

**YANGON UNIVERSITY OF ECONOMICS  
DEPARTMENT OF COMMERCE  
MASTER OF BANKING AND FINANCE PROGRAMME**

**MERCHANT PERCEPTION ON ADOPTION OF  
CASHLESS PAYMENT SYSTEM IN  
BAYINT NAUNG WHOLESALE MARKET**

**NAW TIN MOE MOE SWE  
MBF (DAY)1<sup>ST</sup>BATCH**

**NOVEMBER, 2019**

**MERCHANT PERCEPTION ON ADOPTION OF  
CASHLESS PAYMENT SYSTEM IN  
BAYINT NAUNG WHOLESALE MARKET**

A thesis submitted as a partial fulfillment towards the requirements for  
the degree of Master of Banking and Finance (MBF)

**Supervised by**

Prof. Dr. Tin Tin Htwe  
Professor  
Department of Commerce  
Yangon University of Economics

**Submitted by**

Naw Tin Moe Moe Swe  
Roll No.53  
MBF (Day) 1<sup>st</sup>Batch  
2017-2019

## ACCEPTANCE

Accepted by the Board of Examiners of the Department of Commerce,  
Yangon University of Economics, in partial fulfillment for the requirement of the  
Master of Banking and Finance.

## BOARD OF EXAMINERS

-----  
Prof. Dr. U Tin Win  
(Chairman)  
Rector  
Yangon University of Economics

-----  
(Supervisor)  
Prof. Dr. Tin Tin Htwe  
Professor  
Department of Commerce  
Yangon University of Economics

-----  
(Examiner)  
Prof. Dr. Daw Soe Thu  
Professor and Head  
Department of Commerce  
Yangon University of Economics

-----  
(Examiner)  
Daw Khin New Ohn  
Associate Professor  
Department of Commerce  
Yangon University of Economics

-----  
(Examiner)  
Daw Yee Yee Thein  
Associate Professor  
Department of Commerce  
Yangon University of Economics

November, 2019

## **ABSTRACT**

This paper analyzed the merchant perception on adoption of cashless payment system in Bayint Naung Wholesale Market. Both of primary and secondary data were used for the study. Primary data were collected by questionnaire survey the random sample included 8% of the total merchants in Bayint Naung Wholesale Market face to face interview result. The study analyzed merchant perception on cashless payment system by using the Technology Acceptance Model (TAM). The factors included in the model are external variable, usefulness, ease of use, security of cashless payment system and user attitude which are measured by merchant perception on cashless payment system. The survey results indicated all the variables have high score level. Among these factors external variable such as advertisements enhance merchants to use cashless payment system, the requirement for merchant payment and it is becoming popular in the society are get the highest result followed by user attitude, usefulness, ease of use and security of the cashless payment system. Security score get the lowest score. Almost merchants are using cashless payment daily. It was found that banks need to emphasize more on security system in digital financing services.

## **ACKNOWLEDGEMENTS**

I would like to express my special thanks to Dr. Tin Win, Rector, Yangon University of Economics, for giving me permission to carry out this thesis.

I also thank Prof: Dr. Soe Thu, MBF Programme Director and Head of Department of Commerce, Yangon University of Economics, for her great contribution and encouragements to precede this thesis.

I am indebted to my supervisor Prof: Dr. Tin Tin Htwe, Department of Commerce, Yangon University of Economics for her valuable support and guidance, constructive suggestions, supervision, encouragement and valuable opinion.

Furthermore, I reveal my special recognition to all board of examiners, teachers for giving their precious time, energy and effort in sharing valuable knowledge throughout the duration of the course.

I would like to thank the merchant from Bayint Naung Wholesale Market, who helped me, everything for their cooperation in collection necessary data and documents for this thesis. I would like to thank all the individuals who participate in this study for their time and effort.

I would also thank all the teachers who taught me within MBF course. I thank all the faculty members for their continuous support and feedback throughout my study.

Finally, I am also indebted to my parents and friends for their support and encouragement.

## **CONTENTS**

		<b>Page</b>
<b>ABSTRACT</b>		i
<b>ACKNOWLEDGEMENTS</b>		ii
<b>TABLE OF CONTENTS</b>		iii
<b>LIST OF TABLES</b>		V
<b>LIST OF FIGURES</b>		Vi
<b>LIST OF ABBREVIATIONS</b>		Vii
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Rationale of the Study	2
1.2	Objectives of the Study	3
1.3	Scope and Method of the Study	3
1.4	Organization of the Study	4
<b>CHAPTER II</b>	<b>THEORETICAL BACKGROUND</b>	<b>5</b>
2.1	The Cash Based Payment System in Businesses	5
2.2	The Cashless Payment System in Businesses	6
2.3	Benefit of Cashless Payment System	9
2.4	Theory Review: Technology Acceptance Model (TAM)	10
2.5	Previous Studies	12
2.6	Conceptual Framework of the Study	12

<b>CHAPTER III</b>	<b>OVERVIEWS OF BAYINT NAUNG WHOLESALE MARKET</b>	<b>14</b>
3.1	Financial Sector Reform in Myanmar	14
3.2	Cashless Payment System in Myanmar	15
3.3	Background of Bayint Naung Wholesale Market	16
3.4	Financial Institutions in Bayint Naung Wholesale Market	17
<b>CHAPTER IV</b>	<b>ANALYSIS OF MERCHANT PERCEPTION ON CASHLESS PAYMENT</b>	<b>19</b>
4.1	Research Design	19
4.2	Demographic Characteristic of the Respondents	20
4.3	Current Channel Usage By Merchant	21
4.4	Reliability Analysis	24
4.5	Analysis on the Merchant Perception on Cashless Payment System	26
<b>CHAPTER V</b>	<b>CONCLUSION</b>	<b>35</b>
5.1	Findings of the Study	35
5.2	Suggestions and Recommendation	37
5.3	Need for Further Studies	38

## **REFERENCES**

## **APPENDIX**

## LIST OF TABLES

<b>Table No.</b>	<b>Description</b>	<b>Page</b>
4.1	Demographic Information of Respondents	20
4.2	Local Banks Used for Payment Transaction	22
4.3	Payment Methods Used for Business	22
4.4	Benefits Accrued by Using Cashless Payment	23
4.5	Daily Revenue Range of Merchants	24
4.6	Cronbach's Alpha Rule	25
4.7	Test Results of Cronbach's Alpha Value	26
4.8	Perception on External Variable of Cashless Payment System	27
4.9	Perception on Usefulness of Cashless Payment System	28
4.10	Perception on Security of Cashless Payment System	30
4.11	Perception on Ease of Use of Cashless Payment System	31
4.12	Perception on Attitude of Cashless Payment System	33
4.13	Comparison of Merchant Perception	34

## LIST OF FIGURES

<b>Figure No.</b>	<b>Description</b>	<b>Page</b>
2.1	Technology Acceptance Modle (TAM)	13

## LIST OF ABBREVIATIONS

ATM	-	Automated Teller Machine
AYA	-	Ayerwaddy Bank
CB	-	Co-operative Bank
CBM	-	Central Bank of Myanmar
EMV	-	Europay Mastercard Visa
GDP	-	Gross Domestic Product
KBZ	-	Kan Baw Za
MFSP	-	Mobile Financial Service Providers
MPBSA	-	Myanmar Pulses, Beans and Sesame Seed Merchants' Association
POS	-	Point of Sale
QR	-	Quick Response
SBA	-	Small Business Administration
SLCM	-	Sohan Lal Commodity Management
SMS	-	Short Message Service
TAM	-	Technology Acceptance Model
TTF	-	Task Technology Fit

## **CHAPTER I**

### **INTRODUCTION**

Technology has become an important part of 21<sup>st</sup> century society. One of the biggest changes that emerged because of technology is how people spend their money cash is obsolete and cashless is the latest trend. With the development of technology, cashless payment will continue to grow even more common method of payment in modern society. It is not shocking more advances secure method of cashless payment will be seen by using biometric ID like fingerprints or retinal scan. Cashless economy has received attention of public and created interest among customers. Some of the developments are characterized as mobile ways of transferring money digitally, Short Message Service (SMS), Quick Response (QR) codes (Chandravathi, 2018).

Emerging technologies and innovation play a vital role. In every sectors at the same time, digital identity will help to discuss the growing cyber security concerns, connected with real-time payments. Many financial institutions are creating good progress in developing new products and services to go for 100% financial inclusion. Banks are collaborating with selected strategic partnership, identifying use cases and technologies, facilitating the ecosystem and establishing governance and control to deliver maturity four criteria – people, finance, business and technology.

Banks are partnering with technology companies in order to use sophisticated cashless services (Ali Pay, We chat, etc.) around the world. Myanmar economic development drives the development of financial institution in Myanmar. Along with that, the competition in Myanmar's financial institution becomes intense. KBZ Bank is partnership with Huawei Company and develops a digital payment platform called KBZ Pay. The purpose of the development of this digital platform is to substitute the traditional paper currency payment system with digitalized cashless system.

Although Myanmar revolutionizes its banking industry, Information Technology plays major role in shaping industries and the Central Bank of Myanmar has played an important role in contributing to the setup of cashless society. While the cashless payments will create a positive impact not just for the people, but also for the business and whole of the country, Myanmar is still purely 100% cash society. Since the physical infrastructure for its financial system is broadly and underdeveloped, Myanmar has the opportunity to start with a clean slate, and adopt best practices and approaches right for its marketplace.

## **1.1 Rationale of the Study**

There is so much for Myanmar to gain by moving away from cash to digital payments. At a micro level, consumers will enjoy fast, secure and reliable electronic payments with immediate access to the funds held at the bank or to a line of credit. For merchants, electronic payments will provide an enhanced purchasing experience, reduced cash and check handling costs, and access to a global pool of customers with guaranteed payment.

