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**BARRIERS INFLUENCING DIGITAL PAYMENT
INTENTION TO ADOPTION BY MSME OWNERS**

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BARRIERS INFLUENCING DIGITAL PAYMENT INTENTION TO ADOPTION BY MSME OWNERS

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ABSTRACT

The study mainly focuses on the barriers influencing the intention to adopt digital payments among MSMEs in the Pathein region. The quantitative research method was used in this study. The primary data were collected from 283 out of 969 MSME owners with structured questionnaires. The secondary data were sourced from relevant textbooks, digital payment reports, previously conducted research papers, internet websites, and articles on LinkedIn. This survey focuses on 210 MSMEs owners who already adopted digital payment with barriers. The structured questionnaires used a 5-point Likert scale to determine the level of agreement with various statements. The multiple regression analysis was used in this study. According to the result, multiple regression analysis showed that image and information barriers significantly and negatively affect digital payment adoption. The continuous adoption of digital payments among MSME owners cannot be successful if image and information barriers remain high. Banks and digital payment organizations should prioritize building a positive image and developing educational campaigns for MSME owners highlighting digital payments' benefits and security. Additionally, banks and digital payment organizations should share more information about promotions and the benefits of adopting digital payments. Bankers and employees should communicate better with MSME owners and show positive behavior to encourage the continuous adoption of digital payments.

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3.5	Digital Payment Methods in Pathein	25
CHAPTER IV	ANALYSIS ON DIGITAL PAYMENT ADOPTION OF MSME OWNERS	26
4.1	Research Design	26
4.2	Profile of Respondents	27
4.3	Reliability Analysis	30
4.4	Barriers Effecting Digital Payment Adoption by MSME Owners	31
4.5	Person Correlations Analysys.	39
4.6	Analysis of Barriers Inleuncing Digital Payment Adoption of MSMEs Onwer by Reegression Model	40
CHAPTER V	CONCLUSION	42
5.1	Findings and Disucssions	42
5.2	Suggestions and Recommendations	43
5.3	Needs for Future Research	45
 REFERENCES		
 APPENDIXES		

LIST OF TABLES

Table	No.	Description	Page
	4.1	Profile of Respondents	27
	4.2	Demographic Data of The Respondents	28
	4.3	Result of Cronbach's Alpha Value	30
	4.4	Mean Score Interpretation	31
	4.5	Mean Score of Usage Barriers	32
	4.6	Mean Score of Value Barriers	33
	4.7	Mean Score of Risk Barriers	34
	4.8	Mean Score of Tradition Barriers	35
	4.9	Mean Score of Image Barriers	36
	4.10	Mean Score of Information Barriers	37
	4.11	Mean Score of Adoption Intention	38
	4.12	Person Correlation Analysis	39
	4.13	The Effect of Barriers Inleuncing Digital Payment Adopion of MSME Oweners by Regression Model	40

LIST OF FIGURES

Figure	No.	Description	Page
	2.1	Theories of Innovation Resistance	9
	2.2	Barriers to Digital Payment Adoption: Micro, Small and Medium Enterprises	13
	2.3	Barriers of Mobile Commerce Adoption Intention Preceptions of Generation X in Malaysia	14
	2.4.	Barriers Towards the Adoption of Mobile Payment Services	15
	2.5	Barriers Towards the Adoption of Unified Payment Interface	16
	2.6	Conceptual Framework of the Study	17
	3.1	Category of SMEs in Myanmar	19
	3.2	MSMEs Roadmap of Myanmar	20
	3.3	Digital Payment Transaction Value by Segment	22
	3.4	Traditional Cash Flow and Digital Payment Flow of MSMEs.	24

LIST OF ABBREVIATIONS

ATM	Automatic Teller Machine
BNPL	Buy Now Pay Later
CBM	Central Bank of Myanmar
FinTech	Financial Technology
IRT	Innovation Resistance Theory
JCB	Japan Credit Bureau
MFI	Microfinance Institution
MFS	Mobile Financial Services
MPU	Myanmar Payment Union
MSME	Micro, Small and Median-sized Enterprise
POS	Point of Sale
SME	Small and Median-sized Enterprise
Symbol	Particulars
TAM	Technology Acceptance Model
UPOP	UnionPay Online Payment

CHAPTER I

INTRODUCTION

The rise of technology has proven crucial for nations worldwide, irrespective of their developmental status. The adoption of new technology positively impacts the efficiency and productivity of industries and businesses. Gad(2024) stated that innovation benefits individual firms and contributes to an overall enhancement in a country's productivity. Financial technologies (FinTech) have advanced rapidly in recent years, making transactions in financial markets faster, more efficient, and more secure.

FinTech is because it offers more services at lower costs, helps traditional financial institutions stay competitive, and creates new market opportunities. It also supports financial inclusion by making financial services more accessible and contributes to achieving sustainable development goals (Babuscu et al., 2023). FinTech offers digital services to large organizations and micro, small, and medium-sized enterprises.

Micro, small, and medium-sized businesses, known as MSMEs, are the backbone of the economy. Even though the size of MSMEs differs across industries and regions, MSMEs are essential for a healthy economy. Even though the size of MSMEs differs across sectors and regions, MSMEs are essential for a healthy economy. Many people start or join MSMEs because they have entrepreneurial skills, innovative ideas, or market opportunities and apply their skills in a more flexible environment. In addition, MSMEs can offer autonomy and creativity compared to larger firms. Some MSMEs grow into large and successful businesses, while others remain small and stable. MSMEs is that they create employment opportunities for a large and diverse segment of the population, especially for women, youth, and low-skilled workers. According to the World Bank, SMEs provide 80 percent of net job creation in low-income countries(Gad, 2024).

In today's increasingly digital world, adopting digital payments plays an instrumental role for businesses of all sizes. However, MSMEs often need help with barriers such as limited financial,human resources, inadequate access to essential infrastructure, the absence of long-term vision and strategies, data management, privacy protection, and cybersecurity (World Economic Forum, 2023).

Digital payments such as cards, mobile payments, e-wallets, QR payments, and alternative payments contribute significantly to the success of MSMEs by fostering efficiency, accessibility, and financial inclusion. Adopting digital payment methods and streamlining (European Forest Institutes, 2020) stated that MSMEs are essential for Myanmar's economic development. They create jobs, drive innovation, aid in poverty reduction, and help develop human resources. They also provide opportunities for advanced technologies and contribute to a favorable business and investment environment (Min et al., 2020). Additionally, MSMEs foster creativity and innovation, creating new products, services, and businesses (Zhang, Z., 2023).

Moreover, MSMEs are dispersed across regions, including rural areas, contributing to more balanced regional development. MSMEs can reach a broader domestic and international customer base through online payment platforms and mobile banking, facilitating smoother and quicker transactions. Additionally, digital payments offer transparency, reducing the risk of fraud and providing a more secure financial environment for MSMEs and their clients. The ease of managing finances and accessing Capital online empowers MSMEs to compete more effectively in the modern business landscape. Despite the many advantages of digital payments, such as increased efficiency, improved transparency, and enhanced customer and business convenience (Kyaw, 2023), their adoption in Myanmar has been slower compared to other countries.

Myanmar has abundant natural resources, and MSMEs can gain significantly by leveraging local resources and raw materials for their products. If MSMEs can innovate and effectively transform these raw materials into new products, it can generate foreign income for the country. The government can play a crucial role by investing in technology to lower production costs, enhance energy and infrastructure, and encourage using locally sourced agricultural and livestock materials.

According to the Ministry of Industry, the Ayeyarwady region is Myanmar's third most developed MSME. While regions with a higher concentration of MSMEs, such as Yangon and Mandalay, exhibit higher rates of digital payment adoption, the Ayeyarwady region lags in adoption. Patheingyi, the capital city of Ayeyarwady, had 969 SME businesses in February 2024. The adoption of digital payment is crucial to ensuring a presence in the local market and exploring ASEAN and the global market (Ministry of Commerce, 2024).

1.1 Rationale of the Study

Charltons Myanmar, n.d (2024) mentioned that in recent years, the concept of a cashless society has captured the world's attention, with remarkable progress witnessed in several Asian countries. Smith (2023) identified that cash has historically been the primary mode of payment due to limited banking infrastructure and access to digital financial services in Myanmar. However, the future cash landscape in Myanmar will likely undergo significant changes. In Myanmar, various digital payment methods, including international, local, POS, and e-commerce payments, began to develop in the early 21st century. Central Bank of Myanmar has issued non-bank mobile finance service licenses since 2016 (CBM, 2016).

The adoption of digital payments experienced significant growth during the COVID-19 pandemic, as individuals, families, and businesses increasingly preferred digital transactions over cash due to the observed drawbacks of using physical currency. Charltons Myanmar, n.d (2024) mentioned that the Central Bank of Myanmar (CBM) ensures that digital payment services provided by Payment Service Providers are solid and secure. The aim is to reduce the use of cash and promote digital payments among the public. Furthermore, Smith (2023) highlighted the impact on the ATM network, although cash usage might decline. Charltons Myanmar, n.d (2024) stated that nations worldwide are rapidly adopting innovative technologies to build cashless societies, reshaping financial transactions for individuals, businesses, and governments. The shift involves embracing digital payment methods like mobile wallets and online banking, promoting financial inclusion and efficiency. Building a cashless society necessitates advanced payment infrastructure, collaboration between public and private sectors, and regulatory frameworks.

While the development of digital payments has substantially contributed to Myanmar's economy and supported the growth of MSMEs, traditional cash payment still dominates due to issues related to education and technology; many people and MSMEs continue to rely on cash, perceiving digital payment usage as a challenge. In the Capital and largest economic cities, the adoption of digital payment rates is relatively high; however, the growth rate of the third or fourth-largest economic cities still relies on cash on MSMEs and perceives digital payment usage as a challenge.

Patheingyi is the largest capital city of the Ayeyarwady region and the third-largest MSME development region (Ministry of Commerce, 2024). Dependence on cash presents significant challenges across various business sectors, introducing operational,

security, health, and other associated risks. These risks include operational disruptions associated with physical cash handling, potential health hazards, and other uncertainties. MSMEs in Patheingyi prefer digital payments in personal transactions but hesitate to extend this to their business operations. By understanding and addressing these businesses' specific challenges, policymakers and technology providers can promote a more inclusive digital economy.

Individuals and MSMEs have barriers to adopting the new technology, and most still need to use it. Resistance is a natural response toward innovations because of the possibility of bringing changes to existing lifestyles. Although the technology adoption rate is higher in Myanmar's urban and economically developed cities, most individuals utilize digital payment systems for personal transactions such as mobile top-ups, utility bill payments, and other personal bill settlements. However, businesses resist adopting these digital payment methods due to several perceived barriers. These include functional barriers such as usage, value, and risk, as well as psychological barriers such as image and traditional barriers.

This study aims to identify barriers influencing MSMEs in Patheingyi's intention to adopt digital payment for their businesses, explore how they manage cash payment issues, and assess their willingness to embrace digital payments. The findings of this study will not only benefit the financial and banking sectors and enhance understanding of customer needs and concerns regarding the adoption of digital payment methods.

1.2 Objectives of the Study

The main objectives of this study are as follows:

- To identify the barriers of the digital payment adoption by MSME owners
- To examine barriers influencing on digital payments adoption by MSME owners in Patheingyi.

1.3 Scope and Method of the Study

This study investigates barriers to the adoption of digital payments by MSMEs exclusively in the Pathein area. The quantitative method was applied in this study. Both primary and secondary data were applied in this study. According to the Ministry of Industry, the total number of MSMEs is 969. In February 2024, the required sample size was 283 MSME owners, using the Taro Yamane formula. Therefore, 283 MSME owners were randomly selected out of the total population of 969. The questionnaire was designed for the open section to continue the survey if they have already adopted the digital payment methods. Therefore, this study focuses on 210 MSME owners using digital payment, representing 74% of the total sample size.

The secondary data were sourced from textbooks, reference books, a report on a digital payment organization, websites, magazine articles, and LinkedIn. The data collection occurred from May to June 2024.

