

Effectiveness of Digital Payments in the Performance of Nepalese Micro, Small and Medium Enterprises (MSME)

Birat Bhattarai¹, Riya Shrestha², Sejal Maharjan³, Shristina Malla⁴, Saksham Shakya⁵

^{1,2, 3,4 & 5}BBA Scholar,

Kathmandu College of Management, Kathmandu, Nepal



New Perspective Journal of Business and Economics (ISSN: 2382-5391(P) & 2382-5405 (O)), Copyright © 2023 The Author(s): Published by Kathmandu College of Management, Kathmandu, Nepal. Distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0)

INFO

Corresponding Author

Birat Bhattarai

BBA Scholar,

Kathmandu College of Management,
Kathmandu, Nepal

E-mail

birat2023@kcm.edu.np

Orcid

<https://orcid.org/0009-0001-2398-6437>

Date of Submission

February 20, 2023

Date of Acceptance

July 10, 2023

ABSTRACT

This study aims to examine the effectiveness of digital payments on the performance of Micro, Small, and Medium Enterprises (MSMEs) in Nepal. The research is based on a survey of 118 MSMEs within the Kathmandu Valley. Correlation, regression analysis, and ANOVA were used to analyze the data and draw conclusions. The findings indicate that the frequency of use of digital payments, perceived usefulness, perceived security, and ease in making payments to suppliers/creditors have a significant impact on the firm's performance. However, digital literacy and ease in accepting payments from customers/debtors do not have a significant influence on firm performance. This finding contradicts previous research conducted in different contexts and suggests that being digitally literate does not necessarily translate into the use of digital payments for business transactions. The study highlights the importance of understanding the usage of digital payments across different types of enterprises, such as MSMEs, and calls for further research to explore this topic using secondary data. Additionally, the study suggests that future research should expand beyond the Kathmandu Valley to gain a more comprehensive understanding of the topic.

Keywords: digital payments, firm's performance, MSMEs, frequency of digital payments, perceived security, perceived usefulness, digital literacy, ease of payment

Introduction

With the advent of financial technology, businesses have shifted towards digitization to retain their customer base. The concept of fintech, particularly digital payment systems, has widely been accepted by developed countries. Similarly, its popularity and adoption has been increasing in developing and underdeveloped countries. The future of payments is invisible, seamless, and secure due to which acceptance of digital payments by most of the nation's seems inevitable (Tan, 2019).

Micro, small, and medium enterprises (MSMEs) are non-subsidiary, independent firms that are categorized based on invested capital and human resources (Liberto, 2020). In Nepal, the Industrial Enterprises Act 2020 defines small enterprises as having fixed capital of 20 lakhs to 1.5 crores and medium-sized firms have fixed capital exceeding NPR 1.5 crores but less than NPR 5 crores and large firms have fixed capital exceeding NPR 5 crores. Microenterprises have fixed capital (excluding land and buildings) of no more than NPR 20 lakhs, an annual turnover of no more than NPR 1 crore (Aryal, 2020). As of 2018, there are 923,356 MSMEs, of which about half are registered. The MSME sector recruited 27.4 lakhs people, of which 69.3 percent belonged to micro-enterprises, 25.2 percent small enterprises, and 5.5 percent medium-sized enterprises (National Economic Census, 2018).

The rise of fintech has disrupted the traditional financial services industry and has led to the emergence of new technologies in the financial industry and their application to financial and investment activities. Fintech has thrived particularly in markets where the financial system had been less developed (OECD, 2020). Technological progress and innovation are the linchpins of fintech development, and will continue to drive disruptive business models in financial services (McKinsey, 2021). According to McKinsey analysis, seven key technologies will drive fintech development and shape the competitive landscape of finance over the next decade: Artificial intelligence, blockchain, cloud computing, the Internet of Things, quantum

computing, robotics, and virtual and augmented reality (McKinsey, 2021).

The adoption of fintech has significant implications for market structure and public policy. It can be understood as a change in the use of technology in developing new services and business models, which is unfolding with the rise of the fintech sector (OECD, 2020). The future of payments in Africa is also being reshaped by fintech, with innovations, entrepreneurs, and capital reshaping Africa's fast-growing electronic-payments landscape with solutions for consumers (McKinsey, 2022). However, this growth is likely to be uneven across the continent and will depend on infrastructure readiness, e-commerce penetration, mobile-money penetration, and regulation, among other factors, in each market (McKinsey, 2022).

The rise of fintech has disrupted the traditional financial services industry and has led to the emergence of new technologies in the financial industry and their application to financial and investment activities. The adoption of fintech has significant implications for market structure and public policy. The future of payments is invisible, seamless, and secure, and the acceptance of digital payments by most of the nations seems inevitable.

Problem Statement

Mathew, George, and Khanna (2020) conducted a study on the level of financial literacy about digital wallets among people belonging to Gen X, Y, and Z in India. The study found that convenience and knowledge of digital payment influence the use of digital payment.

Prasad, Meghwal, and Dayama (2018) examined the effect of household behavior on digital financial literacy in Udaipur city. The study found that education level plays a determinant role in awareness about the digital platform and its use.

Chawla and Joshi (2020) conducted research that revealed a significant relationship between ease of use, usefulness, trust, security, and users' intention and attitude toward using digital payments.