Customers are having issues with cash payment system and maintenance of the cash. Cash payment system has risks in safety and takes more time and costs for making physical cash payment. It also has limitations such as the payment can only be done during the working hours and the received cash has to be maintained or deposited within the banking hours. Cash also needs to be checked and has risks in cash count error.

Cashless system is highly used in neighbor countries like China and it could solve several problems mentioned in the above paragraph. It could be done through mobile wallet by account transfer, saves time and cost, and reduce risks of safety and cash count error. The payment can be done anytime, anywhere even the invoice payer and the receiver is in different countries. The rate of adoption of cashless payment is positively and significantly affected by perception of customer (Gokilavani, R., Venkateshkumar, D., Drugarani, M., and Mahalakshmi, R., 2018).

There are benefits of cashless economy which are reduction in black money flow – black money, tax evasion, fake currency are the few activities of the economy that cashless economy can put a stoppage. Drop in cost of cash – cashless economy will decrease the cost of producing notes and coins. The amount can be saved by the government which can be used for betterment of the society. Increased spending – cashless payments results into economic growth due to increased spending. Tracking spending behavior: spending behavior can be known when every transaction becomes cashless. Simplified payments – quicker results can be observed when the payment system becomes simplified. Cashless transactions will make life easy for the consumer in his daily life. Disadvantages of cashless methods: people tend to spend more money. It can be already seen in case of credit card, hackers can enter into payment transaction systems and its platform. They always find a way regardless of how much your systems are safe. Increase in failure rate of transactions due to connectivity (L. Srinivas Reddy, 2009).

In our country, Bayint Naing Wholesale Market is the main source of countrywide stocks and distribute to the whole country. There are both export and import exists in Bayint Naung Wholesale Market. The payment volumes are mostly huge and the payment procedure normally depends on the trust between merchants and customers. Some paid in advance through bank transfer, some paid deposit and settle the remaining balance after delivery, while some made payment on delivery.

There are more than 1200 merchants in Bayint Naung Wholesale Market and (100) merchants requested for data collection. Thus (8%) of the customers and merchants are selected for data collection in Bayint Naung Wholesale Market. This study analyzes the cashless payment system that help and support to understand the needs of cashless system via customer perception in Bayint Naung Wholesale Market.

## **1.2 Objectives of the Study**

The general objective of the study is to investigate merchant perception on cashless payment in specific area. More specifically, the objectives of this study are as follows:

1. To identify current cashless payment system in Bayint Naung Wholesale Market.
2. To analyze the merchant perception on cashless payment system in Bayint Naung Wholesale Market.

## **1.3 Scope and Method of the Study**

This study only focuses on cashless payment by banks and non-banks. The focus area is Bayint Naung Wholesale Market in Mayangone Township, Yangon region, Myanmar. Mainly Primary data was used in this research. Primary data are collected by interviewing 100 merchants with survey questions to analyze their perception on cashless payment. The data collection period was from July 2019 to August 2019 in Bayint Naung Wholesale Market. Secondary data were collected from various and reference books, journal, previous research papers and internet websites.

#### **1.4 Organization of the Study**

This thesis included five chapters. Chapter one is included the introduction, rationale of the study, objectives of the study, scope and method of study. Chapter two is describing Theoretical background about cashless Payment. Chapter three includes overview of Bayint Naung Wholesale Market and cashless payment systems in Myanmar described, Chapter four is data analysis of the merchant perception on cashless payment. The findings and suggestions are presented in Chapter five, which are the conclusions of this thesis.

## **CHAPTER II**

### **THEORETICAL BACKGROUND**

In this chapter, it presented the literature reviews on the cash based payment system in businesses, cashless payment system in businesses, benefit of cashless payment, theory review: Technology Acceptance Model (TAM), previous studies and conceptual framework of the Study.

#### **2.1 The Cash Based Payment System in Businesses**

Cash is still by far the most widely used form of payment in all regions of the world and cash in circulation is growing. Cash remains fundamental in our day to day global economy. Merchants usually do not charge extra for payments in cash. The evidence shows that contrary to popular opinion, demand for cash is growing in absolute terms and relative to GDP. All over the world people prefer to use cash, and for many people, it is the only viable payment method. Businesses that stop using cash are excluding a material portion of society and risk losing customers. People trust cash because it is free to use and readily available for consumers, it is confidential, it cannot be hacked and it does not run out of battery power. These unique qualities continue to hold significant value to people living on all continents (World Cash Report, 2018).

Available diary surveys from 24 countries show that according to World Cash Report, 2018 in 18 countries 75 percentage cash represents more than 50 percentage of all payment transactions. Cash has unique valued attributes, such as 100 percentage availability and reliability, anonymity, and direct settlement without the need for technical infrastructure, explaining the continued popularity of cash even if provided with an alternative. Cash is fundamental to financial inclusion, as it allows everyone, including the more than 2 billion global citizens without access to a bank account, to participate in our day-to-day society.

In many countries in Asia and the Middle East, 3 in 4 online purchases are paid for by cash on delivery. The increase in online purchases has not taken cash out of the equation. Two-thirds of people in the world have a bank account. Cash is fundamental to financial inclusion. It allows everyone, including the unbanked, to participate in our day-to-day society. There are just under a third of the world's populations (2 billion people) without access to a bank account.

Cash empowers its users. It enables them to buy and sell, and store their wealth, without being dependent on anyone else. They can stay outside the financial system if so

desired. There are many reasons, both moral and practical, to want this. For consumers, a key benefit of cash is its tangibility. It can be a useful budgeting tool, and it is a quick and easy payment method.

The main reason for getting a landline needs a bank account and credit. About half of the world's population is "unbanked", without access to the basic financial services need. Telecom companies saw no potential custom, the infrastructure was never built and many were left with fewer possibilities to communicate. But a mobile phone and its airtime can be bought with cash. There is no need to be banked. Almost anyone can get a mobile-and they have. The financial system was a barrier to progress for the world's poor, while cash was a facilitator for them.

Cash is king but is this best option for your customer base. Business is to offer various payment options. By doing this, the customers' choices and also capturing every sale you possibly can. Many businesses choose to be a cash-only business for various reasons. Some businesses choose to operate on a cash-only basis so that they can illegally report less on tax documents. Other businesses do so because they can't afford the merchant fees that come with processing credit and debit card payments. Accepting cash at a small business should always be the starting point, but it should not stop there. Cash, however, is only the physical instantiation of money. The reason why cash has been a popular form of exchange for such a long time is because of the tangibility that it provides to the entire idea of money. But money needs to have a physical form that people could identify with.

## **2.2 The Cashless Payment System in Businesses**

People today do not want to carry around cash if they don't have to. They want to make payments from their mobile phones, on the move and whenever they buy products and services. With more and more businesses offering this functionality there is never a better time to introduce this type of payment method to the business. All physical retailers offer this functionality, and so it pays to consider this type of system whether it is physical or online or both.

**Cashless payment systems** automatically make it easier for the customers to pay and this can mean more profits for the business. The Cashless payment systems allow converting visitors to the website easily with one-click payments that encourage purchases and repeat purchases. By using this type of system business can start to reap the benefits that many retailers are enjoying today. By offering cashless payment systems can also help to increase

trust and loyalty gives you and customers peace of mind that all transactions will be completed safely and quickly. (Limonetik, 2018).

Electronic payment methods: at the same time, electronic payment methods are becoming more widely available and their transaction volumes are increasing rapidly. These electronic payment instruments are compatible with our increasingly digital society, where electronic and mobile commerce are becoming more relevant. According to (World Payments Report, 2017) global non-cash transactions were up by almost 11% in 2014-2015, breaking a decade-old record. Although people are many decades away from operating as a fully cashless society, major economies across the globe are inching closer by adopting cashless technology, with some progressing more than others.

Checks: accepting checks seems to be an outdated and risky way of accepting payment, but many businesses still do so. It's difficult for small businesses to verify whether checks are good or if the account has insufficient funds.

Cards: card payment is the leading method of payment in the world next to cash. This method, however, often comes at a cost. Many card companies charge transactional fees (assessed per transaction), flat fees (assessed per month), and incidental fees (assessed under certain situations such as charge-backs). Visa and Master Card dominate the market as they are widely accepted worldwide. American Express and Discover are the next big players, but have a lower acceptance rate given their higher processing fees. Card fellow provides a great break down of the various fees by Credit Card Company.

Customers have started to expect businesses to accept at least some type of credit card and your small business would be at a disadvantage if it did not follow suit. Recently, credit card companies, in an effort to combat fraud, have begun providing their customers with "smart cards" or credit cards with EMV chip technology.

Online Payments: online payments are going to be the future of convenience and security. The SBA lays out some of the advantages and disadvantages of choosing to adopt this early trend. Online payments will offer businesses a cheaper, faster, and reliable way to do business. Companies such as Venmo (traditionally a peer-to-peer payment platform that was acquired by Paypal in 2013) and Square Cash have become increasingly popular with small businesses.

Money Orders: like checks, money orders are paper documents used to make payments. Unlike checks, money orders are thoroughly secure, issued only after a customer has proffered the money represented on the order. Money orders are relatively rare forms of payment, most often seen amongst low-income customers. You should learn how to verify the authenticity of money orders before you decide to accept them. It is just good business to offer your customers options for making payments. These options can include payment plans, using credit or debit card, online payments, checks, cash, money orders, cashier's checks, automatic withdrawals or western.