1.4 Organization of the Study

This study comprises five chapters. Chapter one describes the introduction, study rationale, objectives, scope, method, and organization. Chapter two presents the racial background, previous studies, and the conceptual framework. Chapter three provides the background of MSMEs in Pathein and digital payment methods. Chapter four analyzes the adoption of digital payment by MSMEs. Finally, Chapter five concludes the study, summarizing findings, providing suggestions, and identifying areas for future research.

CHAPTER II

THEORETICAL BACKGROUND

This chapter reviews theoretical and empirical literature on factors affecting MSME owners' intention to adopt digital payments. It includes concept of FinTech, related theory, barriers to adoption of digital payments, previous study and conceptual framework.

2.1 Concept of Financial Technology (FinTech)

While technological advancements and evolving customer needs will increase FinTech's popularity in the future, building trust remains the most crucial challenge to overcome (Adalet et al., 2024). Fintech, a blend of "financial" and "technology," refers to applications, software, or technology that enables individuals or businesses to digitally access, manage, gain insights into their finances, or conduct financial transactions (Justin Trificana, 2023). Financial technology (fintech) describes new technology that can improve manual processes to automate the delivery and use of financial services (Investopedia, 2024).

Over the past decade, with consumers' growing adoption of digital tools, fintech emerged to help them handle financial challenges and work towards their financial goals. Consequently, consumers have increasingly relied on fintech for various purposes, from banking and budgeting to investments and lending, as well as for its tangible everyday benefits. Fintech uses specialized software and algorithms to help companies, business owners, and consumers manage their financial operations on computers and smartphones (COMESA, 2022). These companies often disrupt traditional ways of interacting with the financial industry by leveraging technology to expand access to financial products, reduce fees, and offer consumers faster and more personalized services.

FinTech companies enhance banking systems by improving both customer and employee experiences. Competitive banks prioritize customer experience, while financial institutions are starting to focus on employee experience to boost sales. FinTech solutions aim to streamline processes and attract more customers (Adalet et al., 2024). In addition, FinTech companies not only offer digital payments but also provide digital services to businesses, helping them operate efficiently with minimal

resources. The rise of FinTech in the past decade has seen increased adoption of digital payments, blockchain systems, e-tax services, electronic bill payments, and digital products like mobile top-ups and entertainment payments. These services have gained popularity as businesses adopt FinTech solutions to strengthen employee skills and empower the younger generation, enhancing their operations.

Digital payments are made through digital or online modes, with no brutal cash exchange involved. Such a payment, also known as an electronic payment or e-payment, involves transferring digital money from one payment account to another, where both the payer and the recipient use a digital device like a mobile phone, computer, or credit, debit, or prepaid card (Piyush et al., 2023).

FinTech primarily offers digital payment services to enterprises. To make digital payments, the person paying (payer) and the person receiving the payment (payee) can be either businesses or individuals. For this to happen, they need a few things: a bank account, online banking access, a device like a computer or smartphone to make the payment, and a way to transmit the payment digitally. The process could involve signing up with a payment provider, a bank, or a service facilitating digital transactions.

Switching to cashless transactions for businesses comes with several advantages. First, it eliminates the need to manage physical cash, reduces the risk of operations, and cuts down on security and storage costs. Digital payments also offer faster transactions, leading to shorter queues and a better in-store experience for customers. This convenience contributes to increased sales. Additionally, cashless transactions create a transparent trail, making accounting more accessible and simplifying tax compliance. For businesses, this means smoother operations.

There are two primary methods for MSMEs to accept digital payments. The first involves accepting digital payments in person at a shop or business instead of cash. This method allows customers to pay directly using digital payment channels such as cards, digital wallets, and other online payment methods. The second method, e-commerce, allows customers to buy products or services from MSMEs online and pay via digital payment channels, including card transactions, digital wallets, and other electronic payment methods. These approaches enable MSMEs to facilitate convenient and secure transactions, catering to in-person and online customer interactions. Moreover, mobile-based digital payments allow businesses to collect valuable customer data for analytics and market segmentation. This data enables targeted marketing and customized offers,

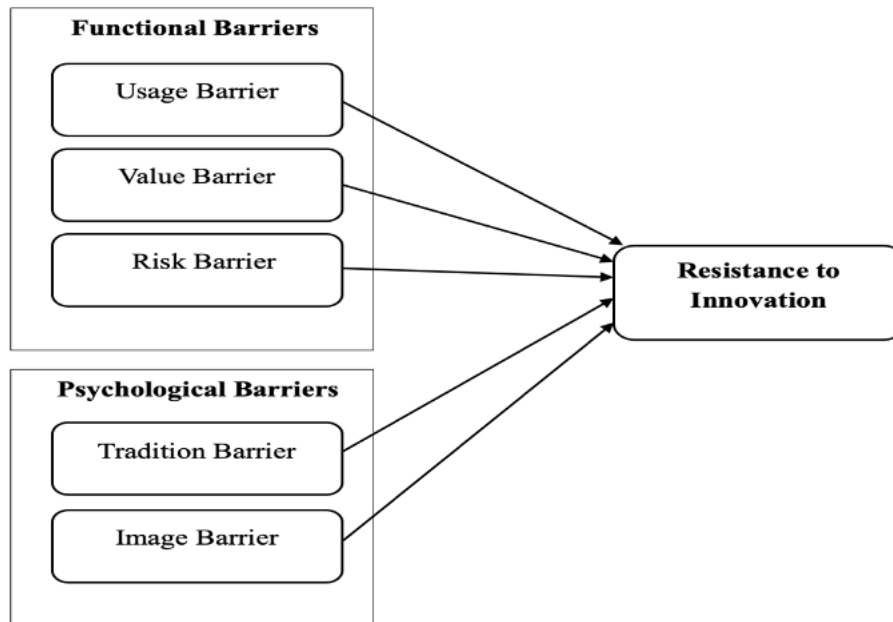
helping customer acquisition and retention. Traditional credit cards and modern Buy Now Pay Later (BNPL) models, supported by digital payments, provide customers with convenient access to credit.

2.2 Related Theory

The theory related to this study is innovation resistance theory (IRT), which offers a theoretical framework for customer resistance (Ram & Sheth, 1989); the theory helps in understanding the resistance-oriented behavior of users. Here, innovation resistance can be defined as behavior resulting from rational thinking and decision-making regarding adopting and using innovation due to potential changes introduced by altering the existing status quo and deviating from established belief systems; innovation resistance stems from rational decision-making regarding the adoption and use of innovation. (Hew et al., 2017). Consumer resistance can play a prominent role in shaping the success or failure of innovations. The changes occurring in an individual's life and behavior because of innovation can instigate user resistance-oriented behavior (Ram & Sheth, 1989). Figure (2.1) shows the components of the innovation resistance theory.

Some researchers updated the adoption barriers of IRT in recent years. Cariningtyas and Puspawati (2023) identified that consumer resistance is crucial to innovation success. The authors found that when barriers are not the main concern for customers, they do not significantly affect the intention to adopt innovations. In addition, consumer resistance can impact innovation success, but only when barriers are significant enough to affect customer adoption intentions.

Figure (2.1) Theory of Innovation Resistance



Source : Ram & Sheth, 1989

2.3 Barriers to Adoption

Ram and Sheth (1989) were pioneers in researching barriers to adoption that lead to consumer resistance. They introduced a theoretical framework to study innovation resistance, laying the groundwork for understanding key barriers of consumers to the adoption of new innovations. Functional and psychological barriers are the key barriers to innovation resistance theory.

Cheng et al. (2018) proved that understanding customer perceptions can reduce the resistance of innovation towards the perspective of adoption or intention to consume, adopt, and purchase where the resistance to positive perception. Michael Musyaffi et al. (2022) focused on how overcoming resistance to innovation can encourage adoption, and it has led to in-depth knowledge of consumer barriers can effectively adopt technology. Khanra, S., Joseph, R. P., Dhir, A., et al. (2022) evidenced that the understanding of how to explore customer perception can retain intentions for continuous usage of innovative adoption.

2.3.1 Functional Barriers

According to Ram and Sheth (1989), there are three main barriers under functional barriers which are usage barriers, value barriers and risk barriers. The functional barriers consist of three main categories: usage barriers, value barriers, and risk barriers.

The usage barrier is observed when an innovation conflicts with the existing workflows, practices, or habits of the consumers, who consequently tend to resist the innovation. This IRT component is similar to 'perceived ease-of-use,' an essential parameter in the Technology Acceptance Model (TAM). Furthermore, it is also closely related to complexity, the degree of perceived difficulty by a consumer in understanding and using an innovation as defined by Rogers. Therefore, the importance of the usage barrier is recognized in different theories and forms to measure an innovation's practical usability.

The value barrier develops when consumers perceive an innovation incapable of delivering better functionalities than the alternative options for the same economic resources. Consumers are less likely to change their present practices and habits in such cases. The value barrier exists when an innovation fails to provide a convincing performance to price value (Ram & Sheth, 1989). This barrier concerns the added value of an innovation (Laukkanen et al., 2008).

The risk barrier refers to the perception or reality of potential risks related to adopting a new technology. These risks can manifest in various forms: financial, performance, security, and social. By addressing risk barriers effectively, MSMEs can increase their business with successful technology adoption and maximize the benefits of innovation. The risk barriers refer to privacy, confidentiality, and personal information issues in technological innovation (Chemingui & Lallouna, 2013). However, it refers to the fear of making mistakes while conducting financial transactions over the phone (Laukkanen et al., 2008). This risk involves issues like internet connection problems, hacking, and the phone's battery life (Chemingui & Lallouna, 2013). Other people's judgment about an innovation is less relevant in a technological context. Other people's judgment about an innovation is less relevant in a technological context (Kleijnen et al., 2009).

2.3.2 Psychological barriers

According to Ram and Sheth (1989), there are two barriers under psychological barriers such as tradition barriers and image barriers. Tradition barriers include not knowing about technology, being used to old ways of doing things, compatibility problems with existing systems, and concerns about cost or complexity. Addressing these barriers requires education, making technology more accessible, ensuring it works with existing setups, and showing people that the benefits outweigh the challenges. The traditional barriers arise when long-established routines are disrupted (Ram & Sheth, 1989). Under the concerns of technology adoption is the general fear of technology replacing human work (Chemingul & Lallouna, 2013).

The image barriers emerge due to negative associations with innovation (Ram & Sheth, 1989). The frequently failed demand from customers' perspectives leads to building a low image barrier, and it is positively associated with users' intention to continue using innovation Khanra, S., Joseph, R. P., Dhir, A., et al. (2022). Image barriers in technology resistance theory are all about how people see a new technology are all about how people see a new technology. If a technology gets a bad reputation or is not well-branded, customers might not trust it. This lack of trust can cause customers to avoid using the technology or the services connected to it. If a company cannot convince customers that their technology is trustworthy, it can hurt their business image and make it harder for them to succeed.

2.4 Relationship Between Barriers and Adoption

Ram and Sheth (1989) provided a foundational understanding of traditional and psychological barriers and offered insights into strategies for overcoming consumer resistance to innovations. Vimal et al.(2023) investigated that functional barriers like poor infrastructure, high costs, lack of expertise, resistance to change, and insufficient regulatory support hinder adoption. Collaborative efforts and supportive policies are recommended to overcome these challenges. Addressing these barriers can enhance sustainability and efficiency in circular economy practices. Karlstad (2017) discovered the obstacles preventing the widespread adoption of mobile payment services. It identifies several key barriers, including security concerns, lack of user trust, and limited awareness about the benefits of mobile payments. Additionally, the study

highlights technical issues like compatibility with different devices and the complexity of the user interface. The authors suggest that addressing these barriers through enhanced security measures, better user education and improved technology integration can facilitate greater adoption of mobile payment services, and attitudes towards the innovation can be made more positive.

Cheng et al. (2024) explored why people in Malaysia hesitate to use e-wallets. It finds that security worries, lack of trust, low awareness, and poor infrastructure are significant obstacles. The study also considers how age, education, and other factors affect people's willingness to use e-wallets. It offers suggestions for overcoming these barriers to increase e-wallet adoption in Malaysia. Nur et al. (2020) studied why people hesitate to use e-wallets. The finding is that concerns about security, usability, trust, and awareness are significant obstacles. This study suggests ways to overcome these barriers and encourage more people to adopt e-wallets for payments.