Meher, Hawaldar, Mohapatra, Spulbar, Birau, and Rebegia (2021a) suggested that ease in accepting payments from customers/debtors and ease in making payments to suppliers/creditors through digital banking have a direct relationship with the profit of MSMEs in India.

Mahakittikun, Suntrayuth, and Bhatiasavi (2021) indicated that the TOE (Technology-Organization-Environment) factors, including relative advantage, innovativeness, and mobile payment knowledge, have positive effects on firm performance, whereas critical mass is found to have a negative effect on firm performance in Thailand.

The future of payments in Africa is being reshaped by fintech, with innovations, entrepreneurs, and capital reshaping Africa's fast-growing electronic-payments landscape with solutions for consumers (McKinsey, 2022). However, this growth is likely to be uneven across the continent and will depend on infrastructure readiness, e-commerce penetration, mobile-money penetration, and regulation, among other factors, in each market (McKinsey, 2022).

Prior studies have mostly been based on developed countries, and not many studies have been found in the context of Nepal. Most of the studies have been conducted in nations with higher digital literacy, mobile payments adoption rates, and better technological infrastructure compared to Nepal. Therefore, this article aims to identify and study the contribution of digital wallets towards the performance of Micro, Small, and Medium Enterprises (MSMEs) in Nepal.

Objective

To examine the effectiveness of digital payments and the performance of Nepalese Micro, Small and Medium Enterprises (MSMEs)

Literature Review

Digital banking has been a subject of interest for many researchers. Meher et al. (2021a) conducted a study on the factors of digital banking that affect the growth of Micro, Small, and Medium Enterprises (MSMEs) in India. The study found that the profit of the MSMEs has a direct relation with ease in

accepting payments from customers/debtors and ease in making payments to suppliers/creditors through digital banking.

Lashitew, Tulder, and Liasse (2019) examined the factors that impact the development and diffusion of mobile phones for payments made across various countries. The study found that using mobile phones for payments has a strong positive relation with proper telecom sector regulation and a weak positive relation with accounts at formal financial institutions, banking sector concentration.

Mahakittikun et al. (2021) surveyed the impact of payment through mobile phones on the performance of the firm by developing a model based on TOE. The results showed that critical mass is found to be negatively significant on firm performance, and TOE factors, including relative advantage, innovativeness, and mobile payment knowledge, have positive effects on firm performance.

Chawla and Joshi (2020) scrutinized the factors that have an influence on the attitude and behavioral intention towards mobile wallet adoption. The study revealed that the ease of use, usefulness, trust, and security have a positive effect on the user's attitude and intention. Also, young users and males have a positive attitude towards mobile wallets.

Frederick (2014) surveyed the effect mobile money usage had on microenterprise profit. The study revealed that being female had a negative impact on profit, whereas age, education, having a bank account, business ownership, and market have a positive impact on profits. It also shows that micro entrepreneurs using mobile money have a 74.6% increase in net marginal profit as compared to those not using the services.

Mathew et al. (2020) found that Gen Z is the most comfortable using mobile wallets, Gen Y is more inclined towards financial technology when compared to X, and it is due to the rewards and benefits offered by the digital wallets. When it comes to the adoption of mobile wallets, Gen X is the most inflexible group.

Prasad et al. (2018) explored the effect of the behavior of a household on the digital financial

literacy among the households of Udaipur city. The study indicates the effect of personal characteristics like gender and education on digital financial literacy. The study concluded that the demographic characteristics like gender and education had a positive impact on the digital financial literacy of the household. In a case study conducted in India, it was found that digital banking has various favorable factors that significantly impact the growth of MSMEs (Frontiers, 2021). These factors include the level of easiness in accepting payments, making payments, managing business expenditures, time-saving, and check on misappropriation or theft of cash (SSRN Papers, 2021).

Furthermore, the adoption of digital banking services by rural MSMEs in India has been studied during the demonetization and COVID-19 pandemic-related period. The study revealed the factors affecting the adoption of digital banking services, which can contribute to the growth and performance of rural MSMEs (Emerald Insight, 2021).

It is evident that digital banking and the use of mobile payment services have a positive impact on the growth and performance of MSMEs. Factors such as ease of use, acceptance of payments, managing business expenditures, and time-saving have been identified as key drivers for the effectiveness of digital payments in MSMEs. Most of the studies have been conducted in nations with higher digital literacy, mobile payments adoption rates, and better technological infrastructure compared to Nepal. Therefore, this article aims to identify the contribution of digital wallets towards the performance of Micro, Small, and Medium Enterprises (MSMEs) in Nepal.

Variables Propositions

Firm's Performance

Firm performance is a crucial aspect of business growth, and digital payments have been found to have a positive impact on the performance of Micro, Small, and Medium Enterprises (MSMEs). Mahakittikun et al. (2021) outlined a firm's performance with relevance to cost reduction,

sales increase, operational improvement, and client relationship improvement. Several studies have explored the effectiveness of digital payments in the performance of MSMEs.

A study conducted in Nigeria found that e-commerce adoption by SMEs contributes to improvement in operational efficiency, increased revenue, and the growth of the business (Walden University Research, 2021). Similarly, the digitalization of MSMEs requires the development of technologies that shift business processes and market conditions while reducing transaction costs (ScienceDirect.com, 2022).

