedures, strengthening customer support, and providing transparent information regarding transaction status, charges, and security.

Overall, the findings demonstrate that the transition toward a digitally oriented payment ecosystem in Kathmandu Valley cannot be explained by technological availability alone. Consumer perception is shaped by the combined effects of reliable facilitating conditions, social influence, perceived usefulness, and ease of use. The findings therefore extend the application of the UTAUT framework to the context of digital transactions in Kathmandu Valley by demonstrating the importance of both technological and social dimensions of consumer perception. The evidence further suggests that sustainable expansion of digital financial services requires a coordinated ecosystem involving reliable infrastructure, user-centered service design, social and community engagement, digital financial literacy, technological innovation, and consumer protection. Such an integrated approach can contribute to greater consumer confidence, broader participation, and more sustainable development of digital financial services in Nepal.

Conclusion

The study examined consumer perceptions of digital transactions in Kathmandu Valley to understand how performance expectancy, effort expectancy, social influence, and facilitating conditions influence the adoption and use of digital payment systems. The results revealed that all four factors have a significant and positive impact on consumer perception, indicating that technological usefulness, simplicity, social acceptance, and infrastructural support collectively determine

users' willingness to adopt cashless modes of payment. Among these variables, performance expectancy and facilitating conditions were identified as the strongest predictors, suggesting that users place greater emphasis on the efficiency, reliability, and technical support of digital platforms. Most respondents agreed that digital transactions are faster, more convenient, and reduce the risks associated with handling physical cash. However, concerns such as network interruptions, transaction delays, and occasional system errors still affect users' confidence. The findings also indicate that while awareness and usage of digital transactions are increasing rapidly, achieving a fully cashless economy requires stronger institutional commitment, improved technological infrastructure, and public education on digital finance. Thus, the study concludes that Nepal is moving steadily toward digitalization, but the transition remains incomplete due to persistent infrastructural and behavioral barriers that need strategic attention from stakeholders.

References

- Budiarti, I., Hibatulloh, F., & Salman, M. (2021). Financial technology as payment methods in the digital era. *International Journal of Research and Applied Technology*, 1(1), 9–16. <https://doi.org/10.34010/injuratech.v1i1.5454>
- Celestin, M., & Mishra, A. K. (2025). The digital transformation of financial disclosure: How emerging technologies are revolutionizing corporate transparency and investor trust. *Journal of Advanced Research in Operational and Marketing Management*, 8(1), 11–25. <https://doi.org/10.24321/2582.5399.202502>
- Celestin, M., Mishra, S., & Mishra, A. K. (2025). Real-time financial reporting in the digital age: How companies are adapting to the growing demand for instantaneous financial insights. *Insight Journal of National Open College*, 2(1), 96–117. <https://doi.org/10.5281/zenodo.15366124>
- Celestin, M., Mishra, S., & Mishra, A. K. (2025). The future of public financial management in the digital era: How AI and blockchain are reshaping government accountability and transparency. *Poornaprajna International Journal of Emerging Technologies*, 2(2), 129–147. <https://doi.org/10.5281/zenodo.18105695>
- Celestin, M., Mishra, S., & Mishra, A. K. (2026a). Harnessing artificial intelligence in detecting accounting fraud: A case study of emerging markets and regulatory challenges. *Journal of Advanced Research in Quality Control & Management*, 11(1), 54–66.
- Celestin, M., Mishra, S., & Mishra, A. K. (2026b). The future of management accounting: Integrating artificial intelligence, big data, and predictive analytics for business optimization. *NOLEGEIN Journal of Operations Research & Management*, 9(2), 29–45.
- Celestin, M., Mishra, S., & Mishra, A. K. (2026c). The role of behavioral accounting in understanding financial decision-making and its influence on corporate strategies. *NOLEGEIN Journal of Leadership & Strategic Management*, 9(2), 12–29.
- Celestin, M., Mishra, S., & Mishra, A. K. (2026). Understanding the role of transfer pricing in multinational corporate tax avoidance: Challenges and policy implications. *Journal of Advanced Research in Operational and Marketing Management*, 9(1), 33–45.
- Celestin, M., Vasuki, M., Mishra, A. K., Dinesh Kumar, A., K., V., & Zulu, L. (2026e). Green fintech adoption pathways and constraints shaping sustainable finance innovation in Africa. *GS WOW: Wisdom of Worthy Research Journal*, 5(1), 13–29. <https://doi.org/10.62078/grks.2026.v05i01.002>
- Chaudhary, A. K., & Mishra, A. K. (2023). Impact assessment of COVID-19 on remittance inflow: A systematic review in the case of Nepal. *Journal of Advanced Research in Quality Control Management*, 8(1), 1–10.

