

**YANGON UNIVERSITY OF ECONOMICS  
DEPARTMENT OF COMMERCE  
MBF PROGRAMME**

**INFLUENCING FACTORS OF CUSTOMER USAGE OF  
MOBILE BANKING SERVICES**

**MYAT THET SU TUN**

**DECEMBER, 2019**

# **INFLUENCING FACTORS OF CUSTOMER USAGE OF MOBILE BANKING SERVICES**

**A thesis is submitted as partial fulfillment of the requirements for the degree  
of “Master of Banking and Finance”**

**Supervised by**

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

**Submitted by**

Ma Myat Thet Su Tun  
Roll No –32  
EMBF 5<sup>th</sup> Batch  
Yangon University of Economics

DECEMBER 2019

## ACCEPTANCE

Accepted by the Board of Examiners of MBF program, Yangon University of Economics, in partial fulfillment of the requirements for the degree of Executive Master of Banking and Finance.

.....

**(Chairman)**

.....

**(Supervisor)**

.....

**(Examiner)**

.....

**(Examiner)**

.....

**(Examiner)**

## **ABSTRACT**

The aim of the study was to identify the customer practices of mobile banking services and to explore the influencing factors of the customer usage of mobile banking services. To do this study 160 respondents are selected who live in Parami Housing, Hlaing Township, Yangon Division. This study is used primary and secondary data. Primary data were distributed by hand to the mobile banking users. To collect the secondary data, information are fetched from various sources. The questionnaires are prepared by using five-point Likert scale to measure the four influencing factors, perceived ease of use, motivating factors, security and perceived usefulness effect on customer usage of mobile banking services in Myanmar Private Banks. This study indicated that all factors are effect on customer usage of mobile banking services. Among them perceived usefulness is the most effective factor. All factors are positively correlated with customer usage of that service. Perceived usefulness is the highest correlation among four determination factors. Mean score for security is 3.31 so that the respondents accept mobile banking security is neutral level. Therefore Myanmar Private Banks should pay attention to the mobile banking system to ensure that users are trusted. This result will assist to the private bank that provided mobile banking services.

## **ACKNOWLEDGEMENTS**

I wish to express my deep thankful and whole-hearted gratitude to the respectful person who have provided guidance to complete thesis. First and foremost, I would like to express my sincere thanks to my special gratitude to Professor Dr.Tin Win, Rector of Yangon University of Economics, and Professor Dr.Nilar Myint Htoo, Pro Rector of Yangon University of Economics, giving opportunity to study the Master of Banking and Finance (EMBF) Course.

My heartfelt thanks also go to the Professor. Dr. Daw Soe Thu, Head of the Department of Commerce and Programme Director of Master of Banking and Finance Programme, Yangon University of Economics, for her encouragement and guidance through the course of my study.

My deepest gratitude goes to my supervisor Dr. Daw Tin Tin Htwe, Professor, Department of Commerce, for her valuable advice, guidance, assistance and kind support during the preparation and writing of this thesis.

I would also like to specially thank my respectful professors and lecturers who imparted their time and valuable knowledge during the course of my study at the Yangon University of Economics, and my friends and all personnel who contributed in various ways to my thesis.

Finally, I have great pleasure in acknowledging my gratitude to all my family, friends, colleagues and other persons who helped directly or indirectly toward the successful completion of this study.

## CONTENTS

<b>ABSTRACT</b>	i
<b>ACKNOWLEDGEMENTS</b>	ii
<b>CONTENTS</b>	iii
<b>LIST OF TABLES</b>	v
<b>LIST OF FIGURES</b>	vi
<b>LIST OF ABBREVIATIONS</b>	vii
<b>CHAPTER 1 INTRODUCTION</b>	1
1.1 Rationale of the Study	1
1.2 Objectives of the Study	2
1.3 Scope and Methods of the Study	2
1.4 Organization of the Study	3
<b>CHAPTER 2 LITERATURE REVIEW</b>	4
2.1 History of Mobile Banking	4
2.2 Mobile Banking Service	5
2.3 Advantages and Disadvantages of Mobile Banking	5
2.4 Challenges of Mobile Banking Services	6
2.5 Previous Studies	7
2.6 Conceptual Framework of the Study	9
<b>CHAPTER 3 OVERVIEW OF BANKING SECTOR IN MYANMAR</b>	11
3.1 Current Situation of Banking Sector in Myanmar	11
3.2 Mobile Financial Services in Myanmar	12
3.3 Mobile Banking Services of Selected Private Banks	13
3.4 Mobile Financial Service Providers in Myanmar	14
<b>CHAPTER 4 ANALYSIS ON FACTOR INFLUENCING OF CUSTOMER USAGE OF MOBILE BANKING SERVICES</b>	16
4.1 Research Design	16
4.2 Background Characteristics of Respondents	17
4.3 Assessment of Reliability Scale for Studied Variable	19
4.4 Analysis on Determinants of Customer Usage of Mobile Banking Services	20