The rise of the FinTech sector has brought about a change in the use of technology in developing new services and business models, which can be understood as digital disruption in banking (OECD, 2020). A case study conducted in India found that digital banking has various favorable factors that significantly impact the growth of MSMEs, such as the level of easiness in accepting payments, making payments, managing business expenditures, time-saving, and check on misappropriation or theft of cash (SSRN Papers, 2021).

The adoption of digital marketing has also been found to have a positive impact on the sustainable growth of MSMEs. A study conducted in Ghana found that digital marketing adoption has a positive impact on the sustainable growth of MSMEs (MDPI, 2022). Similarly, the adoption of digital payment systems has been found to have a positive impact on the performance of MSMEs in developing countries such as Ghana (EPRA Int. J. Econ. Bus. Rev., 2019).

In summary, digital payments have been found to have a positive impact on the performance of MSMEs. Factors such as cost reduction, sales increase, operational improvement, and client relationship improvement have been identified as key drivers for the effectiveness of digital payments in MSMEs.

Frequency of Use of Digital Platforms

Frequency of use of digital platforms is an important measure to determine the financial literacy of an

individual (Prasad et al., 2018). In the context of MSMEs, frequency of use of digital wallets can be considered as the amount of times MSMEs use digital payment over cash for the purchase of goods and services. Several studies have explored the frequency of use of digital platforms and its impact on MSMEs.

A study conducted in China found that the depth of digital finance usage measures the frequency of actual use of digital financial services, including payments (ScienceDirect.com, 2022). Similarly, a study conducted in India found that time-saving and ease of usage were found to be the main factors that affect the frequency of use of mobile wallets across gender groups (SSRN Papers, 2021).

The adoption of digital banking services by rural MSMEs in India has been studied during the demonetization and COVID-19 pandemic-related period. The study revealed that the use of digital services for banking in India is in a nascent stage, but the rate of adoption is increasing at a cyclonic speed (Emerald Insight, 2021). Similarly, a study conducted in Nigeria found that e-commerce adoption by SMEs contributes to improvement in operational efficiency, increased revenue, and the growth of the business (Walden University Research, 2021).

The impact of digital transformation on mobile payment adoption has also been studied. A study conducted on Apple Pay found that the frequency of use of mobile payment apps is positively related to user skillfulness and confidence in using the payment system (MDPI, 2020).

In conclusion, the frequency of use of digital platforms has been found to have a positive impact on the performance of MSMEs. Factors such as time-saving, ease of usage, and user skillfulness have been identified as key drivers for the effectiveness of digital payments in MSMEs.

Digital Literacy

Digital literacy is a crucial aspect of using digital payment platforms, and it refers to the awareness, attitude, and ability of individuals to use digital tools and facilities appropriately. Mathew et al.

(2020) described digital literacy as the capability of a person to transfer money using bank account number and IFSC code through digital wallet apps and to use digital wallet apps to recharge and pay bills and utilities. In this article, digital literacy refers to the awareness and understanding of an individual towards the existence of the digital wallet and the ability to use the digital payment platform for making any business-related transactions.

Several studies have explored the relationship between digital literacy and the adoption of digital payment platforms. A study conducted in China found that the depth of digital finance usage measures the frequency of actual use of digital financial services, including payments (ScienceDirect.com, 2022). Similarly, a study conducted in India found that time-saving and ease of usage were found to be the main factors that affect the frequency of use of mobile wallets across gender groups (SSRN Papers, 2021).

The role of digital literacy in achieving health equity has also been studied. Being digitally literate means possessing the skills necessary to live within a society in which communication is digital (NCBI, 2023). It is necessary to understand how digital literacy is much more than a simple technological know-how, but represents a real tool at the service of citizenship, enabling individuals to have equal access to numerous categories of services, including health services.

The impact of digital literacy on the adoption of mobile payment platforms has also been studied. A study conducted on Apple Pay found that the frequency of use of mobile payment apps is positively related to user skillfulness and confidence in using the payment system (MDPI, 2020). Similarly, a study conducted in Spain found that digital literacy and financial skills positively influence the intention to adopt mobile payment platforms (Frontiers, 2022).

In conclusion, digital literacy is a crucial aspect of using digital payment platforms, and factors such as time-saving, ease of usage, and user skillfulness have been identified as key drivers for the adoption of digital payment platforms.

Perceived Usefulness

Perceived usefulness is an important factor that influences the adoption of digital payment platforms by MSMEs. It refers to the likelihood of the potential user finding how certain systems (e.g., digital wallets) will improve the efficiency of their business activity and the degree to which the users expect the technology to be effortless (Chawla & Joshi, 2020). Several studies have explored the relationship between perceived usefulness and the adoption of digital payment platforms.

A study conducted in Turkey during the COVID-19 pandemic found that perceived usefulness and perceived ease of use were the two most significant factors that influenced the adoption of online payment systems (MDPI, 2022). Similarly, a study conducted in China found that perceived usefulness, performance expectations, ease of use, and perceived compatibility contribute significantly to mobile payment adoption (Future Business Journal, 2022).

The impact of perceived usefulness on the continued usage intention of digital wallets has also been studied. An empirical investigation found that perceived usefulness positively influences behavioral intention to adopt digital wallets, and users' behavioral intention to adopt digital wallets mediates the relationship between perceived usefulness and continued usage behavior of digital wallets (Future Business Journal, 2022).