QR Pay: growth is being driven by advances in mobile technology and a variety of regional factors. The mobile penetration rate, number of smart phones, and the cost of data in a country play a very important role in determining the success of digitalization efforts. All of these factors combined can affect the rate of proliferation of e-wallets in a country. In Asia, a proliferation of QR code-based applications has driven the adoption of e-wallets. Scanning a QR code is considered to be very convenient and easy for customers. QR codes also eliminate the need for POS terminals, which can be a cost burden for merchants. In regions where the electricity supply is unreliable, QR codes are more appropriate as they do not require a continuous electricity supply.

Asia with its digitally savvy population and high proportion of millennial's is increasingly replacing wallets with smart-phones. This has allowed countries in the region to leapfrog from cash to digital payments, bypassing traditional banking and helping many gain access to financial services for the first time. Emerging Asia will likely remain the fastest-growing region globally for cashless payments, with its share of global non-cash transactions reaching around 30 percentage by 2020.

There are clear benefits of this trend: better customer experiences, higher operational efficiency for businesses, financial inclusion of previously un- and under-banked people, and higher transparency and accountability. But there are also costs which should not be overlooked such as the loss of privacy and the risk of fraud and cybercrime.

In this report, they highlight the potential implications for society and investment opportunities. Certain fields in traditional finance in particular could face greater disruption than others, making this an important topic for investors to follow. Companies at the forefront of the fintech wave appear well positioned to benefit from the cashless journey.

### **2.3 Benefits of Cashless Payment System**

It costs the government money to print cash and produce coins and this amount is quite a lot. There are also other costs involving transporting the money to various banks across the country. Meanwhile, it is getting more difficult to monitor the growing volume of cash flows related to tax and licensing matters at government departments. All that leads to unnecessary cases involving corruption. For citizens, fake cash notes and damaged money are also a problem. It is crucial for Myanmar to have an electronic payments system. And depending on how soon we can get that operational, it would be the starting point for a wave of development and growth for the economy (Myanmar Times, 2018).

Especially cashless economy maintains the transparency with proper cyber security. It helps to reduce the cost of printing currency. It supports to reduce the rate of crime and difficult to carry out for the illegal and antisocial activities. The transparency of transactions enhances the revenue collection. It is good for bank sector due to less cash holding. It becomes useful for the citizens to avoid theft, robbery and other money related crimes and incidents and maintain the security of own assets. Technology makes it more convenient to make payments.

Switching from cash based economy to a cashless economy would require a concerted effort to develop a network of critical mass that deals with cashless transactions. Network effects are in place when an addition of one more individual to an existing network of individuals increases the value of all the members in the current network. This makes it costlier for the existing members to switch from the current network. With each additional cashless transaction, the value to all the members currently is using cash increases. In simple words, users find it more attractive to switch to cashless transactions if more users are using them. Therefore, it is important that policy initiatives are in place to develop a critical mass of this network of non-cash users (Mukhopadhyay Financial Innovation, 2016).

The Central Bank of Myanmar is set to implement a standardized national payment system by this year, the system will cover international payments, mobile wallets and all mobile network operators. The country was introduced an easy payment system via mobile phones in Myanmar later this year and being as systematic as possible with the drafting of the regulations as the system will be used by the public to transfer funds for transactions such as buying and selling. The system will be based on Quick Response Code, commonly referred to as QR codes. With international payment firms like Visa and JCB, and local mobile wallet providers such as Wave Money, M Pitesan, OK\$, WeChat and Ali-pay on the implementation of the system. It was coordinating to use a national standard for the whole

country and not different QR codes form companies. Technology management prices, distribution, implementation and financial status of the entire system. The system is greatly to improve the retail payment sector (Myanmar Times Journal, Feb 2019).

#### **2.4 Theory Review: Technology Acceptance Model (TAM)**

TAM is a model of user acceptance of information systems technology based on the theory of reasoned action. Designers, purchasers, and others involved with IT projects are routinely advised to use the TAM to aid the design or purchasing process, training and informational sessions, implementation, and other activities. To the extent that the factors predicting acceptance are controllable, they can be strong levers for acceptance and use. TAM has a strong track record in numerous industries; will it be a useful theoretical tool in technology.

Technology acceptance models aim at studying how individual perceptions affect the intentions to use information technology as well as the actual usage. The Technology Acceptance Model was originally defined by Davis (1989), but it has subsequently been modified and augmented by other researchers. Is one of the most widely used theories in information system literature. Two beliefs (perceived usefulness and perceived ease of use) predict attitudes, which in turn influence intended use of a technology. This intention then consequently impacts behavior of actual system usage. Perceived usefulness is the degree to which a user thinks a technology would enhance performance or productivity in the workplace. Perceived ease of use is the degree of lack of effort required by the user in adopting a given technology. Perceived ease of use also affects perceived usefulness.

In TAM, perceived usefulness is a major belief factor, and perceived ease of use is a secondary belief factor in determining behavioral intentions toward using information technology. Behavioral Intention reflects the extent to which a person purposes to purchase particular products or services. Actual usage behavior refers to the frequency, time, and money which an individual devotes to use technology. Actual system use is perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes.

TAM helps a lot in identifying and categorizing the factors which affect individuals or accepting or refusing use of technology applications. Whereas Sheikhshoaei and Oloumi (2011) indicated two models, they are the Technology Acceptance Model (TAM) and the Task Technology Fit model (TTF) which is frequently used by entities/organizations for explaining the acceptance of e-Banking by consumers, actually these models offer quite

dissimilar but occasionally overlapping point of views on the utilization behavior of these electronic channels. By Shekhshoaei and Oloumo (2011) the Task-Technology Fit model associates technology with performance and imagines that level of performance would go up when a given technology gives features and support that correspond with the requirements of the task. As a result of banks, they would take on e-Banking technologies if it supports in delivering superior quality services to consumers.

By main objective offered by TAM model is to offer comprehensive clarification of factors which affect computer-applications' acceptance generally, and if also supports practitioners for identifying why a precise organism is intolerable and undesirable, Marina (2009) proposed the utilizing any type of information system is straight line determined by the behavioral purpose of using it, which is in turn affected through the users' attitudes in the direction of utilizing the system and the perceived usefulness of the system, attitude and perceived usefulness are also affected by the perceived ease of use.

According Marina (2009) constructs of TAM are almost measured in the same way in every context, in addition, TAM model is a consistent tool and empirically sound. Quite a few meta-analysis research works have given adequate amount of data regarding TAM to be extremely plausible and realistically explain up to forty percent of the behavioral intention to use. In addition, quite a lot of research works have applied TAM for evaluating consumer's adoption in diverse settings for example e-commerce (Hearn & Hearn, 2008); e-learning, internet banking and e-government (Azouzi, 2009). TAM has been evaluated within broader behavioral theories such as the Theory of Reasoned Action (Legris, Ingham, & Collette, 2003).

## **2.5 Previous Studies**

By reviewing various statements from previous study, Hirschman, E. C. (1979) studied the impact of payment method on purchase behavior. He found that use of credit cards encourage more purchases than use of cash. Avery, R.B., et al. (1986) found that there was a strong positive correlation between income, education, wealth, urban variable and middle age and dependent variable credit card use. The factors influencing usage of credit cards issued by a bank in India.

They found that sex, age, educational qualification of card holders has no relationship with utilization of credit cards. They also stated that occupation, income, employment status of spouse, mode of getting card has relationship with utilization of credit cards. Worthington (1995) expressed the view that the cashless society in which clumsy and expensive to handle

coins and notes are replaced by efficient electronic payments initiated by various types of plastic cards is a good prospect for the twenty first century. Electronic payments will be able to check black money. Electronic money could become an important form of currency in the future. He found that the convenience of cashless transactions weighed against the temptation to evade taxes. (Venkateswararao, Podiler, P. Rajesh, July 2017)

According to Kim et.al., (2017) from South Korea, School of Business, Yeungnam University analyze that consumer's perception of the security of electronic payment system have become major factors in the evolution of electronic commerce in markets. They analyze the electronic payment systems have several favorable characteristics including security, reliability, scalability, anonymity, acceptability, privacy, efficiency and convenience (Chou et al, 2004) are comparison with traditional payment methods (Kim, C., Tao, W., Shin, N., & Kim, K. S, 2010).