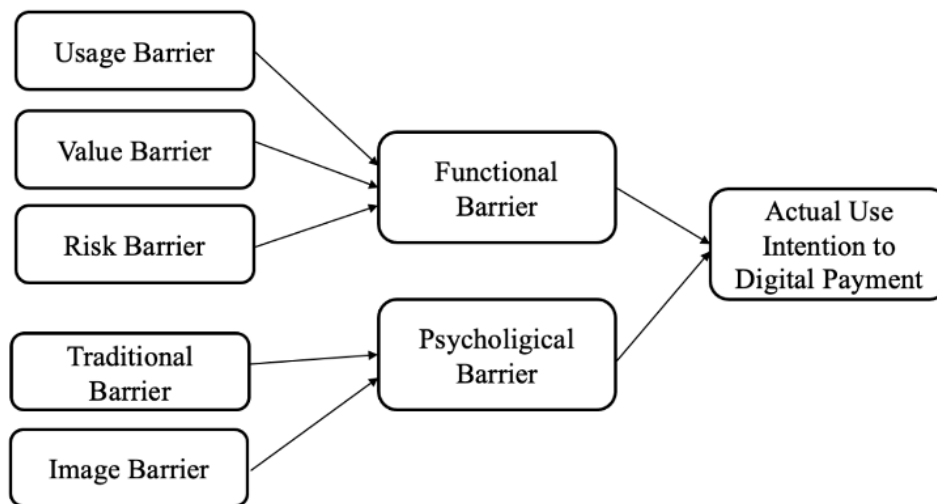
Based on the above studies, if customers have a positive attitude towards an innovation, believing it is secure and easy to use, they are more likely to form a favorable intention to adopt it. When the social environment, including peers, family, and societal trends, supports the innovation, individuals are also more likely to intend to adopt it. Conversely, if users worry about the security of the innovation, their attitudes and trust will be negatively affected. However, providing users with awareness about the benefits and security of the innovation can help build a positive attitude towards adopting the innovation.

2.5 Previous Studies

Previous studies are helpful for researchers because they provide a foundation of existing knowledge in a particular field. This study refers to four previous studies.

The first study focused on barriers to digital payment adoption of micro, small, and medium enterprises by Widayani, Fiernaningsih, & Herijanto Anto (2022).

Figure (2.2) Barriers to Digital Payment Adoption: Micro, Small and Medium Enterprises

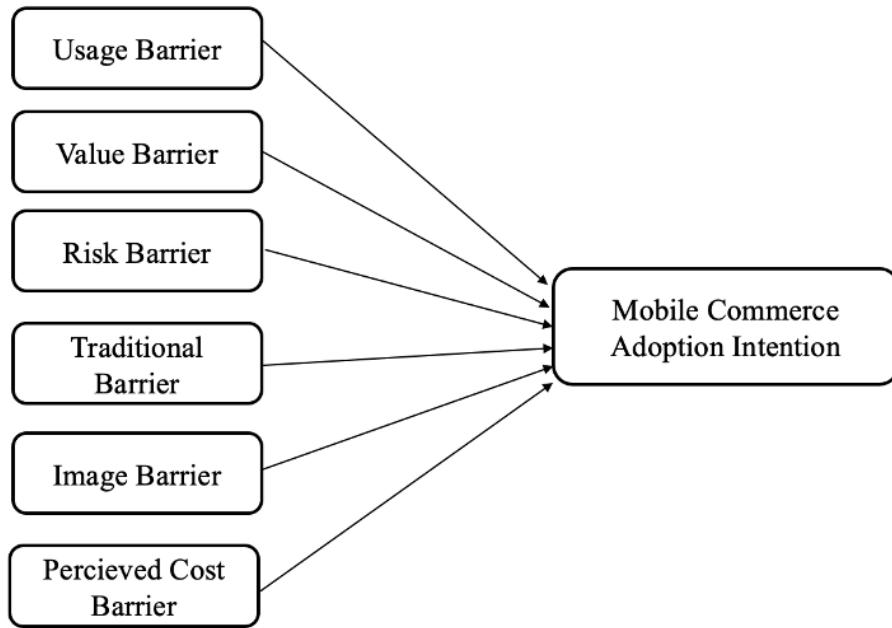


Source: Widayani, Fiernaningsih, & Herijanto Anto (2022)

In Figure (2.2), the study aims to discover why Micro, Small, and Medium Enterprises (MSMEs) are not using digital payment systems. The research respondents are owners or managers of Micro, Small, and Medium Enterprises (MSMEs). The researchers conducted their research with a total of 235 respondents. This study in Blitar City reveals significant functional barriers of usage, value, and risk for MSMEs in adopting digital payments. The finding is limited access to the necessary technology, and the concern is about the costs associated with adopting, the lack of knowledge on digital payment technologies, fears about the security and reliability of digital payment methods, and the complications arising from regulatory requirements and compliance issues. These findings highlight for targeted interventions and support to address the barriers MSMEs face, thereby facilitating a smoother transition to digital payment systems.

The second study is Barriers to Mobile Commerce Adoption Intention and Perceptions of Generation X in Malaysia by Moorthy et al. (2016).

Figure (2.3) Barriers of Mobile Commerce Adoption Intention: Perceptions of Generation X in Malaysia



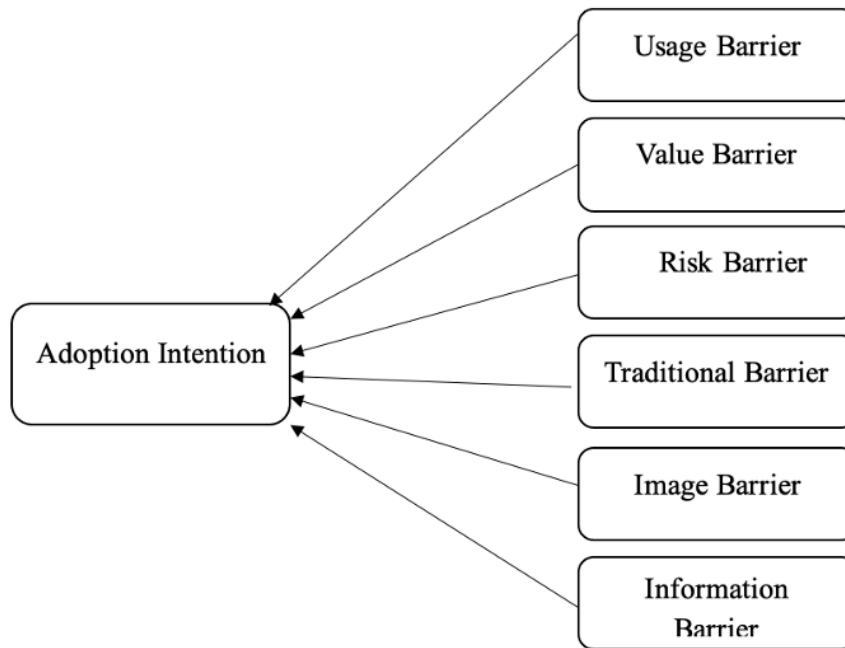
Source: Krishna Moorthy et al. (2016)

In Figure (2.3), the aim of the research is to understand the perceptions and factors that influence their intention to use mobile commerce services. The respondents of the study are individuals from Generation X in Malaysia. This study found that usage, value, risk, tradition, and image barriers significantly impact Generation X's adoption of mobile commerce in Malaysia. The respondents were chosen to provide insights into specific challenges and barriers faced by the age group in adopting mobile commerce. The survey included 250 respondents, focusing on the usability and reliability of mobile commerce platforms.

Interestingly, the perceived cost barrier did not influence mobile commerce adoption. Notably, among these barriers, the traditional barrier was identified as having the most significant impact on the intention to adopt mobile commerce. Additionally, the research introduced a modified Innovation Resistance Theory model, incorporating a new factor—the perceived cost barrier negatively influencing the adoption intention of mobile commerce. These findings suggest that addressing these barriers through education, improved technology, enhanced security measures, and targeted marketing could help increase mobile commerce adoption among Generation X in Malaysia.

The third study is Barriers Toward the Adoption of Mobile Payment Services by Kathrin & Fabienne, 2017.

Figure (2.4) Barriers towards the Adoption of Mobile Payment Services

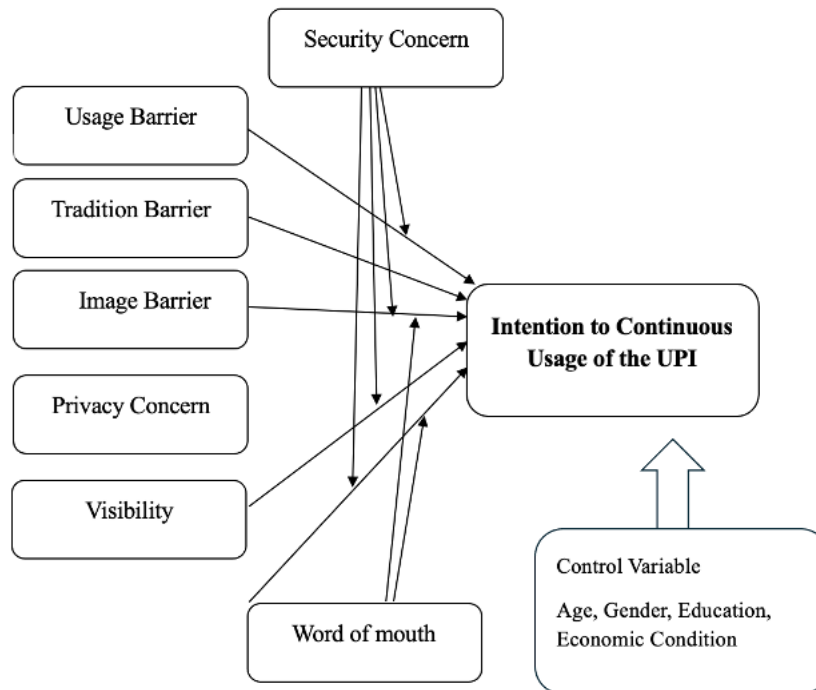


Source: Kathirn & Fabienne (2017)

According to Figure (2.4), the study aims to test the theoretical model of innovation resistance theory, verify whether the added barrier to adoption is acceptable, and study the consequences. The targeted respondents for the research focused on consumers in Germany, as the paper investigates consumer resistance in the context of Germany. The findings lead to an update of the conceptual model presented in the theoretical framework of value, risk, and traditional barriers.

The fourth study is Antecedents of the Barriers Toward the Adoption of Unified Payment Interface by Khanra, S., Joseph, R. P., Dhir, A., et al. (2022).

Figure (2.5) Barriers Towards the Adoption of Unified Payment Interface



Source: [Khanra, S., Joseph, R. P., Dhir, A., et al. \(2022\)](#).

According to Figure (2.5), this study investigates the factors influencing the continuous usage of UPI among 714 users aged between 16 and 55 years. It focuses on a model of innovation resistance, incorporating control variables such as age, gender, education, and economic conditions. The findings highlight privacy concerns and usage barriers as critical obstacles that need addressing to reduce consumer resistance toward continued UPI usage. Moreover, the study identifies security concerns and word-of-mouth (WOM) as partial moderators, influencing the relationships between key variables and the sustained adoption of UPI.