4.5	Relationship between Determinants and Usage of Mobile Banking Services	24
4.6	Analysis of Influencing Factors of the Usage of Mobile Banking Services	25
<b>CHAPTER 5</b>	<b>CONCLUSION</b>	26
5.1	Findings	26
5.2	Suggestions	27
5.3	Needs for Further Study	27
<b>REFERENCES</b>		
<b>APPENDIX</b>		

## LISTS OF TABLES

<b>Table No.</b>	<b>Description</b>	<b>Page</b>
4.1	Demographic Profile of Respondent	17
4.2	Experience of Mobile Banking Users	18
4.3	Result of Cronbach's Alpha Value	19
4.4	Perceived Ease of Use Factor of Respondents	20
4.5	Motivating Factors of Respondents	21
4.6	Security Factor of Respondents	22
4.7	Perceived Usefulness Factor of Respondents	23
4.8	Correlation Coefficient between Usage of Mobile Banking Services	24
4.9	Regression Result of Usage of Mobile Banking Service and its Influencing Factors	25

## LISTS OF FIGURES

<b>Figure</b>	<b>Description</b>	<b>Page</b>
2.1	Technology Acceptance Model (TAM)	8
2.2	Conceptual Framework	10

## LIST OF ABBREVIATIONS

ATM	–	Automated Teller Machine
AYA	–	Ayeyarwady Bank
BCBS	–	Basel Committee on Banking Supervision
CB	–	Co-operative Bank
CBM	–	Central Bank of Myanmar
IFC	–	International Finance Corporation
IMF	–	International Monetary Fund
KBZ	–	Kanbawza Bank
MBA	–	Myanmar Banks Association
MFSP	–	Mobile Financial Services Provider
MNOs	–	Mobile Network Operators
MPU	–	Myanmar Payment Union
NRIC	–	National Registration Identity Card
PCs	–	Personal Computer
PDA	–	Personal Digital Assistant
POS	–	Point of Sale
RTGS	–	Real-Time Gross Settlement
SMS	–	Short Message Service
SPSS	–	Statistical Package for the Social Sciences
TAM	–	Technology Acceptance Model

# **CHAPTER I**

## **INTRODUCTION**

Today, technological advancement has pushed the financial institution to move from traditional branch banking to electronic banking. The automated teller machine (ATM) was first introduced by the Chemical Bank of New York in 1969. At first, it did little more than dispensing cash, but the ATM evolved over time into a true bank-away-from bank offering a full suite of financial transactions. It was then internet banking that came in the mid-1990s to help consumers access their financial accounts from home using an internet-connected computer. Notwithstanding its promise of total convenience, online banking has been growing slowly and tentatively, as most banks have been working out technology issues and building consumer confidence.

In general, mobile banking is seen as a form of electronic banking. It's the bank's platform to provide the customer services. Using wireless devices (mobile phone), the consumer can use mobile banking to do the transaction, such as transfer of funds, bill payments, film ticketing, balance inquiry and access to investment account (Omotoyo&Adebayo,2015). Mobile banking lets customers control their account anytime and anywhere by simply logging into their accounts via their computers or mobile phones through mobile banking service. This procedure can save time for the transaction and save the cost of transportation for the consumer. A research by Campbell &Frei (2010) analyzed the online banking context to assess the implications of using self-service platforms to change consumer interactions with the business. The study found that the use of online banking is linked to higher retention rates for customers and lower bank costs.

In Myanmar, however, local banks have introduced mobile banking services, the functions vary depending on the technologies provided by their mobile network operators. Since December 2013, Myanmar's Central Bank has allowed local banks to engage in mobile banking. Through the use of mobile phones, the mobile banking system can be encouraged.