## **2.6 Conceptual Framework of the Study**

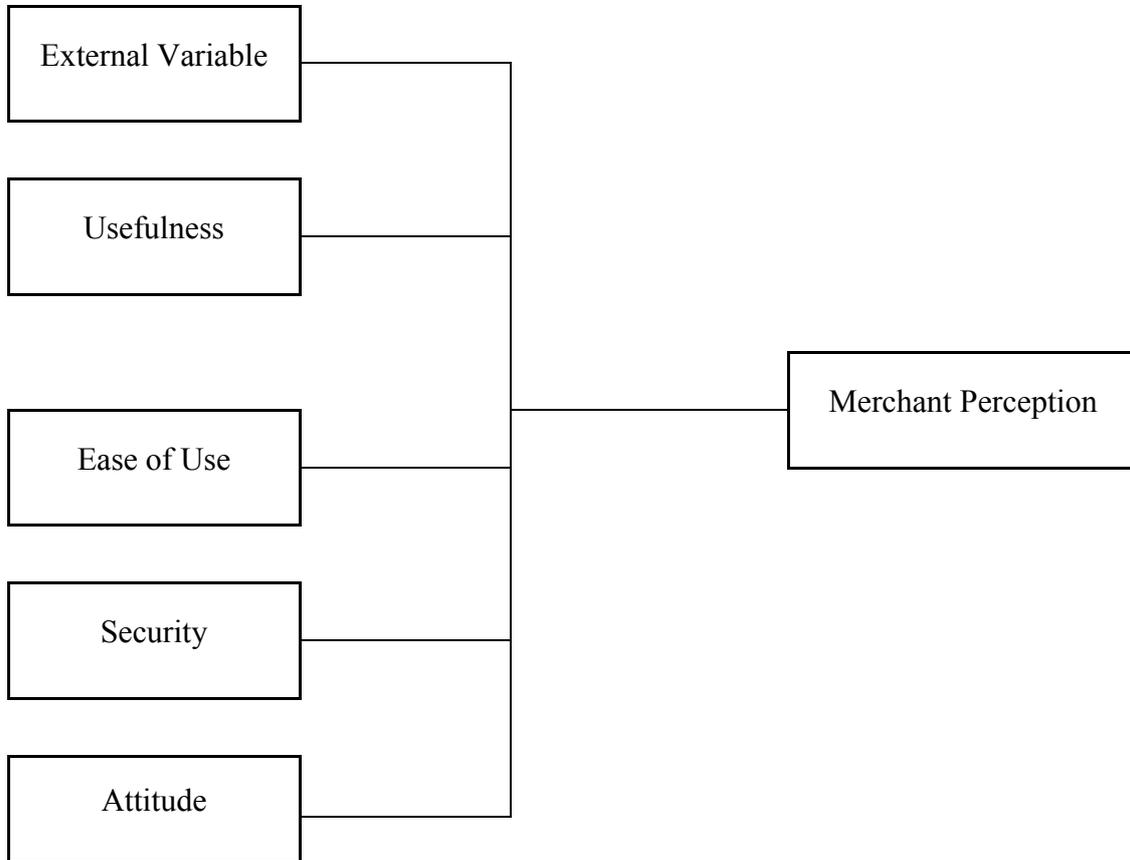
An own combination of Conceptual framework is developed by binding Davis' model and Marina adoption model of TAM. It was developed by focusing on perception of the study area, Bayint Naung Wholesale Market specifically. The perception of the merchants is basically focused on the influencing factors as follows:

External Variable as it was also defined by Davis (1989) refers to the strength of the prospective adopter's intention to make or to support the adoption decision in their company. Usefulness threshold is relatively easy to satisfy for mechanical, electrical, or novelty inventions, because the purpose of the useful requirement is to ensure that the invention works on some minimal level. Ease of Use is taking account as most influencing factors in the conceptual framework. Security is the uncertainty about the outcome of the use of the innovation (Gerrard and Cunningham, 2003). Therefore the adoption of cashless (digital) banking forces consumers to consider concerns about password integrity, privacy, data encryption, hacking, and the protection of personal information. Attitude-behavior consistency is an important concept for social science research because claims are often made about behavior based on evidence which is really about attitude. The attitudinal fallacy is committed when verbal data are used to support claims not about what people believe or say, but what they do.

**Figure 2.1**

**Technology Acceptance Model (TAM)**

Influencing Factors



Source: Davis, 1989 and Marina, 2009

## **CHAPTER III**

### **OVERVIEWS OF BAYINT NAUNG WHOLESALE MARKET**

This chapter describes about four topics. They are financial sector reform in Myanmar, cashless payment systems in Myanmar, background of Bayint Naung wholesale market and financial institutions in Bayint Naung wholesale market.

#### **3.1 Financial Sector Reform in Myanmar**

Myanmar is in the middle of an economic transition. Myanmar financial sector is particularly facing challenges in the pace of the reform process. The future reform process need to be well-sequenced and carefully-managed because big hopes are attached to this reform. In a liberalized financial sector, financial services could be designed to better meet the demands of more people and access to finance would improve and poverty could be reduced.

Financial sector innovations in retail banking have occurred not only in products such as new types of loans, deposits, or insurance, but also in customer service and infrastructure. In particular, the evolution of distribution channels has simplified and increased access to banking products and services as banking moves away from a branch-based approach toward a diversity of branch-less channels to manage accounts and finance.

Foreign banks are now able to lend to domestic firms in the local currency at the standard lending rate of 13 percent. However, foreign banks are free to set their own interest rates if the loans are in foreign currencies. They will also be permitted to provide the full suite of trade financing services. Foreign banks will be free to expand across the country. There are 13 international banks from China, Japan, Singapore, India, Malaysia and Vietnam with branches in the country currently listed with the CBM, while 49 other banks have representative offices in Myanmar. The move is expected to spur local banks to becoming more competitive and eventually help support growth in the Myanmar economy as more firms gain access to funds. It also arrives at a time when the insurance industry is opening up to foreign providers (Myanmar Times Journal, August 2019).

Since Myanmar began to open up in 2011, the government as introduced a number of different reforms to its economic policy in order to effect market-oriented structural changes. A stable and inclusive financial sector is a precondition for sustainable economic development. Myanmar has the lowest level of access to formal financial services. Restrictive and fragmentary legislation and a lack of qualified personnel in the financial

sector are among the reasons for the low level of credit disbursements. The limited availability of needs-oriented financial services is hampering the country's economic development.

### **3.2 Cashless Payment Systems in Myanmar**

Reform of Myanmar's banking sector began in 2011 when the government permitted private banks to conduct foreign exchange transactions and set up ATMs across the country. In 2012, the government approved the Foreign Exchange Management Law, followed by the enactment of the Central Bank of Myanmar (CBM) Law in 2013. The latter established the autonomy of the CBM as the licensing authority and regulator of all banks in Myanmar. Several other banking regulations followed. The Financial Institutions Law of Myanmar, passed in January 2016, represented a major step towards modernizing the sector. The law established governing regulations for both domestic and foreign financial institutions. It also attempted to level the playing field between private and state-owned banks and confirmed the CBM's regulatory powers over the banking sector. (Myanmar's Investment Outlook, 2018).

Enabling business environment in the country, the government, in 2017 announced the passage of the Myanmar Companies Law, which assumes international best practices on company formation, business registration process, corporate governance, and puts foreign investors on a more level footing with local companies. It gives foreign investors an opportunity to buy shares in a domestic company. The change in the foreign company definition unlocks huge business potential in areas that were previously restricted to foreign investors. It not only simplifies the procedures of incorporating a business in Myanmar but also significantly reduces the cost. The new law is set to be implemented by August 2018.

The major cashless payment systems in Myanmar are POS, QR Code, ATMs, Digital Wallets, and Digital Banking. As of July 2013, 346 ATMs were installed in Myanmar and the number of POS rose to 1,408. ATM and POS transactions have extensively grown over the last months and rose from about 50,000 in May 2013 to over 120,000 in June 2013, according to MPU. Well-known Mobile Financial Service Providers (MFSPs) in Myanmar are OK Dollar, Wave Money, and M-Pitesan. Under the 2016 Mobile Financial Service Regulations, MFSPs are only allowed to provide domestic remittance services to the public. MFSP accounts can be easily opened with MFSPs mobile applications without the need to open bank accounts, and retail customers can send up to MMK 5000,000 per day between accounts from the same MFSP with no remittance fees charged. Although banks have been recently expanding their own networks through agent banking, convenience store chains and

other means for their mobile payment platforms, it still is difficult to compete with the established expansive networks of MFSPs' agents, ranging from 24/7 convenience stores, mobile phone service shops to various types of retail stores (GIZ, 2018).

Some banks also have their own branded e-banking platforms, as shown in the following figure: AGD Pay (Asia Green Development Bank), CB Pay (Cooperative Bank), KBZ Pay (Kanbawza Bank), AYA mBanking (Ayerwaddy Bank) and MAB Mobile Banking (Myanmar Apex Bank). These platforms are linked with the respective bank accounts and can provide remittance services, cash in and out services, within bank person-to-person payments, mobile top-up and bill payment services (GIZ, 2018).

### **3.3 Background of Bayint Naung Wholesale Market**

Bayint Naung Warehouse and Wholesale Centre is next to Yogyi Chanung and is located in northwestern Yangon, Myanmar. Bayint Naung Warehouse and Wholesale Centre have length of 3.52 kilometers. The market complex consists of two-story shop houses with floor areas of 1200 and 2400 sq ft. The largest agricultural commodities trading market in Myanmar, established in 1990. It is the only legally permitted wholesale centre of beans and pluses in the country. Matpe is the most common bean and pulse export at the market. And there is rice wholesale centre in the Bayint Naung Warehouse. The market is also the main wholesale centre of dried fish and prawns for mainly domestic markets. Domestic and international prices for edible oil corps, onions, garlic, potatoes and chili are expected to be added soon. There are round about one hundred and fifty warehouses located in Bayint Naung Wholesale Centre. Warehouses were classified by the following industry. They are dry goods (onion, garlic, ginger, potato, tamarind), grains and bean (rice, wheat, peanut, pulses), oil, chili, tea leaf, water products (dried fish and prawn, fish paste, fish sauce).

Myanmar legally exported rice to China through border trade routes, China had not designated Myanmar rice as an official export product. That's why both sides agreed that a bilateral agreement was needed to confirm the status of rice as an official export. Myanmar Pulses, Beans and Sesame Seeds Merchants Association (MPBSA) 1075 organized with of members, was founded in 1992 with the purpose of ensuring fair benefits for local producers, local traders, exporters and foreign buyers. Pulses, beans and sesame seeds export of Myanmar is the second highest among the global counterparts and the highest among the South East Asian countries. MPBSA central executive committee members and executive committee members, assigned by Ministry of Commerce, are the owners of production companies, which conduct and can conduct beans and pulses export well. The Myanmar

Pulses, Beans and Sesame Seed Merchants' Association requires that all domestic and international transactions be concluded here at Bayint Naung Markets.