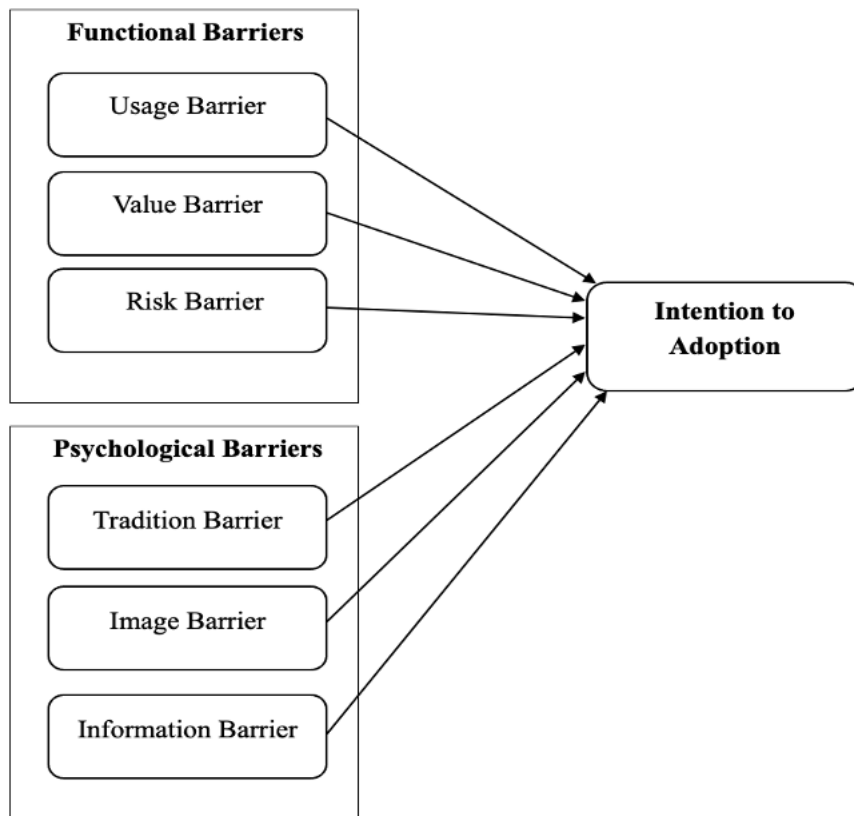
2.6 Conceptual Framework of the Study

Based on previous studies, a conceptual framework for the development of this study can be outlined. This study is based on the innovation resistance theory (IRT), and two primary barriers, namely functional and psychological, have been identified. There are six variables in this study, and functional barriers include three main variables: usage barrier, value barrier, information barrier, and risk barrier. The psychological barriers encompass traditional and image barriers.

According to the culture of Myanmar, not only individuals but also business owners are a general resistance among people towards embracing new technology,

primarily due to their traditional practices, a need for more awareness about technology, and security concerns. However, certain businesses have achieved rapid success by promptly adopting new technology, driven by their keen awareness of the relative advantages it offers. Their success is rooted in a proactive approach, driven by a clear understanding of the relative advantages and barriers they face. Therefore, in this study, there are six independent variables to analyze the factors of intention for adoption and how to affect the adoption action based on changes in customer attitude.

Figure (2.6) Conceptual Framework of the Study



Source: Own Compilation, 2024

Ram and Sheth (1989) introduced the Innovation Resistance Theory, identifying five key barriers: usage, value, risk, tradition, and image. Laukkanen et al. (2008) later emphasized information barriers due to a need for more information about an innovation. This study applies the innovation resistance theory and focuses on the functional barriers of usage, value, risk, and three psychological barriers: tradition, image, and information. The research examines explicitly digital payment adoption among MSME owners in Pathein.

The working definitions for this study's conceptual framework, derived from previous research and own terms, are presented as follows;

The usage barrier of this study focuses on how difficult it is to understand and not understand the advantages of using digital payment platforms.

The value barrier stems from MSME owners' do not have the awareness about the benefits of digital payments. They also perceive a slight operational advantage in adopting digital payment methods, further hindering widespread acceptance.

The risk barrier encompasses significant concerns about fraud, potential transaction errors leading to financial losses, and overall trust issues with digital payment systems.

The traditional barrier highlights the preference for cash transactions and face-to-face interactions over digital payments, which is rooted in the familiarity and perceived security of traditional methods.

The image barrier emphasizes a lack of trust in digital payment systems and the organizations that provide these services, which affects their adoption rates and usage.

The information barrier focuses on uncertainty about the digital payment options currently available in the market and the perception that there is insufficient information on how to contact relevant organizations to make or receive payments.

The intention to adoption new technology reflects whether MSME owners are ready to accept or use new technology. This involves considering both the barriers that hinder ongoing adoption practices and the facilitators that encourage sustained adoption over time.

CHAPTER III

BACKGROUND INFORMATION OF MSMEs IN PATHEIN AND DIGITAL PAYMENT METHODS

This chapter describes background of MSMEs in Myanmar. It begins by establishing about MSMEs within the Myanmar context, detailing the criteria set forth by local regulations, such as the number of employees, capital investment, and annual turnover and

3.1 MSMEs In Myanmar

According to SMEs law (2015), the definition of SMEs in Myanmar is based on capital investment and the number of labor operators in their enterprises. Their main objective is to reach domestic and international markets and enhance competitiveness, to have new employment opportunities and increase the income of the people through development, and to reduce the challenges and barriers in the business operations of small and medium enterprises. SMEs are defined according to the Private Industrial Enterprise Law 1990; the definition of SMEs in Myanmar can be described in Figure (3.1).

Figure (3.1) Category of SMEs in Myanmar

No.	Category	Small	Medium
1	Power HP use	3 to 25	26 to 50
2	No of workers	10 to 50	51 to 100
3	Capital (MMK, million)	Up to 1	Over 1 to 5
4	Production value per year (million)	Up to 2.5	Over 2.5 to 10

Source: Ministry of Industry, 2024

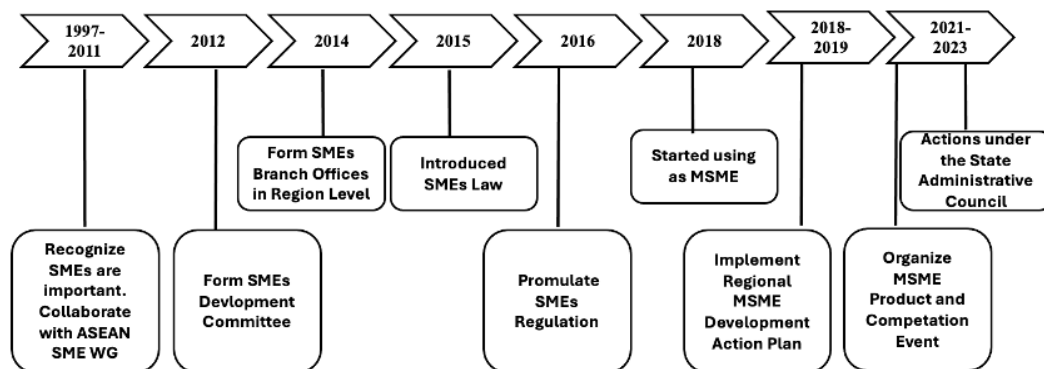
Tracing the development of SMEs in Myanmar is challenging due to the lack of available literature. Historically, Myanmar SMEs have not had the opportunity to develop their potential (Aung Khin, 2019) fully. Over 90% of businesses in Myanmar are Small and Medium Enterprises (SMEs). The government recognizes SMEs as key to the country's future economic development. SME stakeholders include farmers, growers, producers, wholesalers, retailers, transporters, and service providers involved

in getting products to consumers. The primary challenges for Myanmar SMEs are the absence of international collaboration and inadequate investment from the private sector.(Aung Khin, 2019).

SMEs in these environments face significant challenges in accessing financial capital (World Bank, 2023). Consequently, microfinance institutions (MFIs) have become a crucial source of funding for SMEs (Dorfleitner et al., 2020). As SMEs grow, they can access larger loans to expand. This financial support helps create jobs and stimulates local economies, with SMEs contributing significantly to employment in many countries. The development of the Microfinance Law has positively impacted SMEs in Myanmar by providing greater access to financial resources, enabling them to grow and thrive. The SMEs Law introduced in 2011, allowed local microfinance institutions (MFIs) to compete with international MFIs, enhancing the financial landscape for SMEs.

All SMEs with private capital investment must register with relevant authorities in Myanmar. Unfortunately, business registration is not straightforward because of an unclear distribution of responsibilities among government agencies (MSME Report, 2020). Starting from 2018-2019, the government began implementing the MSME development action plan in each region. This plan includes organizing MSME product exhibitions and competition events throughout Myanmar (Ministry of Commerce).

Figure (3.2) MSMEs Roadmap of Myanmar



Source : Ministry of Commerce, 2024

3.2 MSMEs in Patheingyi Region

Patheingyi, located in the Ayeyarwady Region of Myanmar, is known for its vibrant and diverse MSMEs. The city's economic landscape is shaped by its strategic geographical location, rich natural resources, and cultural heritage. Based on the

geographical location, the nature of MSMEs in Patheingyi primarily includes retail shops, food and beverage outlets, small restaurants, agriculture-related businesses, seafood production, mobile phone shops, and local food and souvenir shops. Additionally, rice and cooking oil trading businesses are prominent, with many business owners excelling in these areas. According to the Ministry of Industry (2024), The total number of MSMEs in Patheingyi is higher than in other major cities in Myanmar, except for Yangon and Mandalay.

Small retail shops dominate the local market, providing essential goods and services to the residents. These shops range from grocery stores to clothing and household items. A variety of small restaurants serve local and regional cuisines, contributing significantly to the local economy in Patheingyi. Many MSMEs are engaged in farming, processing, and selling agricultural products such as rice, beans, pulses, and vegetables. MSMEs process and trade fish, shrimp, and other seafood, both for local consumption and export. Patheingyi is famous for its traditional handicrafts and local delicacies. MSMEs produce and sell items like Patheingyi umbrellas, traditional snacks, and handicrafts, attracting tourists and supporting the local economy.

Patheingyi's MSMEs are vital to the local economy, reflecting the region's resourcefulness and cultural richness. They are crucial for job creation, providing employment to a large segment of the population, particularly in rural and semi-urban areas. With better support and strategic growth, Patheingyi's MSMEs can further enhance their contribution to Myanmar's economy (International Labour Organization, n.d.).

3.3 Digital Payment Methods in Myanmar

Since the reopening of Myanmar's economy in 2010, reforms in the banking and payment systems have been a vital part of the financial industry transformation. The Myanmar Payment Union (MPU) was founded in September 2011, and its purpose was to provide ATM and POS (Point of Sale) switching services among local banks (MPU,2024). MPU is the first step in developing digital payments in Myanmar. MPU highlighted that they expanded their network for the enterprise for 34,000 plus POS merchants, 500 plus e-Commerce merchants, and a daily transaction count of over 158,000.

Approximately eight years ago, the concept of digital and mobile payment was unfamiliar to the people of Myanmar (Htin,2023). In recent years, the seamless checkout experience has led to the rise of various payment gateways in Myanmar. Wave

Money, Myanmar's first licensed mobile money provider, has built a nationwide agent network to serve more people and speed up money transfers. (Wave Money Report, 2018). Likewise, KBZPay, an app from KBZ Bank, has gained a strong foothold in Myanmar's payment gateway industry. Its focus on security has built trust among users looking for a reliable financial transaction platform (Pay CEC, 2024).

According to Statista 2024, the Digital Payments market segment is led by consumer transactions and includes e-commerce payments, mobile payments at the point-of-sale system Point of Sale (POS) systems through smartphone apps, and international money transfers conducted online (digital remittances).

According to the Myanmar Insider 2022, there are approximately 24 million mobile wallet accounts in Myanmar, which are provided by both non-bank wallet providers and banks. The leading non-bank background of Mobile Financial Services (MFS) providers include Wave Money, OK\$, M-Pitesan, My Money, and MPT Money. This significant penetration of mobile wallets highlights the country's growing reliance on digital financial solutions driven by diverse service providers.

The usage of digital payment systems has seen significant development over the past seven years since the inception of fintech companies in Myanmar. According to Statista 2024, digital commerce now dominates the payment landscape, accounting for approximately 95% of the total transaction volume compared to other payment methods.

Figure (3.3) Digital Payment Transaction Value by Market Segment

	2018	2019	2020	2021	2022	2023	2024
Digital Commerce	2387	2834	3494	4167	4525	5177	6087
Digital Remittance	9.78	13.20	15.68	19.81	22.92	26.09	29.38
Mobile POS Payment	16.77	51.34	96.58	149.40	189.60	236.40	287.90
Total	2414	2899	3607	4337	4738	5439	6404

Source: Statista, 2024

According to the Central Bank of Myanmar (CBM), the digital payment sector surged to K31.666 billion in 2022, marking a 47 percent increase compared to 2021, as mentioned in a CBM notification. As stated by Augstin 2023, in recent years, Myanmar has made significant progress in the adoption of digital payments, especially in urban areas and among younger generations. Financial institutions and mobile network

operators have introduced mobile banking and electronic payment systems. These initiatives aim to provide alternative payment options and enhance financial inclusion.