### **1.1 Rationale of the Study**

Business banking industry in Myanmar has included various financial developments, ranging from traditional banking to digital banking in order to meet their customers ' needs and gain competitive edge. One such breakthrough in Myanmar's banking industry is mobile banking. Mobile banking is defined as carrying out various banking transactions, such as transfer of funds, balance inquiry, investments and payment of bills using mobile phones.

All private banks licensed and with a branch in Myanmar are allowed to provide their customers with mobile banking services as the use of mobile phones among Myanmar's people is increasing.

Today, financial exclusion remains a major challenge for Myanmar's growth, particularly in rural areas. Less than 26 percent of Myanmar's population aged 15 years or older had a formal financial institution account in 2017 (World Bank website, 2018). Given Myanmar's enormous unbanked population, with bank branches and services inaccessible in most rural areas, mobile financial services have become an important means of financial inclusion. Financial inclusion, however, is increasing as mobile financial services are advancing. Myanmar has the highest penetration rate of mobile phones in the world, with a penetration rate of almost 95% (Tanner, 2018).

Mobile banking is one of the state-of - the-art and modern means of providing electronic banking services in addition to the technical means and methods already used. In a country like Myanmar, however, with high mobile users, the likelihood of providing various banking services on technology is smaller in use. Mobile banking services are still suffering from multiple customer usage problems due to multiple factors including ease of use, motivating factors, security and perceived utility. This paper therefore inspects from the customer's point of view the factor influencing customer use of mobile banking services. In Myanmar banking sector, the factors influencing the use of mobile banking services are essentially focused on providing better services and meeting the needs of customers.

## **1.2 Objectives of the Study**

The objectives of this study are as follows;

- (1) To identify the customer practices of mobile banking services in Hlaing Township.
- (2) To explore the influencing factors on the customers usage of mobile banking services in Hlaing Township.

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

This study focuses on the influencing factors of customer usage of mobile banking services in Myanmar banking sector. The respondents were selected who live in Parami Housing, Hlaing Township, Yangon Division. This survey was carried out on the 1248 population living in this area. Sample size of 160 respondents is randomly

selected from this population to be included in this survey. Using standardized questionnaires distributed to the respondents, this study used descriptive approach and primary data were collected. The secondary data were gathered from previous research, the website, the annual report of the bank, and sources of publication. The study period in this study was from August to October 2019. Required sampling is performed using a simple method of random sampling to perform surveys.

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

This study is composed of five chapters. Chapter I includes introduction, rationale of study, objectives of the study, scope and method of study and organization of study. Chapter II concerns the theory and literature review of the study. Chapter III describes Overview of Banking Sector in Myanmar. Chapter IV mentioned analysis on factor influencing of the customer usage of mobile banking services over study model. The last chapter, Chapter V concludes the overall study with summary for findings, suggestions and needs for future studies.

## CHAPTER II

### LITERATURE REVIEW

This chapter describes the history of mobile banking, mobile banking services, advantages and disadvantages of mobile banking, challenges of mobile banking services, previous study and conceptual framework of the study.

#### **2.1 History of Mobile Banking**

The name of mobile banking is M-banking or SMS banking. The European company called PayBox, which was financially supported by Deutsche Bank, began mobile banking in 1999. SMS was the first mobile banking service to be provided. It is an emerging sector in the banking sector. Older phones, however, had limited features. There was no hardware and software support for mobile phones, palm PCs and PDAs. Other limiting factors in the growth of mobile banking were the higher cost of data plans and the slower network speed. The advancement of technology, hardware and software has enhanced it. Mobile device prices have been drastically reduced and are still decreasing. Network performance is much higher than before, and data plans are less expensive than before. All of these improvements have provided the necessary raw materials to expand mobile banking and increasing the number of people using mobile banking day by day. Because of ease of use and fast access, consumers who used computers / laptops for online banking switch to mobile banking. Mobile banking was pioneered by Wachovia bank in the United States in 2006. In September 2007, the Aite group estimated that mobile banking users in the U.S. would exceed 1.6 million by the end of 2007, rising rapidly to 35 million by 2010. The study showed the potential for growth of mobile banking.

The security issues, however, are the major concerns for providers and consumers of mobile banking services. When mobile banking systems grow, more consumers will start using mobile banking, which will attract the hacker community's attention to targeting customers mostly for financial gain from mobile banking. Safety and security of personal and financial information stored and handled on computers are key factors for customers, banking organization, and security community.