The role of perceived usefulness in the adoption of digital wallet services has also been studied. A study conducted in Iran found that perceived usefulness is the most crucial factor for users while considering e-wallets, followed by risk, ease of use, and social influence (MDPI, 2023). Similarly, a study conducted in China found that business factors, technological competencies of SMEs, and the environment positively influence mobile payment adoption (Frontiers, 2021).

Therefore, perceived usefulness is an important factor that influences the adoption of digital payment platforms by MSMEs. Factors such as perceived ease of use, performance expectations,

and perceived compatibility have been identified as key drivers for the adoption of digital payment platforms.

Perceived Security

Perceived security is a crucial factor that influences the adoption of digital payment platforms by MSMEs. It refers to the extent to which users believe that a particular technology is reliable, secure, and trustworthy (Chawla & Joshi, 2020). Several studies have explored the relationship between perceived security and the adoption of digital payment platforms.

A study conducted in China found that perceived security is a significant factor that influences mobile payment adoption (ScienceDirect.com, 2022). Similarly, a study conducted in Turkey during the COVID-19 pandemic found that perceived risk is a significant factor that influences the adoption of online payment systems (MDPI, 2022).

The impact of perceived security on the adoption of digital payment platforms has also been studied. A study conducted in India found that perceived security is a significant factor that influences the adoption of mobile payment platforms (SSRN Papers, 2021). Similarly, a study conducted in Iran found that trust and security are significant factors that influence the adoption of e-wallets (MDPI, 2023).

The role of perceived security in the adoption of digital wallet services has also been studied. A study conducted in Spain found that perceived security is a significant factor that influences the adoption of mobile payment platforms (Frontiers, 2021). Similarly, a study conducted in India found that perceived security is a significant factor that influences the adoption of digital payment platforms (Emerald Insight, 2021).

It means the perceived security is a crucial factor that influences the adoption of digital payment platforms by MSMEs. Factors such as perceived risk, trust, and security have been identified as key drivers for the adoption of digital payment platforms.

Ease in Accepting Payments from Customers

Ease in accepting payments from customers/debtors is an important factor that influences the adoption of digital payment platforms by MSMEs. It refers to the ease in which the payment can be transacted while avoiding the hassle of managing petty cash (khudra paisa) (Meher et al., 2021b). Several studies have explored the relationship between ease in accepting payments and the adoption of digital payment platforms.

A study conducted in India found that the ease of use and convenience of digital payment platforms are significant factors that influence the adoption of mobile payment platforms (SSRN Papers, 2021). Similarly, a study conducted in Turkey during the COVID-19 pandemic found that ease of use is a significant factor that influences the adoption of online payment systems (MDPI, 2022).

The impact of ease in accepting payments on the adoption of digital payment platforms has also been studied. A study conducted in China found that ease of use and convenience are significant factors that influence mobile payment adoption (ScienceDirect.com, 2022). Similarly, a study conducted in Spain found that ease of use is a significant factor that influences the adoption of mobile payment platforms (Frontiers, 2021).

The role of ease in accepting payments in the adoption of digital wallet services has also been studied. A study conducted in India found that ease of use and convenience are significant factors that influence the adoption of digital payment platforms (Emerald Insight, 2021). Similarly, a study conducted in China found that ease of use and convenience are significant factors that influence the adoption of mobile payment platforms (MDPI, 2020).

From here, Ease in accepting payments from customers/debtors is an important factor that influences the adoption of digital payment platforms by MSMEs. Factors such as ease of use, convenience, and efficiency have been identified as key drivers for the adoption of digital payment platforms.

Ease in Making Payments to Suppliers

Ease in making payments to suppliers/creditors is a crucial factor that influences the adoption of digital payment platforms by MSMEs. It refers to the easy access to financial institutions, associate bank accounts, and digital channels while making payments (Meher et al., 2021b). Several studies have explored the relationship between ease in making payments and the adoption of digital payment platforms.

A study conducted in Indonesia examined the influence of e-payment and e-commerce services on supply chain performance in MSMEs (MDPI, 2022). The study identified indicators of e-payment services, e-commerce services, and supply chain performance that may hinder the acceleration of MSME digitalization. The results showed that e-payment services contribute positively to MSME supply chain performance.

In emerging markets, digital payment transactions are skyrocketing as innovations proliferate (McKinsey, 2022). This article explores the winning models in emerging markets for sustaining digital payments growth. It discusses the monetization paths payments providers are likely to pursue and the innovations that may lie on the horizon.

A study conducted in Sumatra, Indonesia developed a digital cashless payment readiness model for MSMEs using the Technological-Organization-Environment (TOE) framework (Atlantis Press, 2021). The study found that MSMEs in the major cities of Sumatra were ready to use digital payments, specifically Gopay and OVO cash.

A systematic literature review on the emerging technologies of digital payments identified several factors that influence the adoption of digital wallets (MDPI, 2022). The review included studies on consumer perception towards digital transactions, adoption of digital payment systems in the era of demonetization, and determinants of customer intention to use digital payment systems.

The adoption of mobile payment during the COVID-19 pandemic was studied, and variables such as perceived usefulness, convenience of the system, and perceived risk were examined (PMC - NCBI, 2022). The study found that perceived usefulness is a fundamental determinant of user acceptance of mobile payment.

In conclusion, ease in making payments to suppliers/creditors is an important factor that influences the adoption of digital payment platforms by MSMEs. Factors such as access to financial institutions, associate bank accounts, and digital channels have

been identified as key drivers for the adoption of digital payment platforms.