The shift toward digital payment methods, such as mobile wallets and online banking, promotes financial inclusion and efficiency in Myanmar. Building a cashless society requires advanced payment infrastructure, collaboration between public and private sectors, and solid regulatory frameworks (Charltons Myanmar, n.d, 2024). This transition offers numerous advantages, including enhanced data insights for decision-making, improved economic planning, and reduced counterfeiting and money laundering risks.

3.4 Traditional Cash Flow and Digital Payment Flow of MSMEs

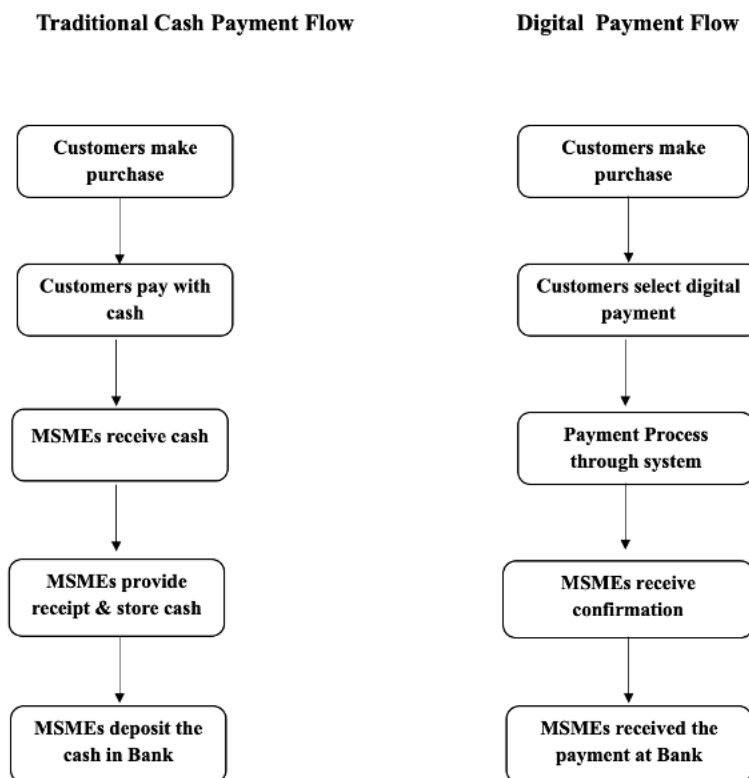
In the traditional payment flow, customers buy products or services from MSMEs, physically visit MSME stores or locations, and pay for selected products or services using cash. MSME receives the cash payment from the customer and records the transaction in their accounting records or cash register. The next step is for the MSME to securely store the received cash until it can be deposited into a bank account. The process may involve using cash registers, safes, or other secure storage methods. Following that stage, Following this stage, the MSME deposits the accumulated cash into its bank account, either in person at a bank branch or through electronic means such as depositing cash at an ATM or utilizing a bank's mobile app for remote deposit. The bank receives the cash deposit from the MSME and credits the corresponding amount to the MSME's account. This process may involve verification and reconciliation to ensure the accuracy of the deposited funds. Once the cash deposit is processed, the funds become available for the MSME to use for various purposes, such as paying suppliers, covering expenses, or withdrawing cash for operational needs.

Digital payment solutions have transformed how we spend and how we are paid. Digital payments are processed faster and more conveniently than traditional payment methods, such as money and credit orders which can help MSMEs to improve their cash flow and avoid late payment fees (Omnipay,2023). In the digital payment flow scenario, the customer initiates a transaction by selecting a product or service offered by the MSMEs and expressing the intent to purchase it. They provide payment options to customers, such as cards, wallets, and others. Customers choose their preferred payment option and authorize the transactions. The authorization details, including the payment amount and customer information, are transmitted securely to the digital

payment system. The digital payment system authenticates the transaction details and confirms that customers have enough funds or credit to complete the payment. Once verified, the payment is processed, and the funds are transferred from the customer's account to the MSME's account. This process may involve intermediaries such as banks or payment processors. Both the customer and the MSMEs receive confirmation of the successful payment transaction. This confirmation is a receipt and assures that the payment has been completed. The MSMEs reconcile the payment transaction with its records to ensure accuracy and completeness. This step helps maintain proper financial records and track incoming revenue.

The entire process of digital payments between customers, MSMEs, and banks typically takes just a minute to complete, ensuring swift and efficient transactions. In contrast, traditional cash payment flows require at least a day to transfer funds from customers to MSMEs' bank accounts. Moreover, MSME owners face risks associated with carrying cash, costs associated with holding cash, and other related risks.

Figure (3.3) Traditional Cash Payment Flow and Digital Payment Flow



Source: Survey Data, 2024

3.5 Digital Payment Methods in Patheingyi Region

The leading payment methods in Patheingyi differ notably from those in larger cities like Yangon and Mandalay. In these metropolitan areas, residents predominantly use MPU, Visa/MasterCard/JCB/UPOP, and credit cards due to their incomes being directly deposited into bank accounts, facilitating the widespread use of these payment methods. Additionally, digital wallets such as KBZPay, AYAPay, WavePay, and CBPay have surged in popularity over the past four to five years, as they can be easily linked to bank accounts for swift cash transfers. Among these, KBZPay stands out in Yangon and Mandalay, benefiting from the extensive network of bank branches that streamline cash-in and cash-out processes. Conversely, in Patheingyi, WavePay is more prevalent, primarily due to the local remittance practices. While some local gift and food shops in downtown Patheingyi only accept cash, medicine shops, hotels, and prominent restaurants commonly accept KBZPay, especially those targeting customers outside the city.

The two or three hotel and guest house business owners in Patheingyi have registered as merchants for digital payments and incur some costs from banks and wallets when customers use these methods. Despite these costs, they do not charge customers extra because they view digital payments positively. They appreciate the ease of cashing out money from banks and are aware of the difficulties associated with cash payments.

In Patheingyi, the leading stores of local food and souvenir shops like Shwe Myin Pyan and Shwe Myin accept digital payments, but their branch stores, even those in downtown and market areas, still need to adopt digital payments. Grocery stores are trendy in Patheingyi, with at least 3-4 shops on small streets, and most of them accept WavePay. However, some refuse to adopt digital payments due to technology barriers, preferring to manage cash. Additionally, these businesses often need help to settle payments with their suppliers digitally, which is a crucial reason for their reluctance to adopt digital payment methods.

Although other wallets are present, their usage pales in comparison to KBZPay and WavePay. Mid-sized businesses, such as those involved in rice trading and peanut oil trading, prefer mobile banking transfers over e-wallet payments due to high transaction volumes and the individual user balance limits of 2 million MMK for KBZ and WavePay, which are insufficient for their operational needs.

CHAPTER IV

ANALYSIS ON DIGITAL PAYMENT ADOPTION OF MSME OWNERS

This chapter analyzes the demographic factors of Pathein MSME owners who intend to adopt digital technologies. The demographic profile of respondents is examined by showing the frequency and number of respondents in each demographic category, including gender, age, position, yearly income, business lifespan, and payment year.

4.1 Research Design

This study is based on the Innovation Resistance Theory, which includes barrier factors to adopting digital technology. These barrier factors can measure the intention to adopt and the non-adoption behavior of MSME owners. This study uses both primary and secondary data. The necessary information for this study's aims was collected via phone calls, online surveys, and face-to-face interviews.

The targeted population is 969 MSMEs who are running the business in Pathein, according to the Ministry of Industry data on February 2024. The sample size is calculated using the Taro Yamane sample size formula. The Taro Yamane formula is as follows:

$$\begin{aligned} n &= N/(K+N(e)^2) \\ &= 969/(1+969(0.05)^2) \\ &= 283 \end{aligned}$$

Where:

N = Population of Study

K = Constant (1)

e = Degree of Error Expected

n = Simple Size

The calculation was based on a 50% response distribution, a 5% precision level, and a 95% confidence interval. The result of the Taro Yamane formula indicates a sample population of 283. A simple random sampling method was applied when collecting the survey data. The results show that 74% of the respondents are mobile payment adoption users, totaling 210 out of 283. This study focuses solely on MSME owners in Pathein, utilizing questionnaires administered to 210 MSME respondents.

The survey designed a structured questionnaire with a 5-point Likert scale to identify the barriers to MSMEs adopting mobile payments. The questionnaire is divided into two sections of demographic information and barriers to digital payment adoption.

In addition, the mean value was calculated using SPSS software in this study. The reliability analysis, Person correlations analysis, and regression model were applied to evaluate the relationships and variables. The questionnaire consisted of 42 items to assess all independent and dependent variables.

4.2 Profile of Respondents

Primary data were collected from 210 MSMEs that adopted mobile payments using a structured questionnaire. The respondents' profiles are also important in identifying their characteristics for the study.

Table (4.1) represents the digital payment adoption experience and non-adoption experience of MSME owners in the Pathein region. The survey collected 283 respondents, and the information is shown in Table (4.1).

Table (4.1) Digital Payment Adoption Experience of the Respondents

No.	Item	Category	No. of Respondent	Percent
	Total		283	100
1.	Experience	Yes	210	74.3
		No	73	25.7

Source: Survey Data, 2024

According to Table (4.1), 210 respondents (74.3%) of MSME owners have experience with digital payment adoption, while 83 respondents (25.7%) do not. This study excludes the non-adopting MSME owners, focusing solely on the total of 210 respondents who have adopted digital payments out of 283 respondents and 73 respondents who do not have adopted the practice of digital payments.

4.2.1 Demographic Profile of Respondents

This section outlines the demographic profiles of the sampled Micro, Small, and Medium Enterprise (MSME) owners in Pathein. The analysis includes factors such as gender, firm size, firm industry, firm age, annual income in the business, services, years of digital payment experience, and payment method.

Table (4.2) Demographic Data of the Respondents

No.	Item	Category	No. of Respondent	Percent
			Total	100
1.	Gender	Male	117	55.7
		Female	93	44.3
2.	Firm Size (No. of employee)	1 to 5	140	6.5
		6 to 10	36	7.1
		11 to 20	24	11.8
		21 to 50	7	3.2
		50 Above	3	1.4
3.	Firm Industry	Retail	64	30.5
		Service	38	18.1
		Manufacturing	45	21.4
		F&B	55	26.2
		Others	8	3.8
4.	Firm Age (Years)	0 to 2	24	11.4
		3 to 5	70	33.3
		6 to 10	70	33.3
		11 to 15	23	11.0
		15 above	23	11.0
5.	Estimated Annual Income (MMK in Million)	0 to 5	8	3.8
		5 above to 10	77	36.7
		10 above to 30	79	37.8
		30 above to 50	25	11.7
		50 above to 100	13	6.2
		100 above	8	3.8

Source: Survey Data, 2024

According to Table (4.2), The gender distribution of the respondents is as follows: out of 210 respondents, 117 (55.7%) were male, and 93 (44.3%) were female. Therefore, males constituted 55.7% of the respondents, while females accounted for

44.3%. The data shows that the number of male respondents is minimally higher than that of female respondents. Many MSME businesses, such as retail stores, tea shops, rice distribution businesses, and others, require a solid physical presence. Consequently, the rate of male MSME owners is higher than that of female owners.

The respondents come from various industries: 64 (30.5%) are in retail, 38 (18.1%) are in the service sector, 45 (21.4%) are in manufacturing, 55 (26.2%) are in food and beverage (F&B), and 8 (3.8%) are in other industries. The cumulative percentages show that 30.5% of the respondents are in retail, 48.6% are in retail and service sectors combined, 70.0% are in retail, service, and manufacturing, 96.2% are in retail, service, manufacturing, and F&B, and 100.0% include all sectors.

Most businesses in Patheingyi are micro-sized, with 1 to 5 employees, making up 66.5% (140 respondents). These include grocery stores, small electronics shops, kitchen and home appliance shops, and fashion shops. Small-sized businesses with 6 to 10 employees are the second most common, and their business type is small tea, comprising 17.1% (36 respondents). Medium-sized businesses with 11 to 20 employees are the third most prevalent, accounting for 11.8% (24 respondents). Finally, businesses with 21 to 50 employees are the fourth most prevalent and accounted for 3.2% (7 respondents), and businesses with 50 and above employees are the least common, representing only 1.4% (3 respondents) of the total.