## **2.2 Mobile Banking Services**

Mobile banking typically operates through one of three ways across all major mobile providers: SMS messaging, mobile web or iPhone, Android or Blackberry device applications. The easiest way to use mobile text and alerts is to transfer funds or access account information via text message. The wording of text varies from bank to bank, but the overall purpose is generally the same. Users must first register with their bank to check their phone numbers, but once that's completed, they can also set up reminders to let them know about negative balances or confirmations of deposits.

The second option for mobile banking is the mobile web. Similar to online account access from a home computer, this option enables balances, bill payment and account transfers to be checked simply by logging into the user's account via a mobile web browser.

For full banking features, mobile banking apps for Android, iPhone and Blackberry link the user directly to the bank server without having to navigate a mobile web browser. You can download these applications either through the website of the bank or through the iTunes store.

Mobile banking can be categorized into three types: (1) Mobile Accounting, (2) Mobile Brokerage, and (3) Mobile Financial Information. It is possible to split mobile accounting services into operations and account management. Card activities include transfers of money, bill payments, etc., and card management includes order checks, updating accounts and personal data, handling lost or stolen cards, etc. The aim of mobile brokerage is to buy and sell stocks, securities and obtain current securities information. Mobile financial information is divided into information and information on the sector. Account information includes branch and ATM location information, credit / debit cards, receipts, warnings, balance inquiries, etc., while market information includes products and services, movements of currencies, interest rates, etc.

## **2.3 Advantages and Disadvantages of Mobile Banking**

Mobile banking's main advantage is ease. Users can communicate with the bank from any location that provides an internet connection via an online website and/or mobile app. The electronic equipment is accessible 24/7 and does not require traveling to a branch. Users can check balances, transfer money to or from accounts, issue transfers, order checks, buy deposit certificates, apply for loans, and even deposit

checks by scanning and transmitting them. When the bank electronically does not need to move or wait in line. In general, online banking is safe, particularly websites that use encrypted communications; that is, websites with the prefix "https." Digital banks may provide the same insurance provided by the Federal Deposit Insurance Corporation. Virtual banks often offer the highest savings interest rates because they pass the savings made by not paying for branches of physical banks and employees to employ them on to customers.

Even though electronic banking is usually safe, it is not completely secure. As it is transmitted to online banks, sophisticated hackers may steal information, leading to identity theft. Fixing problems arising from stolen financial information will take a long time. Many people feel online banking is impersonal and would rather sit in a branch with a representative of a flesh-and-blood client. The best online banks have comprehensive customer support facilities including mobile, chat and email contact, but some provide misleading support. It is important to remember that even if carried out electronically, certain banking transactions, such as receiving payments, are not instant. Therefore, saving money transfers receipts is critical if users want to monitor a transaction's progress. Online banks may not sell all bank branches ' products and services, such as insurance, annuities, trust and estate planning.

#### **2.4 Challenges of Mobile Banking services**

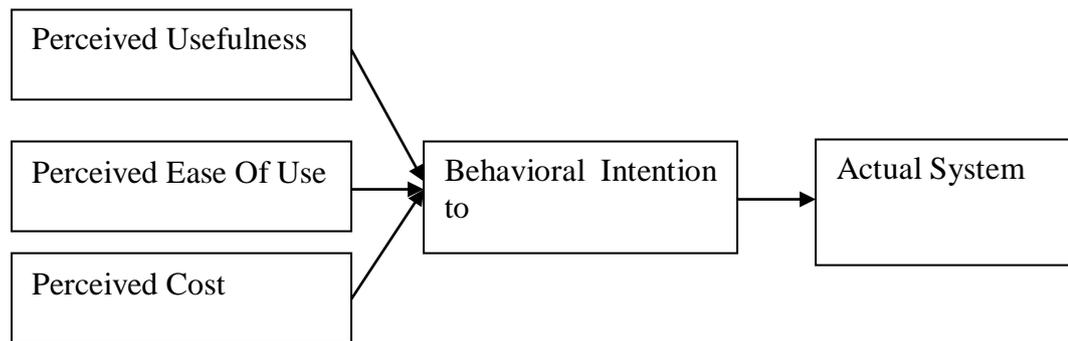
For years, banking organizations have been offering remotely mobile banking services to consumers and businesses. Local fixtures are electronic money transfers, including small payments and corporate cash management systems, as well as publicly accessible digital tools for currency withdrawal and retail account management. Nevertheless, the increased global adoption of the Internet as a distribution platform for banking products and services provides banks with new business possibilities as well as service advantages for their customers (BCBS, 2001). Despite the significant advantages of mobile banking and its capabilities, it carries risks and challenges that banking institutions must recognize and manage prudently. The speed of change in mobile banking technology and customer service innovation is unprecedented. New banking systems have traditionally been introduced over fairly long periods of time and only after in-depth research. Today, however, banks are facing competitive pressure in very short time frames to roll out new business applications, often just a few months from idea to delivery. This competition intensifies the management