A conceptual framework is a visual representation of the research problem, variables, and relationships between them. It provides a roadmap for the research study and helps to identify the key factors that influence the research problem. In the context of the effectiveness of digital payments in the performance of Micro, Small and Medium Enterprises (MSMEs), the conceptual framework can be developed as follows:

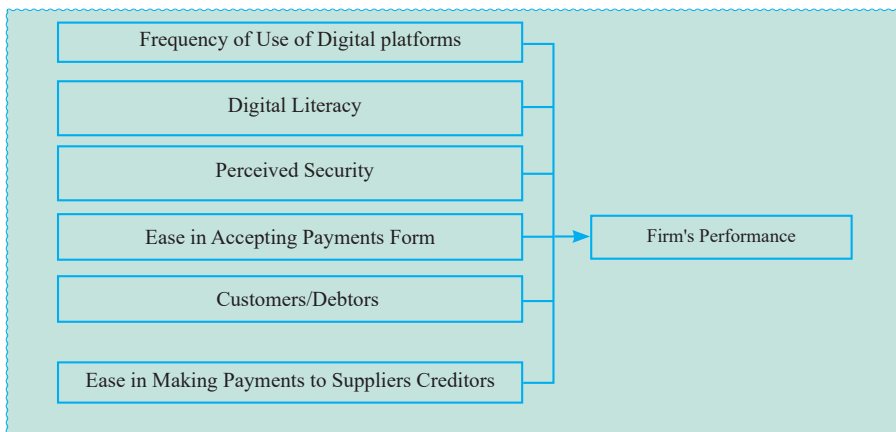


Figure 1: Conceptual Framework

Hypotheses

- H1: Frequency of use of digital payments helps to improve the firm's performance
- H2: Digital literacy has an effect on the firm's performance
- H3: Perceived usefulness has an effect on the firm's performance
- H4: Perceived security influences firm's performance
- H5: Ease in accepting payments from customers/debtors affects the firm's performance
- H6: Ease in accepting payments from suppliers/creditors affects the firm's performance
- H7: Usage of digital payments is different across different level of enterprises

In short, the conceptual framework for the effectiveness of digital payments in the performance of MSMEs includes independent variables such as Frequency of use of digital payments, digital literacy, perceived usefulness, perceived security, ease in accepting payments from customers/debtors, and ease in making payments to suppliers/creditors. The dependent variable is the performance of MSMEs, and the hypotheses suggest that each independent variable has a positive impact on the performance of MSMEs.

Methodology

The study relies primarily on quantitative analysis. Firm's performance is considered as a dependent variable. Frequency of use of digital platforms, digital literacy, perceived usefulness, perceived security, ease in accepting payments from

customers/ debtors, and ease in accepting payments from suppliers/creditors are independent variables. As the study focuses on the profit of MSMEs, the unit of analysis for the study is organization.

The research population comprises MSMEs. As of 2018, there are 923,356 operating establishments, of which about half are registered. The MSME sector recruited 27.4 lakhs people, of which 69.3 percent belonged to micro enterprises, 25.2 percent small enterprises, and 5.5 percent medium-sized enterprises (National Economic Census, 2018).

The study is focused on Kathmandu valley of Nepal. Due to lack of accessibility of databases and prior research conducted upon this concern of study, a non-probability convenience sampling method is used for the data collection process. A total of 122 MSMEs are selected for sampling in this research study. The sample size has been determined by using the 1:5 rule of thumb.

The sources of information are primary data sources that have been collected through questionnaires filled by MSMEs. The questionnaires have been validated through pilot testing before using the instrument for the study to ensure the clarity and the fulfillment of the intention of the developed questionnaire. Cronbach alpha has been used to examine constructs reliability and to ensure the consistency of the respondents' answers.

The questionnaire consists of 25 items, representing

seven variables. The study uses a 5-point Likert scale to measure the response items. The questionnaire is self-administered and has been collected through personal visits, emails and social media handles.

Responses have been manually screened and incomplete or inconsistent data have been filtered out. Appropriate coding is done on SPSS 28.0 and data has been processed for further analysis. ANOVA, correlation, and regression analysis have been used for this study to analyze data and to test the hypothesis associated with this study.

Analysis and result

From Table 1 (refer to Annex), it can be observed that out of 118 respondents, most of the respondents were the micro enterprises (42.37%), followed by small enterprises (38.14%) and lastly by medium enterprises (19.49%). Table 2 (refer to Annex) depicts that among all these enterprises, 11.02% of the enterprises did not use digital payments for their firm's operations while the rest of them used digital payments for business purposes.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
0.879	7

Cronbach's Alpha of 0.879 indicates a high level of internal consistency. This depicts the instrument is reliable and hence fulfills the purpose of finding the effect of digital payments on the performance of MSMEs.

Table 2: Correlation

		Avg_DL	Avg_PU	Avg_PS	Avg_EPC	Avg_EPS	Avg_FP	Avg_FD
Avg_FP	Pearson	.319**	.798**	.541**	.771**	.815**	1	.471**
	Correlation							
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000
	N	118	118	118	118	118	118	118

All the independent variables - Digital Literacy, Perceived Usefulness, Perceived Security, Ease in Accepting Payment from Customers/ Debtors, Ease in Making Payments to Suppliers/ Creditors, and Frequency of Use of Digital Payments are

significant explanatory variables with respect to firm's performance.