The firm industry of this study is based on their years of operation. Businesses operating for 0 to 2 years comprise 11.4% (24 respondents). Those in operation for 3 to 5 years account for 33.3% (70 respondents), the same percentage as those operating for 6 to 10 years. Businesses that have been running for 11 to 15 years and those operating for over 15 years each constitute 11.0% (23 respondents). Therefore, the most common businesses in Patheingyi have been operating for 3 to 10 years, making up the most significant proportion of the total.

The estimated annual income of MSMEs is presented with Kyat (MMK), and a small proportion of businesses (3.8%, eight respondents) earn between 0 to 5 million MMK annually. The largest group, making up 36.7% (77 respondents), have annual incomes between 5 million and 10 million MMK. Slightly more, 37.8% (79 respondents) earn between 10 million to 30 million MMK. Those earning between 30 and 50 million MMK constitute 11.7% (25 respondents). Businesses with incomes from

50 million to 100 million MMK make up 6.2% (13 respondents), and another small group (3.8%, eight respondents) earns over 100 million MMK annually. Most businesses in Pathein have annual incomes ranging from 5 million to 30 million MMK.

4.3 Reliability Analysis

Understanding the barriers that prevent MSME owners from adopting digital payment systems is essential for promoting their use. This section focuses on a reliability analysis of these barriers to ensure our findings are consistent and reliable. Identifying and confirming these barriers can provide valuable insights to help increase digital payment adoption among MSMEs. There are 42 questions built to cover barriers to digital payment adoption.

The reliability of survey instruments and scales used in research is tested using Cronbach's Alpha formula. A value greater than 0.9 indicates excellent internal consistency, values between 0.8 and 0.9 are evaluated good, and values between 0.7 and 0.8 are acceptable. Values between 0.6 and 0.7 are questionable, values between 0.5 and 0.6 are poor, and values below 0.5 are unacceptable. This classification helps assess the reliability of survey instruments and scales used in research. The result of Cronbach's Alpha is shown in Table (4.3).

Table (4.3) Result of Cronbach's Alpha Value

No.	Description	No of items	Cronbach's Alpha
1	Usage Barriers	6	0.961
2	Value Barriers	6	0.925
3	Risk Barriers	6	0.973
4	Traditional Barriers	6	0.933
5	Image Barriers	6	0.953
6	Information Barriers	6	0.983
7	Continuous Adoption	6	0.970

Source: Survey Data, 2024

Table (4.3) shows that the usage barriers have a Cronbach's Alpha value of 0.961, indicating excellent internal consistency. The value barriers have a Cronbach's Alpha value of 0.925, reflecting excellent reliability. Risk barriers are represented with

a value of 0.973, demonstrating excellent consistency. Traditional barriers have a value of 0.933, indicating excellent reliability. Image barriers exhibit a of 0.953, showing excellent internal consistency. Information barriers have the highest Cronbach's Alpha value at 0.983, indicating excellent consistency. Continuous adoption shows a value of 0.970, demonstrating excellent internal consistency.

These high Cronbach's Alpha values across all categories confirm the result of reliability and internal consistency of the survey instruments used to assess the barriers to digital payment adoption among MSMEs.

4.4 MSME Owners Barriers Effecting Digital Payment Adoption

In terms of Innovation Resistance Theory, the analysis focuses on identifying the barrier factors, which include usage barriers, value barriers, image barriers, risk barriers, and tradition barriers. A questionnaire utilizing a five-point Likert scale is employed to assess respondents' satisfaction levels with each dimension. A five-point Likert Scale is used with strongly agreed, agreed, neutral, disagreed, and strongly disagreed. The measurement is represented by mean value and standard deviation.

Table (4.4) Mean Score Interpretation

Mean Score	Interpretation
1.00 -1.80	Lowest
1.81-2.60	Low
2.61-3.40	Moderate
3.41-4.20	High
4.21-5.00	Very High

Source : Best , 1977

Table (4.4) provides an outline of the interpretation of mean scores on a five-point Likert scale, referencing the standards from best, 1997. The interpretation of mean scores on a five-point Likert scale ranges from 1.00 to 1.80 as "Lowest," indicating the least favorable responses, 1.81 to 2.60 as "Low," showing generally unfavorable responses, 2.61 to 3.40 as "Moderate," reflecting neutral or average responses, 3.41 to 4.20 as "High," indicating favorable responses, and 4.21 to 5.00 as "Very High,"

representing the most favorable responses. This helps to understand the overall level of agreement or satisfaction from survey responses.

(a) Usage Barriers on Digital Payment Adoption

Regarding the analysis of usage barriers on digital payment adoption of MSME owners, the respondents have to give their degree of barriers and then, the score were ranged to calculate mean value and standard deviation. In Table (4.6), the mean values of scores and standard deviation are shown.

Table (4.5) Mean Score of Usage Barriers

No.	Usage Barriers	Mean Scores	Std. Deviation
1.	Having language a barrier while using digital payment systems.	1.61	.79
2.	Using e-wallets (KBZPay, AYAPay, WavePay, etc.,) and other digital payment services difficult.	1.63	.85
3.	The working steps of digital payments are not simple and easy to use.	1.65	.91
4.	Using payment methods that are currently unknown or not widely recognized.	1.64	.86
5.	The process in Digital Payment services is unclear.	1.61	.89
6.	Having limited access to reliable internet connectivity.	1.91	.76
	Overall Mean	1.68	

Source: Survey Data, 2024

According to Table (4.5), the analysis summarizes the perceived barriers to using digital payment systems, with each barrier evaluated by mean scores and standard deviations. The most significant barrier identified is " Having limited access to reliable internet connectivity." with a mean score of 1.91. This mean score, being less than 2.61, indicates that this barrier is considered low effect and there is an inclination towards continuous adoption of digital payment systems in this regard.

The overall mean score for all barriers is 1.68. This overall mean score, also showed low level of difficulty perceived across all barriers, indicating that, generally, the barriers are not very high, and there is a tendency towards continuous adoption of digital payment systems.

(b) Value Barriers on Digital Payment Adoption

In this section, Table (4.6) illustrates the value barriers of digital payment adoption of MSMEs owners. Overall mean is 2.03.

Table (4.6) Mean Score of Value Barriers

No.	Value Barriers	Mean Scores	Std. Deviation
1.	Using digital payments is not helpful for business.	1.75	1.29
2.	Accepting money with digital payments is no less efficient than accepting money in cash.	2.47	1.54
3.	Using digital payments is not helpful for the financial management for business.	2.01	1.40
4.	Having digital payments is no substitute for using cash.	2.15	1.43
5.	Using digital payments does not save time for business.	1.86	1.35
6.	Having initial cost and the commissions to be paid to the respective banks or mobile wallets are burdensome for businesses.	1.98	1.37
	Overall Mean	2.03	

Source: Survey Data, 2024

Table (4.6) outlines perceived value barriers in adopting digital payment systems, rated by mean scores and standard deviations. The most significant barrier, "Accepting money with digital payments is no less efficient than accepting money in cash." has a mean score of 2.47, indicating low perceived challenges in this aspect. Conversely, the barrier with the lowest mean score is "Using digital payments is not helpful for business," scoring 1.75, suggesting relatively lowest perceived barriers. The

overall mean score for all value barriers is 2.03 indicating low perceived challenges across these areas.

(c) Risk Barriers on Digital Payment Adoption

In Table (4.7), the risk barriers on digital payment adoption and the benefits of adoption result are shown in the following Table.

Table (4.7) Mean Score of Risk Barriers

No.	Risk Barriers	Mean Scores	Std. Deviation
1.	Being worried is an error when receiving money through digital payments.	1.98	1.41
2.	Being concerned that wrong information may be entered while paying or receiving through digital payments.	1.96	1.41
3.	Being concerned that passwords will be leaked when making/receiving digital payments.	1.91	1.44
4.	Being anxious about personal information will be leaked when using/receiving digital payments.	1.94	1.45
5.	Being nervous about losing money due to online scams when using digital payments.	2.07	1.54
6.	Being uneasy that money won't be received while using digital payment.	2.12	1.51
	Overall Mean	2.00	

Source: Survey Data, 2024

According to Table (4.7), the key risk barriers to using digital payment systems, with respondents rating the concerns of MSME owners. The primary concern identified is " Being uneasy that money won't be received while using digital payment," which has a mean score of 2.12 refers low level of effect. Additionally, " Being nervous about losing money due to online scams when using digital payments.", scoring 2.07 shows low effect on worry of losing money.

The overall mean score for these concerns is 2.00 indicate a low level of worry among MSME owners regarding these risks.

(d) Tradition Barriers on Digital Payment Adoption

Regarding the analysis of tradition barriers on digital payments adoption of MSME owners, the respondents have to give their degree of barriers and then, the score were ranged to calculate mean value.

Table (4.8) Mean Score of Tradition Barriers

No.	Tradition Barriers	Mean Scores	Std. Deviation
1.	Not being patient to use digital payments.	2.51	1.71
2.	Not favouring digital payments rather than face-to-face payments.	2.76	1.61
3.	Not having interest to pay/receive the payment in cash.	2.82	1.63
4.	Not preferring to pay/receive online.	2.31	1.43
5.	Not favoring recording income and expenses digitally.	2.63	1.62
6.	Not preferring to count digital money instead of cash.	2.75	1.64
	Overall Mean	2.63	

Source: Survey Data, 2024

Table(4.8) identifies traditional barriers to adopting digital payments, based on respondent ratings. The most prominent barrier is " Not having interest to pay/receive the payment in cash." with a mean score of 2.82 means moderate level of prefer to pay/receive with cash. Following closely is " Not favouring digital payments rather than face-to-face payments," which scores a mean of 2.76 also shows the result of moderate level of prefer to use face to face payments.

The overall mean score for these barriers is 2.63, indicating moderate resistance among respondents towards embracing digital payment methods. These findings underscore a preference for traditional payment modes like cash and face-to-face transactions, suggesting a need for strategies that address these preferences to encourage greater adoption of digital payment solutions.

(e) Image Barriers on Digital Payment Adoption

This section analyses the image and trust of MSMEs on banks and digital payment organization associated with the adoption of digital payment system. Perceptions of MSME owners who adopted and concern about the risks of digital payment services are presented in Table (4.9).

Table (4.9) Mean Score of Image Barriers

No.	Image Barriers	Mean Scores	Std. Deviation
1.	Not trusting digital payment systems.	1.80	1.28
2.	Not having interest in the benefits of using a digital payment system.	1.78	1.17
3.	Not being interested in the promotional offers given by the respective banks about digital payment systems.	2.08	1.27
4.	Not trusting banks' and organizations' established digital payment systems like mobile wallets (Kbz Pay, AYA Pay, WavePay).	1.73	1.27
5.	Not trusting the employees of the related organizations who encourage the use of digital payment systems.	1.78	1.27
6.	Not being interested he digital payment system because of reports of losses due to financial fraud.	1.86	1.31
	Overall Mean	1.84	

Source: Survey Data, 2024

The Table (4.9) highlights MSMEs' concerns regarding image barriers to using digital payment systems. The most significant worry is “ Not being interested in the

promotional offers given by the respective banks about digital payment systems.” and the result of mean score get 2.08, it integrate moderate level of resistance on adoption . “Not trusting banks' and organizations' established digital payment systems like mobile wallets,”on mean score 1.73.

The overall mean score of 1.84 and it indicates low level on a general lack of trust and interest in digital payment systems among respondents that reflecting moderate variability in their attitudes.

(f) Information Barriers on Digital Payment Adoption

The respondents were asked to rate the degree of barriers for all influencing factors. These scores were then used to calculate the mean value and standard deviation. Table (4.10) displays the mean values and standard deviations of the scores.

Table (4.10) Mean Score of Information Barriers

No.	Information Barriers	Mean Scores	Std. Deviation
1.	Not being sure about digital payments currently used in the market.	1.91	1.32
2.	Not receiving sufficient information available to contact relevant organizations for making payments/receipts through digital payment systems.	1.99	1.34
3.	Not being aware of information about any benefits for business in using a digital payment/receiving system.	1.94	1.30
4.	Not knowing the information about the benefits of using digital payment systems for business and customers.	1.92	1.27
5.	Being in trouble to get information about the new digital payment system.	1.91	1.32
6.	Not receiving the information that will give the business better opportunities for making/receiving payments through digital payment systems.	1.96	1.35
	Overall Mean	1.94	

Source: Survey Data, 2024

Table (4.10) presents a survey on information barriers to adopting digital payments, displaying mean scores and standard deviations for various concerns. The most concern of MSMEs owners is that mean score of 1.99 indicates insufficient information to contact relevant organization to get digital payment and transaction related information.