Two domestic banks (Yoma and CB) Bank have agreed to offer loans backed by commodities, allowing farmers to pledge items like beans and pulses as collateral for access to competitively priced financing for the first time. However, the appeal of warehouse receipt financing may be limited as capped interest rates mean the lenders have little incentive to take on the risk. Yoma Bank and CB Bank have both teamed up with the Myanmar subsidiary of Indian warehouse services firm Sohan Lal Commodity Management, SLCM Limited, to offer commodity-backed credit. This is the first time the service has been made available through official channels in Myanmar.

### **3.4 Financial Institutions in Bayint Naung Wholesale Market**

Myanmar's biggest Commodity Exchange Centre, Bayint Naung in Yangon, has launched the country's first electronic information system – displaying commodity prices in real time – starting October 1, 2008 (Myanmar Times, Volume 22, No. 439). This plan is intended to facilitate a uniform pricing system across the country in line with international market prices. The market is at the center of the planned Internet-based commodities information network that will link all of the country's wholesale commodity exchange centers, to achieve consistent pricing and operations in line with international market prices. Wholesale commodity exchanges are currently only connected by telephone. It is one of the main sources of countrywide stocks and distribute to the whole country. Its payment transactions and volumes amount are mostly huge and the payment procedure normally depends on the trust between merchants and customers.

Bayint Naung Wholesale Market commonly use cash-based payment system since it is easy and less sophisticated, compared with other payment system. The cash-based payment system is mostly used as it is useful in emergency, lack of transaction fees, and physically recognizable. There are also other types of payment systems such as cheques, mobile banking, bank account transfer, QR payment, etc. Most of the merchants in Bayint Naung Wholesale are not familiar with technology and thus, digital payment system is hardly used in the Market.

There are three types of banks that offer payment services for Bayint Naung Wholesale Market. They are State-owned Banks, Semi-government Banks, and Private Banks. Since Private Banks provide competitive quality of services with competitive service fees, innovative technology, and reliable cyber security, technology is highly improved in

Private Banks. Thus, Private Banks are mostly used by merchants and customers in Bayint Naung Wholesale Market. Since there are branches nearby with the Market, there is no time to travel and convenient to get the bank services from Private Banks.

The current payment systems of Bayint Naung Wholesale Market are both cash-based system and cashless payment system. However, most of the merchants and customers use cash because it is easy to use, useful in emergency, no need to pay transition fees and easily recognizable. They also likely to use other payment types like cheques, mobile banking, bank account transfer, QR payment. Most of the merchants are not familiar with technology so few people use digital mobile banking.

The policies of Non-cash payment system focuses on mitigating risks and improving efficiency of payment system. The most common methods of payment in Bayint Naung wholesale market are open account, letter of credit, cash in advance, documentary collection, factoring and etc. In general, payment system activities experienced an improvement aligned with the increasing public needs for both cash and non-cash payment instruments.

## **CHAPTER IV**

### **ANALYSIS OF MERCHANT PERCEPTION ON CASHLESS PAYMENT**

In this chapter, analysis of merchant perception on cashless payment is presented based on the data results from survey questionnaires. There are six parts in this chapter. They are research design, demographic characteristics of the respondents, current practices of payment system, reliability analysis, analysis of merchant perception on cashless payment system, and comparison of merchant perception on cashless payment.

#### **4.1 Research Design**

The objectives of the study are to identify current Cashless Payment system in Myanmar and to analyze the Merchant Perception on Cashless Payment in Bayint Naung Wholesale Market. To carry out of these objectives, the required data were collected through sample survey. As a survey instrument, a structured questionnaire was used. The questionnaires instrument includes three sections.

The first section includes the demographic profile of customer those who are using cashless payment system. This section includes merchant's gender, age, education, position, and type of business. The second section mainly focused on question pertaining to the current practices of payment system of sampled merchant. The last section of the questionnaires is perception of cashless payment system to assess the agreement level for using cashless payment system.

The study adapts the questionnaires from various part studied related to the topic and mainly used Likert scale measurement for all the variables constructed 30 questions were made to collect data. A five-point Likert scale has been used in this section to measure merchant perception on cashless payment services. The scaling is: 5 for strongly agree; 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree have been given in order to analyze data.

As a sampling size for this thesis is 100 merchant are distributed the survey question. After collecting the data, the processed data are further analyzed by SPSS version 23. This thesis would apply the both descriptive analysis such as frequency, percentage and measure of central tendency and variability and inferential analysis such as multiple linear regression analysis.

#### 4.2 Demographic Characteristics of the Respondents

This section presents the profiles of 100 respondents of merchant in Bayint Naung Wholesale Market. This profile covers the gender, age, educational background, position of respondents and type of trading product. All the data obtained from the questionnaires collected are interpreted and summarized in frequency distribution and percentage distribution. The frequency analysis of selected merchant demographic data is illustrated through the table of frequency counts, and their respective percentage.

**Table (4.1)**

##### **Demographic Information of Respondents**

<b>Gender</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Male	54	54
Female	46	46
<b>Age (in year)</b>		
below 30 years old	10	10
30-39	32	32
40-49	20	20
50 and above	38	38
<b>Education Level</b>		
High School	26	26
Bachelor degree	72	72
Master degree	2	2
<b>Position</b>		
Manager	18	18
Business Owner	82	82
<b>Trading Product</b>		
Rice	21	21
Bean	18	18
Onion	22	22
Tea Leave	17	17
Oil	22	22

Source: Survey Data, 2019

As shown in Table (4.1), the genders of respondents are 54% of males and 46% of female out of 100 % respondents. Therefore, male respondents are a big more than female. Most of respondent are aged over 50 years with 38%, between 30 to 39 years old age group follows the second with 32 % and the least respondents age group is below 30 years old with 10 % of the merchants.

The respondents categorized by educational level shown as 72 % of bachelor degree holder are most percentage, the second lead is high school level with 26 % and lastly are master degree holder with 2 %.

Merchants are divided into two categories; Manager and Business Owner. As a result of Table (4.1), about 18 % of Manager and remaining, 82 % of the Business Owner. Therefore, most of the Business Owner they have specifically knowledge of cashless payment.

As a result of Table (4.1), refers to the respondents by trading products. About 21 % of trading products are rice, 18 % of trading products are bean, 22 % of trading products are onion, 17 % of trading products are tea leave and 22 % of trading products are oil. It indicated that the majority of merchants who are using cashless payment services are especially conduct in Onion trading and Oil trading.

### **4.3 Current Practices of Payment System**

This section surveyed to identify the current practices of payment system by merchants in Bayint Naung Wholesale Market. There are four questions in this section. They are local banks used for payment transaction, payment methods used for business, benefits accrued by using cashless payment, and daily revenue range of merchants.

#### **4.3.1 Local Banks Used for Payment Transaction**

Table 4.2 demonstrates the local banks used for payment transaction by the merchant in Bayint Naung Wholesale Market and there are five collective banks shown in the result. They are KBZ Bank, AYA Bank, CB Bank, Yoma Bank, and other banks.

**Table (4.2)**  
**Local Banks Used for Payment Transaction**

<b>Local Banks</b>	<b>No. of Respondent</b>	<b>Percent</b>
KBZ Bank	38	38
AYA Bank	33	33
CB Bank	12	12
Yoma Bank	5	5
Other Bank	12	12
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Survey Data, 2019

According to Table (4.2), most of the merchant use KBZ Bank for their payment transaction with 38 % while Yoma Bank has the least percentage of merchants used for payment transaction. Moreover, AYA Bank gets 33%, CB Bank gets 12%, and other banks get 12 % respectively on the merchants' usage of local banks.

#### **4.3.2 Payment Methods Used for Business**

There are six types of payment methods used for business by the respondents in the sample: Cash, Cheque, Mobile Banking, Account Transfer, QR Pay, and Wave Money. The following shows the number of respondents and its percentage of payment methods used for business.

**Table (4.3)**  
**Payment Methods Used for Business**

<b>Payment Methods</b>	<b>No. of Respondent</b>	<b>Percent</b>
Cheque	35	35
Mobile Banking	31	31
Account Transfer	25	25
QR Pay	5	5
Wave Money	4	4
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Survey Data, 2019

Table (4.3) presents the number and percentage of respondents that use different types of payment methods for their businesses. The result shows that 35 % of respondents

use cheque is the largest group of respondents among the types of payment methods. However, there is only 4% of respondents, using wave money payment, stands the least usage of payment method. There are 31 % usage of mobile banking, 25 % of account transfer, and 5 % of QR Pay used by the respondents.

#### 4.3.3 Benefits Accrued by Using Cashless Payment

There are five possible benefits accrued by using cashless payment for the respondents. They are save time, usefulness, more secure, 24/7 availability, and easy to use. Respondents were allowed to choose only one option for this question. The following Table (4.4) shows the type of benefits accrued by using cashless payment.

**Table (4.4)**  
**Benefits Accrued by Using Cashless Payment**

<b>Benefits Accrued</b>	<b>No. of Respondent</b>	<b>Percent</b>
Save time	25	25
Usefulness	25	25
More secure	16	16
24/7 availability	20	20
Easy to use	14	14
Total	100	100

Source: Survey Data, 2019

As the result of Table (4.4), save time and usefulness result the largest percentage of respondents with 25% while easy to use is the lowest percentage of respondents with 14%. On the other hand, 24.7 availability is 20% and more secure is 16% of the respondents in the benefits accrued by using cashless payment.

#### 4.3.4 Daily Revenue Range of Merchants

The daily revenue range of merchants provide three open answers in the questionnaire: minimum amount, average amount, and maximum amount. The following table presents the range of daily revenue, results from the answers of each respondents.