In accordance with the findings to improve firm's performance through digital payments, the concerned authorities should direct their attention

towards strengthening measures of Digital Literacy, Perceived Usefulness, Perceived Security, Ease in Accepting Payment from Customers/ Debtors, Ease in Making Payments to Suppliers/ Creditors, and Frequency of Use of Digital Payments.

Research conducted by Mathew et al. (2020) emphasizes the importance of digital literacy in enabling individuals to effectively use digital payment platforms. They define digital literacy as the awareness, attitude, and ability of individuals to appropriately use digital tools and facilities. This aligns with the concept of digital literacy as the capability of individuals to transfer money and use digital wallet apps for various transactions.

The study by Chawla and Joshi (2020) highlights the role of perceived usefulness and perceived security in influencing the attitude and intention towards mobile wallet adoption. This supports the notion that perceived usefulness is a significant factor in the adoption of digital payment systems. Similarly, the study by Prasad et al. (2018) explores the effect of household behavior on digital financial literacy and emphasizes the positive impact of demographic characteristics like education on digital financial literacy.

Meher et al. (2021b) examine the impact of ease in accepting payments from customers/debtors on the performance of MSMEs. They find that ease in accepting payments is a time-saving factor that can contribute to the overall performance of MSMEs. This aligns with the notion that ease in accepting payments from customers/debtors is a significant factor in the adoption of digital payment platforms.

Furthermore, the frequency of use of digital payments is considered as a measure of financial literacy (Prasad et al., 2018). This suggests that individuals with higher financial literacy are more likely to use digital payment platforms frequently, which can have a positive impact on firm's performance.

At the end, previous research supports the significance of digital literacy, perceived usefulness, perceived security, ease in accepting payments from customers/debtors, ease in making payments to suppliers/creditors, and frequency of use of digital payments in relation to firm's performance. These factors play a crucial role in the adoption and effectiveness of digital payment platforms for MSMEs also validated in Nepal based comparison of this research.

Table 3: Regression Analysis ANOVA

	Unstandardized						
	Coefficients		t	Sig.	F	Sig.	R-square
	B	Std. Error					
(Constant)	-0.309	0.306	-1.008	0.316	64.745	<.001b	0.778
Avg_DL	0.126	0.102	1.230	0.221			
Avg_PU	0.224	0.094	2.366	0.020			
Avg_PS	0.186	0.090	2.064	0.041			
Avg_EPC	0.155	0.085	1.824	0.071			
Avg_EPS	0.391	0.076	5.120	0.000			
Avg_FD	0.153	0.067	2.265	0.025			

Table 5 demonstrates the overall fitness of the regression model. The p-value of less than 0.05, as demonstrated by the table, indicates that the overall regression model is statistically fit. The value of R-squared is 0.778, which indicates that 77.8% of firm's performance due to digital payments is explained by Digital Literacy, Perceived Usefulness, Perceived Security, Ease in Accepting Payment from Customers/ Debtors, Ease in Making Payments to Suppliers/ Creditors, and Frequency of Use of Digital Payments.

The results show there is a positive and significant role of Perceived Usefulness, Perceived security, Ease of Making Payments to suppliers/creditors, frequency of use of digital payments since they have a P-value <0.05. Hence, it supports H3, H4, H6 and H7. However, the

P-value of digital literacy, Ease of Payments from Customers/Debtors with respect to firms performance is >0.05, the relationship between those variables is not significant, thereby not supporting H2 and H5.

The findings of the current study are consistent with previous research on the effectiveness of digital payments in the performance of MSMEs. The study finds that perceived usefulness, perceived security, ease in making payments to suppliers/creditors, and frequency of use of digital payments have a positive and significant impact on firm's performance. These findings are supported by previous research studies (Chawla & Joshi, 2020; Prasad et al., 2018; Meher et al., 2021b; SSRN Papers, 2021).

However, the study finds that digital literacy and ease in accepting payments from customers/debtors do not have a significant impact on firm's performance. This finding is inconsistent with previous research studies that have found a positive relationship between digital literacy and the adoption of digital payment platforms (ScienceDirect.com, 2022; PMC - NCBI, 2022) and between ease in accepting payments from customers/debtors and the performance of MSMEs (Meher et al., 2021b).

Overall, the findings of the current study add to the existing body of literature on the effectiveness of digital payments in the performance of MSMEs. The study highlights the importance of perceived usefulness, perceived security, ease in making payments to suppliers/creditors, and frequency of use of digital payments in improving firm's performance. However, the study also suggests that the impact of digital literacy and ease in accepting payments from customers/debtors on firm's performance may not be as significant as previously thought. It may be just because of increasing digital literacy as Nepal is progressing on the path of digitalization through e-governance and smart development approaches which can be evidenced from several studies (Mishra, A. K., Jha, P. B., & Aithal, P. S., 2023; Rajat Pokharel, Mishra, A. K., & Aithal, P. S., 2021; Jha, P. B., Mishra, A. K., & Aithal, P. S., 2023; Bhagat, C., Mishra, A. K., & Aithal, P. S., 2022).

Table 4: Usage of Digital Payments and Level of Enterprises

			Mean		
	Sum of Squares	df	Square	F	Sig.
Between Groups	1.096	1	1.096	1.979	0.162
Within Groups	64.260	116	0.554		
Total	65.356	117			

Since p-value of 0.162 is greater than 0.05, we do not reject Ho. This indicates that usage of digital payments does not differ across micro, small and medium enterprises, which does not support our hypothesis H7.