- Chaveesuk, S., Khalid, B., & Chaiyasoonthorn, W. (2022). Continuance intention to use digital payments in mitigating the spread of COVID-19 virus. *International Journal of Data and Network Science*, 6(2), 527–536.
- Joshi, S., Sharma, M., Bisht, P., & Singh, S. (2021). Explaining the factors influencing consumer perception, adoption readiness, and perceived usefulness toward digital transactions: Online retailing experience of millennials in India. *Journal of Operations and Strategic Planning*, 4(2), 202–223.
- Kala, K., & Mishra, A. K. (2024). *Marketing management: Consumer insights*. Priyam Publication. <https://doi.org/10.5281/zenodo.14582092>
- Kamal, I., Rizki, R. N., & Aulia, M. R. (2023). The enthusiasm of digital payment services and millennial consumer behaviour in Indonesia. *International Journal of Professional Business Review*, 8(2), e0923. <https://doi.org/10.26668/businessreview/2023.v8i2.923>
- Luarn, P., & Lin, H.-H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in Human Behavior*, 21(6), 873–891.
- Maharjan, A., Danuwar, R. K., Kayestha, M., Maharjan, M., Baral, D. K., Koirala, A., & Timilsina, D. P. (2024). Analysing customers' perception on QR payment in Kathmandu Valley: An empirical study using UTAUT and PLS-SEM. *Quest Journal of Management and Social Sciences*, 6(1), 57–73.
- Mishra, A. K. (2023). Digital academic operation: A case of Nepal. In P. K. Paul, D. Gurrapu, & E. R. K. (Eds.), *Digital education: Foundation and emergence with challenges, cases* (pp. 219–228). New Delhi Publishers.
- Mishra, A. K. (2026). Analysis of digital transformation in logistics and supply chain management in India and Nepal: An innovation at Madhesh University. *Madhesh Journal of Interdisciplinary Research*, 1(1), 1–8. <https://doi.org/10.3126/mjir.v1i1.97089>
- Mishra, S., & Mishra, A. K. (2024). AI influencing factors among students. *Rabi Sangyan*, 1(1), 1–8. <https://doi.org/10.3126/rs.v1i1.74673>
- Niruba Rani, J., Mishra, A. K., & Satheesh, A. (2024). *Strategic human resource management*. Priyam Publication. <https://doi.org/10.5281/zenodo.14593374>
- Timilsina, R. K., Ghimire, M. N., Mishra, A. K., Shrestha, E. B., Adhikari, S. R., & Dinesh Kumar, A. (2024). Analysis of sociological aspects: Employment opportunities and financial benefits for small poultry keeping entrepreneurs in the Mid-Terai region of Nepal. *International Journal of Applied and Advanced Scientific Research*, 9(2), 56–63. <https://doi.org/10.5281/zenodo.13333239>
- Vasuki, M., Mishra, A. K., Celestin, M., & Kumar, A. D. (2026a). Mathematical optimization of intelligent transportation networks for smart city efficiency. *Journal of Advanced Research in Operational and Marketing Management*, 9(2), 7–18. <https://doi.org/10.24321/2582.5399.2026014>
- Vasuki, M., Mishra, A. K., Kumar, A. D., & Celestin, M. (2026b). Artificial intelligence and supply chain resilience: Implications for organizational performance. *Journal of Advanced Research in Quality Control & Management*, 11(2), 24–34. <https://doi.org/10.24321/2582.3280.202610>
- Yang, M., Mamun, A. A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability*, 13(2), 831. <https://doi.org/10.3390/su13020831>
- Yoezer, K., & Dorji, Y. (2023). A cashless society: Consumer perception towards the use of digital transactions. *Asian Research Journal of Arts & Social Sciences*, 21(4), 1–8. <https://doi.org/10.9734/arjass/2023/v21i4487>