challenge to ensure that sufficient strategic evaluation, risk analysis and security assessments are carried out before new e-banking applications are introduced (BCBS, 2001). E-banking increases the reliance of banks on information technology, thus raising the technological complexity of many operational and security issues and encouraging a move towards more collaboration, alliances and outsourcing agreements with third parties, many of whom are unregulated. This growth has led to the development of new business models involving banks and non-bank organizations such as Internet service providers, telecommunications companies and other technology companies (BCBS, 2001). Through definition, the Internet is omnipresent and global. It is an open network that unknown parties can access from anywhere in the world, with messages passing across unknown locations and rapidly evolving wireless devices. The value of security checks, customer verification methods, data protection, audit trail procedures, and customer privacy requirements is therefore greatly magnified (BCBS, 2001).

## **2.5 Previous Studies**

The Technology Acceptance Model (TAM) is an extension of Ajzen & Fishbein's (1980) philosophy of reasoned behavior. Davis and Bagozzi and Warshaw (Davis, Bagozzi & Warshaw, 1989) have produced TAM. Khalifa and Abou-Shouk, 2014; Abou-Shouk and Khalifa, 2017; Khalifa and Mewad, 2017; TAM is essentially an information system philosophy that explores how a user embraces and uses a technology, TAM discusses a number of factors that affect a user's decision and at the same time deals with how and when users will use it. The paradigm deals with information technology acceptance. The external factors influencing consumers in making a decision are perceived utility, perceived user-friendliness, perceived cost effectiveness. The TAM's main purpose is to explain how a user accepts a particular technology.

**Figure 2.1 Technology Acceptance Model (TAM)**



Source: Davis, Bagozzi, and Warshaw (1989)

Several studies have studied internet or online banking, but there is little and little exposure to work focused on mobile banking. Kazi and Muhammad (2013) Pakistan has inspected the research study that analyzes the effect of mobile banking services on Pakistan's customers. The data collection was carried out by surveying 372 respondents from the province of Sindh's two largest cities (Karachi and Hyderabad) using the sampling method of judgment. The researcher used a framework for correlation analysis, and multiple regressions were used to evaluate the results. In this research, the TAM model played a major role, variables such as social influence, perceived risk, perceived usefulness, and perceived user-friendliness to study whether they influenced mobile banking throughout Pakistan.

Grace Makongoro (2014) conducted a research study examining factors affecting the adoption of mobile banking services by customers in Tanzania.' His overall research objective was to establish the factors influencing the adoption of Tanzania's mobile banking services. Individuals living in Dar es Salaam were the target population for this study. For obtain data 24 from respondents, a convenience sampling technique was used. Questionnaires have been circulated to 150 individuals. The reason this sample population was chosen was because these individuals are people engaged in retail banking and could very well be among the potential customers of mobile banking services now or in the near future. In this case, a questionnaire was distributed to the respondents who are users of mobile banking services in Tanzania or future users. For this reason, mobile banking customers tend to use mobile banking services based on their perceived ease of use, perceived utility, time and cost, he found the perceived risk, convenience and relative advantage as the most significant influencing factors in mobile banking adoption because they had a

strong influence on mobile banking adoption than any other variable. The results also confirmed that a reasonable correlation existed between the independent variables (perceived risk, convenience and relative advantage) and the dependent variable, while there was a negative correlation with Trust in influencing the adoption of mobile banking.