**Table (4.5)**  
**Daily Revenue Range of Merchants**

<b>Revenue Range (MMK)</b>	<b>No. of Respondent</b>	<b>Percent</b>
2,000,000 – 5,000,000	14	14
5,000,001 – 8,000,000	28	28
8,000,001 – 11,000,000	30	30
11,000,001 – 14,000,000	20	20
Above 14,000,001	8	8
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Survey Data, 2019

Based on the results of survey answers, there are five range of daily revenue upon the 100 merchants as shown in Table (4.5). They are from MMK 2,000,000 to MMK 5,000,000, from MMK 5,000,001 to MMK 8,000,000, from MMK 8,000,001 to MMK 11,000,000, from MMK 11,000,001 to MMK 14,000,000, and above MMK 14,000,001. According to Table (4.5), revenue range of MMK 8,000,001 to MMK 11,000,000 get the most percentage of respondents with 30% and the range of MMK 5,000,001 to MMK 8,000,000 results the second largest percentage with 28%. However, the revenue range of above MMK 14,000,001 gets the least percentage of respondents with only 8%. There are 20% of respondents in MMK 11,000,001 to MMK 14,000,000 revenue range and 14% of respondents in MMK 2,000,000 to MMK 5,000,000 revenue range.

#### **4.4 Reliability Analysis**

This study has extensively used Likert scales. Thus, before they are used, it should be checked their reliability. The reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of the measure. Examining the internal consistency of the test enables the researcher to determine which item are not consistent with the test in measuring the phenomenon under investigation. The object is to remove the inconsistent items and improve the internal consistency of the test. The research used Cronbach's Alpha as a measure of internal consistency. Cronbach's Alpha is a reliability co-efficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003).

Cronbach's Alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's Alpha coefficient is

to 1.0 the greater the internal consistency of the items in the scale. Based upon the formula  $\alpha = rk / (1 + (k - 1)r)$ , where k is the number of items considered and r is the mean of the inter-item correlations the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. George and Mallery (2003) provide the following rules of thumb:

This study has extensively used Likert scales. Thus, before they are used, it should be checked their reliability. The reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of the measure. Examining the internal consistency of the test enables the researcher to determine which item are not consistent with the test in measuring the phenomenon under investigation. The object is to remove the inconsistent items and improve the internal consistency of the test. The research used Cronbach's Alpha as a measure of internal consistency. Cronbach's Alpha is a reliability co-efficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003).

Cronbach's Alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's Alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Based upon the formula  $\alpha = rk / (1 + (k - 1)r)$ , where k is the number of items considered and r is the mean of the inter-item correlations the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. George and Mallery (2003) provide the following rules of thumb:

**Table (4.6) Cronbach's Alpha Rule**

<b>Cronbach's Alpha</b>	<b>Internal Consistency</b>
$\alpha > .9$	Excellent
$\alpha > .8$	Good
$\alpha > .7$	Acceptable
$\alpha > .6$	Questionable
$\alpha > .5$	Poor
$\alpha < .5$	Unacceptable

Source: George and Mallery, (2003)

If alpha value is high, then this suggests that all the items are reliable, and the entire test is internally consistent. If alpha is low, then at least one of items are unreliable and must be identified via item analysis procedure. However, as per DeVellis (2003), the Cronbach's alpha value should ideally be above 0.7.

Table (4.7) is a summary of the reliability test based on the Cronbach alpha coefficient for the five scales items in the survey instrument. The Cronbach's Alpha value for all variables is range between 0.935 and 0.872. Therefore, the constructed scales are deemed to be reliable.

**Table (4.7)**  
**Test Results of Cronbach's Alpha Value**

<b>Variable</b>	<b>No. of Items</b>	<b>Cronbach's Alpha Value</b>
External Variable	<b>4</b>	<b>0.889</b>
Usefulness	<b>5</b>	<b>0.872</b>
Security	<b>4</b>	<b>0.915</b>
Ease of Use	<b>4</b>	<b>0.918</b>
Attitude	<b>4</b>	<b>0.935</b>

Source: Survey Data, 2019

According to the Best (1997), the mean values of Five – point Likert scale items were interpreted as follows:

The score among 1.00 – 1.8 means strongly disagree.

The score among 1.81 – 2.60 means disagree.

The score among 2.61 – 3.40 means neither disagree nor agree.

The score among 3.41 – 4.20 means agree.

The score among 4.21 – 5.00 means strongly agree. The means score for each statement is calculated and discussed.

#### **4.5 Analysis of Merchant Perception on Cashless Payment System**

The field of cashless payment system is developing quickly and is being a viable payment method in Myanmar. It is important to consider which aspects of cashless payment that matters the most of the merchants. There are five questions that are designed to obtain the perception level of merchants on the extent to which the accessibility of cashless payment

services. They are External Variable, Usefulness, Security, Ease of Use, and Attitude of Using Cashless Payment. In particular, respondents were asked to rate on a 5-point Likert scale of their perceptions and opinions with respect to the statements with strongly disagree as 1 to strongly agree as 5.

#### 4.5.1 Perception on External Variable of Cashless Payment System

There are four questions that are designed to obtain the perception level of merchants on external variable of cashless payment. There is highest level of mean score, merchant perception greater on external variable and vice versa. The sampled merchant were asked to rate on the statements describe their perception level regarding external variable attribute for using cashless payment services.

**Table (4.8)**

**Perception on External Variable of Cashless Payment System**

<b>Sr.</b>	<b>Statements</b>	<b>Mean Value</b>	<b>Standard Deviation</b>
1	Advertisements enhance merchants to use cashless payment system.	4.48	0.549
2	Cashless payment system has to be used because of the requirement for merchant payment.	4.50	0.506
3	Cashless payment system is being used because it is becoming popular in the society.	4.36	0.613
4	Social media influencers encourage merchants to focus on the cashless payment system and let them use it.	4.41	0.583
<b>Overall Mean</b>		<b>4.44</b>	

Source: Survey Data, 2019

According to Table (4.8) the mean score of advertisements enhance merchants to use cashless payment system results 4.48 with 0.549 standard deviation as the greatest mean score. The mean scores of the cashless payment system has to be used because of the requirement for merchant payment is 4.50 with 0.506 standard deviation. This implies that, most of the merchant strongly agreed that the cashless payment system has to be used because of the requirement for merchant payment.

The mean scores of the cashless payment system is being used because it becomes popular in the society is 4.36 with 0.613 standard deviation. This implies that, most of the

merchant strongly agreed that the cashless payment system is being used because it is becoming popular in the society.

The mean scores of the social media influencers encourage merchants to focus on the cashless payment system and let them use it is 4.41 with 0.583 standard deviation. This implies that, most of the merchant strongly agreed that social media influencers encourage merchants to focus on the cashless payment system.

The overall mean scores of perception for external variable attribute for using cashless payment system is 4.44. This mean value presents that the almost all customers considers external variable to be the biggest concern when they using cashless payment services. Therefore, it can conclude that external variable of different merchant significantly effect of using the cashless payment system.

#### 4.5.2 Perception on Usefulness of Cashless Payment System

There are five question that are designed to obtain the perception level of merchants on usefulness of cashless payment. The higher level of mean score, merchant perception greater on usefulness and vice versa. The sampled merchants were asked to rate on the statements describe their perception level regarding usefulness attribute for using cashless payment services.

**Table (4.9)**  
**Perception on Usefulness of Cashless Payment System**

Sr.	Statements	Mean Value	Standard Deviation
1	Cashless payment can be useful when I have to pay anytime and anywhere.	3.95	0.815
2	Cashless payment is useful in my job as I don't need to carry the cash even though it is large amount.	4.11	0.722
3	Cashless payment system is useful as I can do payment more frequently.	4.09	0.772
4	Cashless payment system make me lower risk and shortage of currency notes.	4.14	0.668
5	Cashless payment can be used to track easily of my spending.	4.11	0.722
<b>Overall Mean</b>		<b>4.08</b>	

Source: Survey Data, 2019

According to Table (4.9) the mean score of cashless payment can be useful when I have to pay anytime and anywhere is 3.95 with 0.815 standard deviation. This means that, on the average, most of the merchant agreed that the cashless payment can be useful when I have to pay anytime and anywhere.

The mean scores of the cashless payment is useful in my job as I don't need to carry the cash even though it is large amount is 4.11 with 0.722 standard deviation. This implies that, most of the merchant strongly agreed that the cashless payment is useful in my job as I don't need to carry the cash even though it is large amount.

The mean scores of the cashless payment system is useful as I can do payment more frequently is 4.09 with 0.772 standard deviation. This implies that, most of the merchant strongly agreed that cashless payment system is useful as I can do payment more frequently.

The mean scores of cashless payment system make me lower risk and shortage of currency notes is 4.14 with 0.668 standard deviation. This implies that, most of the merchant strongly agreed that the cashless payment system make me lower risk and shortage of currency notes.

The mean scores of cashless payment can be used to track easily of my spending is 4.11 with 0.722 standard deviation. This implies that, most of the merchant strongly agreed that the cashless payment can be used to track easily of my spending.

The overall mean scores of perception for usefulness attribute for using cashless payment system is 4.08. This mean value presents that the almost all customers considers usefulness to be the biggest concern when they using cashless payment services. Therefore, it can conclude that perceived usefulness of different merchant significantly effect of using the cashless payment system.

#### **4.5.3 Perception on Security of Cashless Payment System**

Since cashless payment is a form of electronic payment via a wireless medium it can cause security issues. For new users that are utilizing cashless payment, it can imply trust problems to replay on an unfamiliar technology. There is growing concern about risks of being hacked and identity thefts which can make commuter carefully consider whether or not to adopt the payment method unless potential security problems have been recognized and attended to.