The overall mean score of 1.94 for the information barriers indicates a low level of uncertainty and perceived lack of information about digital payment systems among respondents.

(g) Digital Payment Intention for Adoption

The respondents rated the degree of barriers for influencing adoption factors. These ratings were used to calculate the mean values and standard deviations. Table (4.11) presents the mean values and standard deviations of these scores.

Table (4.11) Mean Score Of Intention for Adoption

No.	Continuous Adoption	Mean Scores	Std. Deviation
1.	Planning to continue using digital payment/ acceptance systems for business in the future.	4.68	.67
2.	Planning to continue using digital payment/ acceptance system if opportunities arise for the business.	4.66	.67
3.	Believing that using the digital payment system will benefit customers and planning to continue using it in the future.	4.70	.59
4.	Planning to continue using digital payment/ acceptance systems, trusting that information will be kept securely by banks and institutions.	4.64	.68
5.	Considering if the business competitor's use of a digital payment/acceptance system is a reason to continue using it for the business.	4.62	.66
6.	Believing that the negative effects caused by the use of digital payment/acceptance systems will be resolved by the relevant organizations and planning to continue using the digital payment/acceptance system in the future.	4.65	.66
	Overall Mean	4.66	

Source: Survey Data, 2024

According to the Table (4.11) the summarizes of survey on the continuous adoption of digital payment systems, showing mean scores for various statements. Respondents highly intend to continue using digital payments, with a mean score of 4.68 that they have plan to continue using the digital payment acceptance for their business. The result also shows strong intention which receive the mean score 4.66 that means to continue if business opportunities arise, and believe in the benefits for customers with mean score 4.70.

The overall mean score for continuous usage is 4.67, indicating a strong overall positive attitude towards ongoing use of digital payment systems. Despite the presence of barriers, MSME owners may still be willing use new technology if opportunities arise for their businesses.

4.5 Pearson Correlations Analysis

The relationship between barrier infleuncing adoption intention is examined by Person correlations. The Pearson correlations analysis given in Table (4.12).

Table (4.12) Pearson Correlations Analysis

Variable	Continuous Adoption
Usage Barriers	-.396**
Value Barriers	-.453**
Risk Barriers	-.308**
Traditional Barriers	-.433**
Image Barriers	-.481**
Information Barriers	-.461**

Source: Survey Data, 2024 , **Correlations is significant at 0.05 level.

Table (4.12) found negative Pearson correlation between various barriers and continuous adoption. According to Table (4.12) the results are ranging from -0.308 to -0.481. Usage barriers showed a moderate negative correlation (-0.396, $p < 0.01$), while value barriers had a moderate to strong negative correlation (-0.453, $p < 0.01$). Risk barriers displayed a moderate negative correlation (-0.308, $p < 0.01$). Traditional, image, and information barriers had strong negative correlations, ranging from -0.433 to -0.481 ($p < 0.01$). This means that as these barriers increase, continuous adoption decreases.

4.6 Analysis of Barriers Influencing Digital Payment Adoption of MSME Owners by Regression Model

In this study, regression analysis is used to examine the digital payment adoption among MSME owners in Pathein. The dependent variable is the Adoption of Electronic Payment. The independent variables are usage barriers, value barriers, risk barriers, traditional barriers, image barriers, and information barriers.

Table (4.13) The Effect of Barriers Influencing Digital Payment Adoption of MSME Owners

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	β		
(Constant)	5.339	.203		26.327	0.000
Usage Barriers	.068	.063	.122	1.074	.284
Value Barriers	-.078	.050	-.151	-1.562	.120
Risk Barriers	.066	.040	.149	1.648	.101
Traditional Barriers	-.044	.038	-.101	-1.150	.252
Image Barriers	-.177***	.060	-.328	-2.963	.003
Information Barriers	-.109**	.054	-.226	-2.008	.046
Gender	.029	.073	.023	.393	.695
Firm Type	-.003	.030	-.007	-.114	.910
Firm Size	-.078	.035	-.145	-2.214	.028
Firm Income	-.013	.032	-.027	-.423	.673
Firm Life	.009	.029	.019	.309	.758
R				.567	
R Square				.321	
Adjusted R Square				.283	
F Value				1.334	

Source: Survey Data, 2024, *** Significant at 1% level, ** Significant at 5% level, *Significant at 10% level

According to Table (4.13), when the data control on gender, firm type, firm size, firm income, and firm life, the value of R is 0.567, and it indicates a moderate correlation between the observed and predicted values. The Adjusted R Square value of 0.283 accounts for the number of predictors in the model and still shows that the

model can moderately explain the variation in digital payment adoption intention. Regression shows the causal relationship between the two variables. The variability of the independent variable changes the dependent variable.

The p-value for image barriers is 0.003, and for information barriers, it is 0.046, both of which are below the 0.05 threshold, indicating that these variables have a statistically significant negative impact. The Firm Size has a p-value of 0.028, demonstrating a statistically significant negative impact.

Image barriers are highly significant in the intention to adopt digital payments, as indicated by a p-value of less than 0.01, meaning they are significant at the 1% level. This implies that customers have trust and a positive perception of the digital payment system and its organization. If organizations further build customer trust, the adoption rate of digital payments is likely to increase. By focusing on those areas, organizations can enhance trust and improve the image of digital payment systems, leading to higher adoption rates.

Information barriers are significant in the intention to adopt digital payments at the 5% level, with a p-value of less than 0.05 but more than 0.01. This suggests that customers receive sufficient information about the digital payment system, understand its advantages, and are informed about related promotions.

Although the correlation coefficients indicate a negative significant relationship between barriers and adoption, the regression coefficients were only significant for image and information barriers. This may be due to a non-linear relationship between these barriers and the adoption of those variables.

CHAPTER V

CONCLUSION

This chapter summarizes the study in two main parts: findings and suggestions. The findings section highlights the key barriers to digital payment adoption by MSMEs in Pathein. Based on the findings, the study offers recommendations to improve mobile payment adoption of MSME owners.

5.1 Findings and Discussions

This study focuses on the barriers to digital payment adoption by MSMEs in Pathein. A total of 210 users have adopted digital payments for their businesses, and the survey analyzes the key barriers to their adoption intention.

According to the survey results, demographic factors such as gender, firm age, size, industry, and yearly income significantly influence the intention to adopt digital payments. Most respondents are male, reflecting the nature of MSMEs in Pathein. Most firms (140 out of 210) operate with 1-5 employees, indicating the region's dominance of micro-sized businesses. Regarding firm age, 70 firms have been established for 3 to 5 years, suggesting that many MSMEs started during or after the COVID-19 pandemic. Another 70 firms with 6 to 10 years of operation indicate a more established business environment than newer enterprises. The firm type of retail industry is 64, and under the retail categories, grocery stores, small electronic stores, local gift stores, clinics, and fashion stores are more popular businesses in Pathein. The highest response from MSMEs came from firms with yearly incomes of 10 million and above. Firms with incomes between 5 million and 10 million had the second-highest response. That indicates that micro and small businesses are dominant among Pathein MSME owners.

The mean results indicate that the network connection is the critical barrier in analyzing usage barriers. Undervalue barriers, accepting digital payments is seen as less efficient than accepting cash. The results for risk barriers also highlight concerns about not receiving the money. Traditional barriers are higher than others, primarily due to a preference for counting cash instead of digital transactions. The results for image barriers show a need for more interest in promotional offers related to digital payments and associated organizations. Under information barriers, limited information about digital payments is a significant barrier. Even though the mean value is quite low for the presence of barriers, the relationship is significant for information and image

barriers. These two are essential for the significant loss of one's property, threatening trust in digital payment systems.

The Pearson correlation analysis reveals that all functional barriers, including usage barriers, value barriers, and risk barriers, are significantly related to the intention to adopt. Additionally, the psychological barriers, encompassing tradition, image, and information barriers, are also significant at the 5% level in the context of continuous adoption.

While the correlation coefficients between the barriers and adoption are significantly negative, the regression coefficients were only significant for image and information barriers. The regression analysis results indicate that image and information barriers have a significant negative effect on adoption intention when controlling for factors such as gender, firm type, firm size, firm income, and firm age. This means that negative perceptions of digital payments (image barriers) and a lack of sufficient information about digital payments (information barriers) are significantly associated with lower intentions to adopt digital payment methods. Customers are unlikely to tolerate negative perceptions or insufficient information regarding their digital payment system. Customers may accept certain levels of barriers related to value, risk, and traditional factors and continue using digital payment systems, but negative perceptions and insufficient information significantly hinder adoption intentions.

5.2 Suggestions and Recommendations

Based on the finding, most of MSMEs owners are dissatisfied with unstable internet connections when accepting digital payments. Due to poor internet connectivity, they need help to promptly confirm receipt of payments from customers if the internet service providers can provide more stable network service to ensure the usage of digital payment.

A significant barrier to reducing cash reliance among MSME owners is their preference for cash transactions in income handling and supplier payments. To improve that issue of replacing cash, banks, and digital service providers need to acquire more users, especially suppliers of MSMEs and individuals in rural areas. The service providers must focus on expanding their user base, particularly among MSMEs and individuals. Moreover, the related organization should attract them with indirect or direct ways to adopt digital payment and educate them on the same value as physical

cash and the advantages of digital payment to compare with the pain points of using cash. In addition, creating more agent networks with lower cash costs can improve digital payment and sales volume. Additionally, emphasizing the benefits of digital payments, such as improved financial management, time-saving advantages, and addressing concerns about initial costs and commissions through incentives or reduced fees, can facilitate greater adoption.

Furthermore, the efforts should focus on building trust and promoting the benefits and safety of using digital payments through targeted campaigns, and transparent communication can help alleviate fears. Additionally, enhancing the appeal of promotional offers and ensuring they are well-understood can increase interest and engagement. Providing testimonials and success stories from other businesses that have benefited from digital payments may also build confidence and reduce customers' fear.

Banks and digital payment companies must improve their security to prevent customers' financial and personal information from being lost. To lower these risks, they should provide cybersecurity and fraud awareness training. Employees should be well-prepared to handle customer inquiries related to financial issues, ensuring they are proficient in fraud prevention and security protocols. These efforts will help reduce fears and make people feel safer using digital payments. Apart from that, digital payment providers should enhance clear instructions to avoid errors, implement fraud detection systems, and ensure reliable transaction processes to build trust and reduce user anxiety.

In addition, banks and digital payment providers should ensure that digital payment platforms have user-friendly designs, even for individuals who need to become more familiar with the technology. Simplify the technology and provide good customer support to help people feel comfortable making digital payments. They should train people on how digital payments are safe and convenient through simple guides and community workshops. When launching new products or features, they should ensure their employees effectively communicate the benefits and convenience to customers, providing guides and information in local languages for easier understanding and accessibility. Apart from those, to be transparent about fees, terms, and conditions. On the other hand, collaborating with trusted community organizations to endorse and promote digital payments can help change perceptions and build credibility.

Despite the growth of digital payment adoption in Myanmar, Pathein's adoption remains slow. Moreover, overcoming traditional habits is crucial for successful market

adoption. This approach focuses on addressing security concerns, emphasizing the benefits of digital payments, planning a successful marketing strategy, and overcoming traditional consumer behaviors in Patheingyi. This approach aims to show service providers and customers the value and convenience of digital payment methods, encouraging widespread adoption and satisfaction.

According to the Innovation Resistance Theory, which highlights situational influences on behavior, positive changes in the business environment can effectively shift attitudes and behaviors. Therefore, this study suggests that addressing both traditional barriers and value-related concerns among MSME owners is crucial for facilitating the successful adoption of digital payments. Focusing on these areas makes it possible to ensure sustained adoption of digital payment systems in Patheingyi. This approach aims to enhance acceptance and utilization of these technologies among MSMEs, thereby fostering their integration into everyday business operations more effectively.