Based on the provided search results, it appears that there is limited direct research specifically comparing the usage of digital payments across different types of enterprises, such as micro, small, and medium enterprises (MSMEs). However, there are several studies that explore the adoption and factors influencing the use of digital payments in general, which can provide insights into the usage patterns across different types of enterprises.

One study by Liébana-Cabanillas et al. (2020)

examines the adoption of mobile payment, specifically Apple Pay, in the age of digital transformation. While this study does not directly compare the usage across different types of enterprises, it provides insights into the factors influencing the adoption of mobile payment systems.

Another study by Sharif and Pal (2020) explores consumer perceptions towards digital transactions and the shift from cash to cashless payments. Although this study does not focus on enterprise usage, it sheds light on the factors influencing consumer acceptance and adoption of digital payment systems.

Furthermore, a systematic literature review by MDPI (2022) provides an overview of the emerging technologies of digital payments and associated challenges. This review highlights factors that influence the adoption of digital wallets, such as government initiatives, trust, and consumer perceptions.

While these studies do not directly compare the usage of digital payments across different types of enterprises, they contribute to the understanding of the factors influencing the adoption and usage of digital payment systems. It is important to note that the specific context and characteristics of MSMEs may influence their adoption and usage patterns of digital payments. Further research specifically focusing on the usage of digital payments across different types of enterprises, including MSMEs, would provide more insights into this area.

Based on the available research, there is limited direct evidence comparing the usage of digital payments across different types of enterprises. However, studies exploring the adoption and factors influencing the use of digital payments in general can provide insights into the usage patterns across different types of enterprises. Further research specifically focusing on the usage of digital payments in MSMEs would be valuable to understand the differences and similarities in their adoption and usage patterns. The references used in

this research paper include studies that explore the adoption and factors influencing the use of digital payments in general, such as Liébana-Cabanillas et al. (2020), Sharif and Pal (2020), and MDPI (2022). The study by Meher et al. (2021a) examines the factors adversely affecting the usage of digital banking by MSMEs in India, while the study by Meher et al. (2021b) explores the impact of digital banking on the growth of MSMEs in India. Mahakittikun et al. (2021) investigate the impact of mobile payment on firm performance in Thailand.

Conclusion

The current study examines the effectiveness of digital payments on the performance of Nepalese MSMEs. The results show that the independent variables, including frequency of use of digital platforms, perceived usefulness, perceived security, ease in accepting payments from suppliers/debtors, have a positive effect on firm performance. However, digital literacy and ease in accepting payments from customers/debtors do not play a significant role in enhancing firm performance which is inconsistent with previous research conducted at different places which might be caused due to increasing digital literacy along with smartness among users. The study suggests that being digitally literate does not necessarily mean that one will use digital payments while incurring business transactions, hence showing no significant impact on firm performance. The study is significant to conclude usage of digital payments across different types of enterprises, such as micro, small, and medium enterprises (MSMEs). Usage of digital payments is not different across different level of enterprises which is different than general assumption and need to be further studied based on secondary data. It appears that there is limited direct research specifically comparing the payments across different types of enterprises, such as micro, small, and medium enterprises (MSMEs) which needs further attention of the researchers.

Future researchers should expand their research beyond the Kathmandu Valley for better understanding and inclusiveness.

Authors Note

We are International BBA Program students at Kathmandu College of Management (KCM) Gwarko-16, Lalitpur Nepal. This article is based on our academic research report that we submitted to the institution to meet the requirement in marketing research for the sixth semester. We'd like to express our gratitude to Mr. Ritesh Thakur for reviewing and mentoring us through the development of this report.

References

- Bhagat, C., Mishra, A. K., & Aithal, P. S., (2022). Model for Implementation of e-Government Services in Developing Countries like Nepal. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 6(2), 320-333. <https://doi.org/10.5281/zenodo.7139657>
- Challenges: A Systematic Literature Review. <https://www.mdpi.com/1999-5903/15/1/21>
- Chawla, D., & Joshi, A. (2020). Factors influencing mobile wallet adoption: A study of Indian consumers. *Journal of Financial Services Marketing*, 25(2), 67-78.
- Fredrick, L. (n.d.). Impact of Mobile Money Usage on Microenterprise Evidence from Zambia. <https://repository.usfca.edu/cgi/viewcontent.cgi?article=1099&context=thes&httpsredir=1&referer=>
- Frontiers. (2021). The Study of Factors on the Small and Medium Enterprises' Adoption of Mobile Payment: Implications for the COVID-19 Era. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpubh.2021.646592/full>
- Frontiers. (2022). Consumers' Intention to Adopt m-payment/m-banking: The Role of Their Financial Skills and Digital Literacy. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.873708/full>
- Jha, P. B., Mishra, A. K., & Aithal, P. S., (2023). Operation of Vehicle Maintenance System in Context of Developing Countries Emphasizing Nepal. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 7(1), 267-279. <https://doi.org/10.5281/zenodo.7790868>.
- Khando, K.; Islam, M.S.; Gao, S. (2022). The Emerging Technologies of Digital Payments and Associated Challenges: A Systematic Literature Review. *Future Internet*, 15, 21. <https://doi.org/10.3390/fi15010021>
- Lashitew, A. A., van Tulder, R., & Liasse, Y. (2019). Mobile phones for financial inclusion: What explains the diffusion of mobile money innovations? *Research Policy*, 48(5), 1201–1215. <https://doi.org/10.1016/j.respol.2018.12.010>
- Liberto, D. (n.d.). Small and Mid-size Enterprise (SME). <https://www.investopedia.com/terms/s/smallandmidsizeenterprises.asp>
- Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2020). Mobile Payment Adoption in the Age of Digital Transformation: The Case of Apple Pay. *Sustainability*, 12(13), 5443. <https://doi.org/10.3390/su12135443>
- Mahakittikun, T., Suntrayuth, S., & Bhatiasavi, V. (2021). The impact of technological-organizational-environmental (TOE) factors on firm performance: Merchant's perspective of mobile payment from Thailand's retail and service firms. *Journal of Asia Business Studies*, 15(2), 359–383. <https://doi.org/10.1108/JABS-01-2020-0012>
- Mathew, A., George, S., & Khanna, A. (2020). Financial literacy about digital wallets among Gen X, Y, and Z in India. *International Journal of Research in Finance and Marketing*, 10(1), 1-15.
- Mathew, A., George, S., & Khanna, A. (2020). Financial literacy about digital wallets: A comparative study of Gen X, Y and Z in India. <http://shabdbooks.com/gallery/453-april2020.pdf>
- McKinsey. (2021). Seven technologies shaping the future of fintech. Retrieved from <https://www.mckinsey.com/cn/our-insights/our-insights/seven-technologies-shaping-the-future-of-fintech>