Table (4.10) describes the perception on security attribute for using cashless payment system. To assessment of the perception level of merchant for using cashless payment system, four questions are designed. The sampled merchant were asked to rate on the statements describe their perception level regarding security attribute for using cashless payment services.

**Table (4.10)**  
**Perception on Security of Cashless Payment System**

Sr.	Statements	Mean Value	Standard Deviation
1	Cashless payment have sufficient security controls to prevent fraud.	3.91	0.830
2	Cashless payment services are secure in conducting payment transactions.	4.00	0.778
3	Cashless payment services have sufficient security controls to maintain data confidentiality.	4.09	0.676
4	Cashless payment is more secure than cash payment.	3.98	0.731
<b>Overall Mean</b>		<b>3.99</b>	

Source: Survey Data, 2019

According to the Table (4.10) the mean score of those that cashless payment has sufficient security controls to prevent fraud is 3.91 with 0.830 standard deviation. This means that, on the average, most of the merchant believe that cashless payment have sufficient security controls to prevent fraud.

The mean scores of the securing in conducting payment transactions is 4.00 with 0.778 standard deviation. This implies that, most of the merchant believe that cashless payment services are secure in conducting payment transaction.

Also the mean scores of the statement that controls to maintain data confidentiality is 4.09 with 0.676 standard deviation. This means that, on the average, most of the merchant believe that cashless payment services have sufficient security controls to maintain data confidentiality.

The mean scores of the cashless payment more secure than cash payment is 3.98 with 0.731 standard deviation. Therefore, most of the merchant agreed that cashless payment is more secure than cash payment.

The overall mean scores of perception for security attribute for using cashless payment system is 3.99. This mean value presents that the almost all customers considers security to be the biggest concern when they using cashless payment services. Therefore, it can conclude that perceived security of different merchant significantly effect of using the cashless payment system.

#### 4.5.4 Perception on Ease of Use of Cashless Payment System

Since cashless payment is a new way of paying, there is increased transaction speed and the ease of use. The main advantage of cashless payment is the ease of use is brings in form of increased transaction speed. Ease of use and cost reduction. The merchant can make payment transactions from any location anytime.

In this study four question are designed to obtain the perception level of merchant on the ease of use attribute for using cashless payment system. The merchant were asked to rate on the statement that describes their perception level regarding ease of use of cashless payment system. Hence, a higher mean score demonstrates the merchant have greater perception level and vice versa.

**Table (4.11)**  
**Perception on Ease of Use of Cashless Payment System**

Sr.	Statements	Mean Value	Standard Deviation
1	There are few steps required to complete the transactions.	4.00	0.682
2	It is easier to use cashless payment than cash payment.	3.98	0.762
3	The interaction with cashless payment services is clear and understandable.	4.07	0.728
4	Using cashless payment will save me time.	4.07	0.728
<b>Overall Mean</b>		<b>4.03</b>	

Source: Survey Data, 2019

As a result of Table (4.11), there are four statements regarding ease of use attribute for using cashless payment system. The mean value of few steps required to complete the transaction is 4.0 with 0.682 standard deviation. Therefore, the merchant who are using cashless payment system agreed that using cashless payment are few steps required to complete the transactions.

Mean value of easier to use cashless payment than cash payment is 3.98 with 0.762 standard deviation. Therefore, it can be point out they agreed it is easier to use cashless payment than cash payment.

The mean value of the statement that the interaction with cashless payment services is clear and understandable is 4.07 with 0.728 standard deviation. Therefore, most of merchant who are using cashless payment system strongly agreed that the interaction with cashless payment services is clear and understandable.

The mean value of the statement that the using cashless payment will save me time is 4.07 with 0.728 standard deviation. Therefore, most of merchant who are using cashless payment system strongly agreed that the using cashless payment will save me time.

The overall mean scores of perception for ease of use attribute for using cashless payment system is 4.03. This mean value presents that the almost all merchant consider ease of use to be the biggest concern when they using cashless payment system.

#### **4.5.5 Perception on Attitude of Cashless Payment System**

In this study four question are designed to obtain the perception level of merchant on the attitude for using cashless payment system. The merchant were asked to rate on the statement that describes their perception level regarding attitude of cashless payment system. Hence, a higher mean score demonstrates the merchant have greater perception level and vice versa.

**Table (4.12)**  
**Perception on Attitude of Cashless Payment System**

Sr.	Statements	Mean Value	Standard Deviation
1	Using cashless payment is interested.	4.11	0.689
2	The convenience of using cashless payment service is clearer and more understandable.	4.05	0.746
3	Learning to use cashless payment won't be difficult for me.	4.14	0.668
4	Cashless payment is aimed to use also in the future because of their easy and comfortable functions.	4.30	0.553
<b>Overall Mean</b>		<b>4.15</b>	

Source: Survey Data, 2019

As a result of Table (4.12), there are four statements regarding attitude attribute for using cashless payment system. The mean value of using cashless payment is interested is 4.11 with 0.689 standard deviation. Therefore, the merchant who are using cashless payment system agreed that using cashless payment is interested.

Mean value of the convenience of using cashless payment service is clearer and more understandable is 4.05 with 0.746 standard deviation. Therefore, it can be point out they agreed the convenience of using cashless payment service is clearer and more understandable.

The mean value of the statement that learning to use cashless payment won't be difficult for me is 4.14 with 0.668 standard deviation. Therefore, most of merchant who are using cashless payment system strongly agreed that learning to use cashless payment won't be difficult for me.

The mean value of the cashless payment is aimed to use also in the future because of their easy and comfortable functions is 4.30 with 0.553 standard deviation. Therefore, most of merchant who are using cashless payment system strongly agreed that the cashless payment is aimed to use also in the future because of their easy and comfortable functions.

The overall mean scores of perception for attitude attribute for using cashless payment system is 4.15. This mean value presents that the almost all merchant attitude to be the biggest concern when they using cashless payment system.

#### 4.6 Comparison of Merchant Perception on Cashless Payment System

The study is based on the survey results of questionnaires comprised with five variables, namely, External Variable, Usefulness, Security, Ease of Use, and Attitude. Table (4.13) shows the summary of merchant perceptions, compared the overall mean values of five variables from the survey results.

**Table (4.13) Comparison of Merchant Perception**

<b>Variable</b>	<b>Mean Value</b>
External Variable	4.44
Usefulness	4.08
Security	3.99
Ease of Use	4.03
Attitude	4.15

Source: Survey Data, 2019

As shown in Figure (4.13), each category has not much difference in overall mean value. Overall mean value seems to be stable between 4.44 and 3.99. External Variable gets the highest mean score while Security gets the lowest mean score.

## **CHAPTER V**

### **CONCLUSION**

In this chapter is only focused on the merchant perception of cashless payment system in Bayint Naung Wholesale Market. In this chapter, finding are summarized and concluded to derive the answers of research questions. This chapter includes three main sections: finding, suggestions and recommendation and need for further research. First part consists of the finding of the study and research analysis of merchants' perception on cashless payment. On the second part, it includes the suggestions and recommendations that are from the results of the research findings. In the last part, it presents the needs for further research.

#### **5.1 Findings of the Study**

According to the survey and its results, there are more male merchants than female and most of them are 50 years old and above. Majority of them hold Bachelor degree and almost all of them are business owners. The most common trading products are onion, oil, and rice but they also have trading for bean and tea leave.

Based on the results of the survey data, it was found that cash payment system is the most used payment method by merchants in Bayint Naung Wholesale Market. However, majority of the respondents use cashless payment systems and the most common cashless payment systems used are cheque, mobile banking, account transfer, QR pay, and wave money. According to the results, cheque and mobile banking are the most useful cashless payment while wave money is the least used system by merchants.

It was found that the merchants in Bayint Naung Wholesale Market use different local banks for their business and the most commonly used banks for payment transaction are KBZ Bank, AYA Bank, CB Bank, Yoma Bank, and other banks. The result shows that KBZ Bank is the most used bank for payment transaction and AYA Bank is the second most useful bank for merchant. Yoma Bank is the least used bank for payment transaction by merchants in Bayint Naung Wholesale Market.

There are some benefits that persist merchants to make cashless system useful for their businesses. The most common benefits accrued to merchants in using cashless payment are it saves time and useful for merchants. It was also found that cashless payment system is available 24/7 and more secure compared to cash payment. On the other hand, it is also easy

to use but the main reason of using cashless payment system is that it save time and its usefulness.

The study has also observed the daily revenue range of respondents and found that there are five classification of revenue range from minimum MMK 2,000,000 to maximum above MMK 14,000,001. Most of the respondents have revenue within the range of MMK 8,000,001 to MMK 11,000,000 while there are few respondents who have above MMK 14,000,001 revenue. It was also found that the merchants with lower revenue made their payments by cash and those with greater revenue made their payment transactions by cashless systems.

In terms of the influencing factors of merchants' perception on the cashless payment, external variable, usefulness, security, ease of use, and attitude of using cashless payment are found as the major factors influenced the merchants' perception. External Variable of cashless payment has the greatest score on cashless payment system has to be used because of the requirement for merchant payment. The least likely to have merchants' perception is that cashless payment system is being used because it is becoming popular in the society. It was also found that merchants noticed on cashless payment as user friendly and banks need more efforts to make user acceptance training about their cashless services.

As for usefulness of cashless payment, cashless payment system is more likely to make merchants lower risk and shortage of currency notes. There is the least likely to make cashless payment useful when merchants have to pay anytime and anywhere. Merchants also have positive view on cashless payment useful in their business as they don't need to carry the large amount of cash, it can be made frequently and found useful for them, and it can be used to track easily for their spending.