5.3 Need For Further Study

This study focuses exclusively on variables pertinent to ongoing digital payment adoption among MSME owners in the Patheingyi region. Future research should replicate this model in diverse contexts to validate our findings. Additionally, future studies are encouraged to develop a resistance to innovation model, mainly focusing on non-adopting users to uncover critical barriers. Moreover, while this study concentrates on MSMEs' adoption of digital payments for business purposes, future research should expand to include individuals and agent networks within the Patheingyi region.

Interestingly, the uptake of card payments for point-of-sale (POS) and e-commerce among MSME owners remains limited, with larger enterprises or MSMEs engaged in cross-border trade showing higher adoption rates. In recent years, Myanmar has witnessed the emergence of numerous cashless payment apps and systems catering to diverse customer segments based on their unique advantages. Understanding MSME attitudes and barriers to adopting these technologies can inform strategies to enhance digital payment adoption within this sector.

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APPENDIX I

Yangon University of Economics Master of Banking and Finance (MBF) Program

**The assessment of barriers factors of digital payment intention to adopt MSME
Owners in Patheingyi.**

Questionnaires Form Part (I) Demographic Profile of Respondents, Please
Tick “✓“in the box that best describes you.

1. Business Owner Manager

2. Gender
 Male Female

3. What industry does your business operate in? e.g., retail, services, manufacturing)?
 Retail Services
 Manufacturing F&B
 Other (please specify)

4. What is the size of your business in terms of the number of employees?
 1-5 11- 20
 6-10 21- 50
 21- 50

5. How long has your business been operating?
 6 months – 2years 3-5 years
 6-10 years 11 to 15 years
 15 years above

6. Digital Payment (If you are non- users, please skip the questions.)
 User non-user

7. Digital Payment Experience
 Below 1 year More than 1 year but less than 2years
 More than 2 years but less than 3 years 3 years and above

7. Digital Payment (If you are non- users, please skip the questions.)

- User non-user

8. Estimated yearly income

- Below 5 million Above 5 million – less than 10 million
 Above 10 million – below 30 million Above 30 million – less than 50 million
 Above 50 million – below 1 billion Above 1 billion

9. Type of payment acceptance used (You can choose more than one):

- Mobile Wallets (KBZPay , AYA Pay, CB Pay, etc)
 Mobile Banking Bank Transfer
 Card Payments (Visa/MasterCard/MPU) Cash
 Others (Please specify: _____)

Part (II)

Section No 2 and 9 concerned of barriers factor influencing digital payment intention to adopt MSMEs Owners in Pathein.

How would you rate each of the Hygiene factor relating to agree or disagree for the questions?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

No	Particular	1	2	3	4	5
A	Usage Barriers					
1.	Having language a barrier while using digital payment systems.					
2.	Using e-wallets (KBZPay, AYAPay, WavePay, etc.) and other digital payment services difficult.					
3.	The working steps of digital payments are not simple and easy to use.					
4.	Using payment methods that are currently unknown or not widely recognized.					
5.	The process in Digital Payment services is unclear.					
6.	Having limited access to reliable internet connectivity.					
B	Value Barriers					
1.	Using digital payments is not helpful for business.					
2.	Accepting money with digital payments is no less efficient than accepting money in cash.					
3.	Using digital payments is not helpful for the financial management for business.					
4.	Having digital payments is no substitute for using cash.					
5.	Using digital payments does not save time for business.					
6.	Having initial cost and the commissions to be paid to the respective banks or mobile wallets are burdensome for businesses.					
C	Risk Barriers	1	2	3	4	5
1.	Being worried is an error when receiving money through digital payments.					
2.	Being concerned that wrong information may be entered while paying or receiving through digital payments.					
3.	Being concerned that passwords will be leaked when making/receiving digital payments.					
4.	Being anxious about personal information will be leaked when using/receiving digital payments.					
5.	Being nervous about losing money due to online scams when using digital payments.					
6.	Being uneasy that money won't be received while using digital payment.					
D	Tradition Barriers	1	2	3	4	5

1.	Not being patient to use digital payments.					
2.	Not favouring digital payments rather than face-to-face payments.					
3.	Not having interest to pay/receive the payment in cash.					
4.	Not preferring to pay/receive online.					
5.	Not favoring recording income and expenses digitally.					
6.	Not preferring to count digital money instead of cash.					
E	Image Barriers	1	2	3	4	5
1.	Not trusting digital payment systems.					
2.	Not having interest in the benefits of using a digital payment system.					
3.	Not being interested in the promotional offers given by the respective banks about digital payment systems.					
4.	Not trusting banks' and organizations' established digital payment systems like mobile wallets (Kbz Pay, AYA Pay, WavePay).					
5.	Not trusting the employees of the related organizations who encourage the use of digital payment systems.					
6.	Not being interested he digital payment system because of reports of losses due to financial fraud.					
F	Information Barriers	1	2	3	4	5
1.	Not being sure about digital payments currently used in the market.					
2.	Not receiving sufficient information available to contact relevant organizations for making payments/receipts through digital payment systems.					
3.	Not being aware of information about any benefits for business in using a digital payment/receiving system.					
4.	Not knowing the information about the benefits of using digital payment systems for business and customers.					
5.	Being in trouble to get information about the new digital payment system.					
6.	Not receiving the information that will give the business better opportunities for making/receiving payments through digital payment systems.					
G	Intention for Adoption	1	2	3	4	5
1.	Planning to continue using digital payment/acceptance systems for business in the future.					

2.	Planning to continue using the digital payment/acceptance system if opportunities arise for the business.					
3.	Believing that using the digital payment system will benefit customers and planning to continue using it in the future.					
4.	Planning to continue using digital payment/acceptance systems, trusting that information will be kept securely by banks and institutions.					
5.	Considering if the business competitor's use of a digital payment/acceptance system is a reason to continue using it for the business.					
6.	Believing that the negative effects caused by the use of digital payment/acceptance systems will be resolved by the relevant organizations and planning to continue using the digital payment/acceptance system in the future.					

APPENDIX II

No.	Item	Category	No. of Respondent
		Total	
1.	Gender	Male	117
		Female	93
2.	Firm Size (No. of employee)	1 to 5	140
		6 to 10	36
		11 to 20	24
		21 to 50	7
		50 Above	3
3.	Firm Industry	Retail	64
		Service	38
		Manufacturing	45
		F&B	55
		Others	8
4.	Firm Age (Years)	0 to 2	24
		3 to 5	70
		6 to 10	70
		11 to 15	23
		15 above	23
5.	Estimated Annual Income (MMK in Million)	0 to 5	8
		5 above to 10	77
		10 above to 30	79
		30 above to 50	25
		50 above to 100	13
		100 above	8

APPENDIX III

No	Particular	1	2	3	4	5
A	Usage Barriers					
1.	Having language a barrier while using digital payment systems.	157	38	24	8	9
2.	Using e-wallets (KBZPay, AYAPay, WavePay, etc.) and other digital payment services difficult.	154	19	18	16	3
3.	The working steps of digital payments are not simple and easy to use.	152	24	20	11	3
4.	Using payment methods that are currently unknown or not widely recognized.	150	24	16	15	4
5.	The process in Digital Payment services is unclear.	151	25	15	14	4
6.	Having limited access to reliable internet connectivity.	135	26	22	17	10
B	Value Barriers					
1.	Using digital payments is not helpful for business.	147	22	18	13	8
2.	Accepting money with digital payments is no less efficient than accepting money in cash.	96	42	27	25	20
3.	Using digital payments is not helpful for the financial management for business.	120	35	29	14	11
4.	Having digital payments is no substitute for using cash.	111	34	34	19	12
5.	Using digital payments does not save time for business.	139	29	21	12	9
6.	Having initial cost and the commissions to be paid to the respective banks or mobile wallets are burdensome for businesses.	124	31	24	21	10
C	Risk Barriers	1	2	3	4	5
1.	Being worried is an error when receiving money through digital payments.	132	29	20	19	10
2.	Being concerned that wrong information may be entered while paying or receiving through digital payments.	135	27	21	17	10
3.	Being concerned that passwords will be leaked when making/receiving digital payments.	141	23	16	15	15
4.	Being anxious about personal information will be leaked when using/receiving digital payments.	140	21	20	15	14
5.	Being nervous about losing money due to online scams when using digital payments.	133	22	21	20	14
6.	Being uneasy that money won't be received while using digital payment.	126	27	25	16	16

D	Tradition Barriers	1	2	3	4	5
1.	Not being patient to use digital payments.	112	39	27	24	8
2.	Not favouring digital payments rather than face-to-face payments.	87	42	39	28	14
3.	Not having interest to pay/receive the payment in cash.	84	46	34	31	15
4.	Not preferring to pay/receive online.	94	47	42	16	11
5.	Not favoring recording income and expenses digitally.	96	44	31	26	13
6.	Not preferring to count digital money instead of cash.	88	42	33	31	16
E	Image Barriers	1	2	3	4	5
1.	Not trusting digital payment systems.	141	32	22	11	4
2.	Not having interest in the benefits of using a digital payment system.	127	45	19	15	4
3.	Not being interested in the promotional offers given by the respective banks about digital payment systems.	95	62	28	19	6
4.	Not trusting banks' and organizations' established digital payment systems like mobile wallets (Kbz Pay, AYA Pay, WavePay).	150	31	15	10	4
5.	Not trusting the employees of the related organizations who encourage the use of digital payment systems.	143	32	21	10	4
6.	Not being interested he digital payment system because of reports of losses due to financial fraud.	139	31	21	17	2
F	Information Barriers	1	2	3	4	5
1.	Not being sure about digital payments currently used in the market.	126	35	31	9	9
2.	Not receiving sufficient information available to contact relevant organizations for making payments/receipts through digital payment systems.	119	37	30	16	8
3.	Not being aware of information about any benefits for business in using a digital payment/receiving system.	121	37	33	14	5
4.	Not knowing the information about the benefits of using digital payment systems for business and customers.	120	41	31	13	5
5.	Being in trouble to get information about the new digital payment system.	128	31	28	16	7
6.	Not receiving the information that will give the business better opportunities for making/receiving payments through digital payment systems.	125	30	30	18	7
G	Intention for Adoption	1	2	3	4	5
1.	Planning to continue using digital payment/acceptance systems for business in the future.	3	2	16	33	156

2.	Planning to continue using the digital payment/acceptance system if opportunities arise for the business.	3	2	12	41	152
3.	Believing that using the digital payment system will benefit customers and planning to continue using it in the future.	2	1	12	39	156
4.	Planning to continue using digital payment/acceptance systems, trusting that information will be kept securely by banks and institutions.	2	4	18	37	149
5.	Considering if the business competitor's use of a digital payment/acceptance system is a reason to continue using it for the business.	2	3	16	46	143
6.	Believing that the negative effects caused by the use of digital payment/acceptance systems will be resolved by the relevant organizations and planning to continue using the digital payment/acceptance system in the future.	2	3	17	39	149

APPENDIX IV

Effect of Barriers on Mobile Payment Adoption Intention for Adoption

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate	Change Statistics		
					R Square Change	F Change	df1
1	.567 ^b	.321	.283	.51743	.023	1.334	5

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.065	11	2.279	8.511	.000 ^c
	Residual	53.012	198	.268		
	Total	78.077	209			

Coefficient

Model	Dimension	Variance Proportions						
		Tbar	Imbar	Inbar	Gender	Type	Fsize	Income
1	Usage	.00	.00	.00	.00	.00	.00	.00
	Value	.00	.01	.01	.01	.03	.02	.01
	Risk	.00	.00	.00	.03	.00	.68	.00
	Tradition	.00	.01	.00	.01	.67	.05	.01
	Image	.11	.02	.00	.07	.00	.07	.09
	Information	.12	.00	.01	.39	.02	.04	.01
	Adp Int:	.23	.03	.03	.06	.11	.01	.01
	Gender	.00	.00	.03	.01	.03	.09	.60
	Firm Type	.15	.02	.41	.01	.00	.01	.06
	Firm Size	.04	.81	.04	.03	.03	.00	.00
	Income	.28	.00	.48	.02	.01	.00	.01
	Firm Life	.05	.11	.00	.37	.10	.02	.19