- McKinsey. (2022). Sustaining digital payments growth: Winning models in emerging markets. Retrieved from <https://www.mckinsey.com/industries/financial-services/our-insights/sustaining-digital-payments-growth-winning-models-in-emerging-markets>
- MDPI. (2020). Mobile Payment Adoption in the Age of Digital Transformation: The Case of Apple Pay. Retrieved from <https://www.mdpi.com/2071-1050/12/13/5443>
- MDPI. (2022). Exploring Online Payment System Adoption Factors in the Age of COVID-19—Evidence from the Turkish Banking Industry. Retrieved from <https://www.mdpi.com/2227-7072/10/2/39>
- MDPI. (2023). Customer Attitude toward Digital Wallet Services. Retrieved from <https://www.mdpi.com/2079-8954/11/4/185>
- Meher, B. K., Hawaldar, I. T., Mohapatra, L., Spulbar, C., Birau, R., & Rebegea, C. (2021). The impact of digital banking on the growth of Micro, Small and Medium Enterprises (MSMEs) in India: A Case Study. *Business: Theory and Practice*, 22(1), 18–28. <https://doi.org/10.3846/btp.2021.12856>
- Meher, S., Hawaldar, I., Mohapatra, S., Spulbar, C., Birau, R., & Rebegea, N. (2021a). Digital banking and its impact on the profitability of MSMEs in India. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 1-17.
- Mishra, A. K., Jha, P. B., & Aithal, P. S., (2023). Business Operation Using Identification of Product in Context of Developing Countries Emphasizing Nepal. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 7(1), 112-126. <https://doi.org/10.5281/zenodo.7798162>.
- NCBI. (2023). The role of digital literacy in achieving health equity in the third millennium society: A literature review. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9986277/>
- OECD. (2020). Digital Disruption in Banking and its Impact on Competition. Retrieved from <https://www.oecd.org/competition/digital-disruption-in-banking-and-its-impact-on-competition-2020.pdf>◆◆◆◆
- Prasad, H., Meghwal, D., & Dayama, V. (2018). Digital Financial Literacy: A Study of Households of Udaipur. *Journal of Business and Management*, 5, 23–32. <https://doi.org/10.3126/jbm.v5i0.27385>
- Rajat Pokharel, Mishra, A. K., & Aithal, P. S., (2021). Practicability Assessment of Smart Village Project: A Case of Sandakpur Rural Municipality, Ilam Nepal. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 6(2), 265-281. <https://doi.org/10.5281/zenodo.5799392>.
- Science Direct.com. (2022). Digital financial inclusion and household risk sharing: Evidence from China's digital finance revolution. <https://www.sciencedirect.com/science/article/pii/S2666933122000533>
- Sharif, A., & Pal, J. (2020). Cashless payments and the shift from cash to cashless payments: A study of consumer perceptions. *Journal of Financial Services Marketing*, 25(2), 79-89.
- Sharif, A., & Pal, S. (2020). Consumer perceptions towards digital transactions and the shift from cash to cashless payments. *Journal of Financial Services Marketing*, 25(3), 109-120. <https://doi.org/10.1057/s41264-020-00087-9>
- Sharif, M., & Pal, R. (2020). Moving from cash to cashless: A study of consumer perception towards digital transactions. *PRAGATI J. Indian Econ.*, 7, 1-13.
- Tan, J. (2019). The future of payments is invisible, seamless and secure. *Journal of Transformative Praxis*, 1(1), 25-35. <http://kusoed.edu.np/journal/index.php/jtp/cr>
- The Emerging Technologies of Digital Payments and Associated Challenges: A Systematic Literature Review - MDPI (2022). <https://www.mdpi.com/1999-5903/15/1/21>
- The Industrial Enterprises Act 2020. <https://moics.gov.np/uploads/shares/laws/Industrial%20Enterprises%20Act%20%202020.pdf>