The most important part of cashless payment system, security, found to have sufficient security controls to maintain data confidentiality and are secure in conducting payment transactions. The merchants understand that cashless payment have sufficient security controls to prevent fraud in the wholesale market and cashless payment is more secure than cash payment.

The cashless payment system is easy to use for merchants and thus it have positive view on the interaction with cashless payment services that is clear and understandable and it will save time for them. Merchants are also optimistic on the transaction as it only needs few steps to complete and cashless payment is easier for them to use compared with cash payment.

In the study of attitude of cashless payment system, it is more likely to have merchants view on cashless payment that is aimed to use in the future because of their easy and comfortable functions. They also have positive perception on learning to use cashless payment would not be difficult for them and they found it interesting. The convenience of using cashless payment service is clearer and more understandable for merchants and thus they have more favorable taste of using cashless payment against cash payment.

In comparison of the overall merchant perceptions on cashless payment, the finding proves that external variable is the greatest perception resulted among the five categories of perceptions. The security founds to be the least scored perception by merchants. Attitude of cashless payment scored the second greatest value while usefulness stand the third and ease of use is the fourth, respectively. It was found that the merchants are not very comfortable with the security but they prefer cashless more than cash as it is obviously the most secured option available for their business.

Since the Bayint Naung Wholesale Market is a major wholesale market distribute stocks for the whole country and even have export/ import business, the transaction amounts are large and thus, merchants have greater interest of secured payment system with quality services by banks. The cashless payment is more likely to be used for larger amounts while small amounts with greater frequency of payment are done by cash. As the business trend turns to be modernized and efficient, they are more relying on banks for their business transactions.

## **5.2 Suggestions and Recommendation**

Most of the respondents are above 50 years old male and thus, the cashless payment systems offer them should have less procedure and as simple as possible. Security should be the strongest part of cashless payment it needs to have sufficient security controls to prevent frauds and other cyber distractions. As the merchants' businesses are directly interrelated with Myanmar's trading economy, banks should be the most reliable and secured channel, that provide the most convenient and quality services to them.

In addition, most of the respondents have given for cashless system to improve, telecommunication provider must prioritize the service they are giving to their customer by giving a fast internet connection and the security of the user's information not only for telecommunication provider but also for cashless system provider. Cashless provider should widen their coverage all over the country especially to secluded areas.

As per short chat during the survey to merchants, they suggested for discount and promos to improve cashless system and government should focus on the development and improvement of cashless system in Myanmar. It was also described that cashless payments online and in-store are secured, it's just people have lack of trust and the risk associated with the products online, by one of the respondent merchants.

In Bayint Naung because these companies are the dependent provider of a society to move, internet connection should be strong for the purpose of online transaction which is commonly the basis of history transacted by the e-payment, card or mobile banking users. Cashless payment provides greater freedom to individuals in making various payment be it their tax, or purchasing something online, fees, fines etc. at their convenient location at any time of the day according to their convenience. After conducted this research it is not possible to tell which the best Cashless payment option is because almost every option is similar to each other in some way or the other and differ only in minor details.

Another suggestion that are mostly given by the respondents is a better security for the e-payment, mobile banking or cards users this refers to the personal information which is commonly required for a person to avail this kind of cashless system. Robbery can also occur in this kind of system through hacking the system of the bank or the system of a person's phone through unsecured WiFi.

### **5.3 Needs for Further Research**

This study only focuses on merchant perception on cashless payment system in Bayint Naung Wholesale Market. In this study, it is selected only 3 top local banks (KBZ, AYA and CB) because these three are leading banks in private commercial banking sectors. There are 30 random samples from each bank.

Since the period of study and perception of people are always changing, the assessment on cashless payment service is also changed. Therefore, more and more research is made in continuous basis. At the same time, bank should maintain their cashless service qualities factors to keep merchants' positive perception.

The respondents comprise only 100 merchants because of time limitation and financial constraint. Further research on the needs of cashless payment needed to be done on State-owned Banks, and Semi-government banks. The conditions of state owned banks will be quite different from private banks. Therefore, future study should conduct on merchants' perception of all other banks also. Moreover, it should focus on geographic view not only in Yangon area but also other states and divisions of Myanmar.

## REFERENCES

1. Alvares, Clifford. (2009) *The problem regarding fake currency in India* ,18(5), p 24-24
2. Boyanov, K & Vasileva, P. (2016) *The Cashless Society: Consumer Perceptions of Payment Methods* Bachelors Thesis, Aarhus University Business and Social Sciences
3. Chandravathi. (2018) *Merchant's perception towards cashless economy* A case study with reference to Belthangady, 4(1), pp. 45
4. Cristobal, Mary Anne A, Malayang, Jefferson C, Sampan, Marie Tonie Q & Solina, Micah Erika A. (2018), *A Research Study on the Effects of Cashless Transactions on People's Spending Behavior*, Deltasalle College of Saint Benilde
5. Ei Ei Khine. (2017) *Merchant Perception on E-Banking Services*, (MBF- 3rd Batch), Yangon University of Economics
6. Gerrard Philip, J. Barton Cunningham , International Journal of Bank Marketing, ISSN:0265-2323,Publication date: 1 February 2003.
7. Gokilavani, R., Venkatesh kumar , Durgarani, M., & Mahalakshmi, R. (2018) *Can India Move Towards Digital Sovereign Currency?* Volume 119 No. 17
8. Hnin Moe Aye. (2017), *Customer Perception on Mobile Financial Services* (MBF- 3rd Batch), Yangon University of Economics
9. Htin Lynn Aung. (2018) Myanmar Times Journal. *At least five more years needed for Myanmar to go cashless*, 07 Sep, Yangon, Myanmar Consolidated Media
10. Mukhopadhyay. (2016) Financial Innovation. *Understanding cashless payments in India*, DOI 10.1186/s40857-016-0047-4
11. Srinivas, L. (2009) Faculty of Management, *A study on importance of cashless transactions in India*, Osmania University Hyderabad
12. Thomas Foerch. GIZ. (2018) *Myanmar's Banking Sector in Transition* (Current Status and Challenges Ahead). Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
13. Venkateswararao Podile, Rajesh, P. (2017) *Public Perception on Cashless Transaction in India*”, 7, pp.63-77,10.5958/2249-7323.2017.00069.4

14. World Payment Report, (2017) <https://worldpaymentsreport.com/>
15. World Cash Report. (2018) <https://cashessentials.org/app/uploads/2018/07/2018-world-cash-report.pdf>

## Appendix

### Questionnaires

#### Yangon University of Economics

#### Master of Banking and Finance (MBF) Program

#### A Study on Merchant Perception on Cashless Payment

##### I. Demographic

1. Gender of Respondents

- 1. Male
- 2. Female

2. Age of Respondents

- 1. Below 30 years old
- 2. 30 to 39 years old
- 3. 40 to 49 years old
- 4. Over 50 years old

3. Educational Background of Respondents

- 1. Middle school
- 2. High school
- 3. Bachelor
- 4. Master
- 5. Ph.D.

4. Position of Respondents

- 1. Manager
- 2. Business Owner

5. Type of Trading Product

- 1. Rice
- 2. Bean
- 3. Onion
- 4. Tea Leave
- 5. Oil

## II. Current Practices of Payment System

Which of the following payment methods would you be most likely to use in your business? (Please choose one answer only)

1. Bank Transfer
  2. Cheque
  3. Mobile Banking
  4. QR Pay
  5. Wave Money
  6. OK Dollar
6. How many often do you use these services?
1. Daily
  2. Weekly
  3. Monthly
  4. Yearly
  5. Never
7. Which of the following benefit accrue to you, while using Cashless Payments?  
(Please choose one answer only)
1. Save time
  2. 24/7 availability
  3. More secure
  4. Usefulness
  5. Easy to use
8. What is your Daily income range?
1. Minimum amount -----
  2. Average amount -----
  3. Maximum amount -----

### III. Influencing Factors of Merchant Perception

The scale that was used in this item was an interval scale. In particular, the respondents were asked to rate on a 5-point Likert scale their perceptions and opinions with respect to the statements, with 1= strongly disagree and 5= strongly agree.

#### External Variable

Statement	1	2	3	4	5
1. Advertisements enhance merchants to use cashless payment system.					
2. Cashless payment system has to be used because of the requirement for merchant payment.					
3. Cashless payment system is being used because it is becoming popular in the society.					
4. Social media influencers encourage merchants to focus on the cashless payment system and let them use it.					

#### Usefulness

Statement	1	2	3	4	5
1. Cashless payment can be useful when I have to pay anytime and anywhere.					
2. Cashless payment is useful in my job as I don't need to carry the cash even though it is large amount.					
3. Cashless payment system is					

useful as I can do payment more frequently.					
4. Cashless payment system make me lower risk and shortage of currency notes.					
5. Cashless payment can be used to track easily of my spending.					

### Security

Statement	1	2	3	4	5
1. Cashless payment have sufficient security controls to prevent fraud.					
2. Cashless payment services are secure in conducting payment transactions.					
3. Cashless payment methods have sufficient security controls to maintain data confidentiality.					
4. Cashless payment is more secure than cash payment.					

### Ease of Use

Statement	1	2	3	4	5
1. There are few steps required to complete the transactions.					
2. It is easier to use cashless payment than cash payment.					
3. The interaction with cashless payment services is clear and understandable.					
4. Using cashless payment will save me time.					

## Attitude

Statement	1	2	3	4	5
1. Using cashless payment is interested.					
2. The convenience of using cashless payment service is clearer and more understandable.					
3. Learning to use cashless payment won't be difficult for me.					
4. Cashless payment is aimed to use also in the future because of their easy and comfortable functions.					