Mahmoodasim Alsamydai(2014) disclosed "The factors influencing the use of mobile banking services in Jordan by customers." The aim of this research was to identify the factors influencing the use of mobile banking services by customers by analyzing several subject areas. A research model consisted of six dimensions including motivating factors, impeding factors, perceived utility, attitude, purpose and use of mobile banking services. The study's hypotheses are divided into two classes. The first group includes six hypotheses and focuses on testing the factors affecting the use of mobile banking services by consumers, this test was performed using T-Value (one sample t-test) and statistical analysis. The second group, which includes hypothesis 7, was used to determine the correlation between the study model constructs. We found that the perceived usefulness has a positive effect on mobile banking services ' attitude, purpose, and use.

Based on previous studies and model of TAM, this research attempted to classify contributing factors in Myanmar's Private Commercial Bank consumer use of mobile banking services. The research also attempted to add as independent variables motivating factor and security factor that affect the use of mobile banking services.

## 2.6 Conceptual Framework of the study

In this study perceived ease of use, motivating factors, security and perceived usefulness are independent variables and customer usage of mobile banking is dependent variable. Questionnaires were constructed by the following assumption statements.

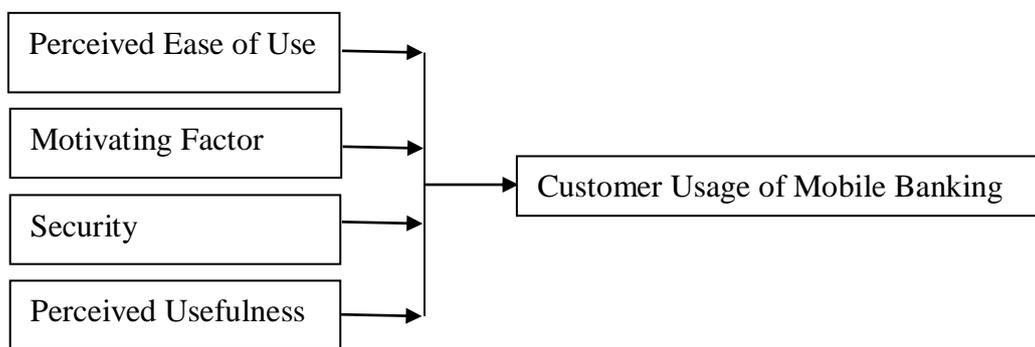
**Perceived Ease of Use** - Customers may interest to use the mobile banking system when they thought that mobile banking is easy to use, easy to receive salaries payment, available to get service any time, easy to make banking transactions via mobile banking.

**Motivating Factor** - Using mobile banking is modernism, low cost of transaction and time saving effect on motivating factors of customer usage of mobile banking services.

**Security** - Mobile banking system should be conducted in safety information and data, transaction security, prevention from unexpected issue, taking responsibility for customer usage error and mobile device losing issue.

**Perceived Usefulness** - Customer may intend to use mobile banking system in future if they accept that mobile banking services make them time saving, convenience and safety for business transaction, reducing stress of unavoidable conflict and attaining their needs and wants.

**Figure 2.2 Conceptual Framework of the study**



Source: Own Compilation, 2019.

## CHAPTER III

### OVERVIEW OF BANKING SECTOR IN MYANMAR

This chapter presented the overview of banking sector in Myanmar. There are four sections such as current situation of banking sector in Myanmar, mobile financial services in Myanmar, mobile banking services of selected Myanmar Private Banks and mobile financial service providers in Myanmar.

#### 3.1 Current Situation of Banking Sector in Myanmar

By the end of September 2018, Central Bank of Myanmar focused on financial inclusion and thus granted 27 private banks with 1710 branches, 13 foreign bank branches with 44 foreign bank representatives and 25 non-bank financial institutions. In addition, CBM has allowed banks to carry out mobile banking services, 9 private banks, 2 Mobile Network Operators and 1 Non-Bank Financial Institution to easily access financial services to people from the unreached banking service area. In the banking supervision system for implementing compliance-based risk-based supervision, CBM released Internal Guidelines and User Manual with IMF Technical Assistance and subsequently checked some banks in 2018, and CBM has a proposal to fully implement risk-based supervision in 2020.

The Myanmar Banks Association (MBA) was established in April 1999 to provide the domestic banking industry with a dialog and lobbying forum. MBA also deals globally with partnerships and banks. It currently has 31 banks with members, including all four banks owned by the state. The CBM Governor presided over the MBA until early 2013, while representatives of local banks assumed vice-president and secretary duties. In September 2013, the MBA elected a board of directors independent of the CBM for the first time since its inception. The new MBA president is also CB Bank chairman.

Myanmar Payment Union (MPU) was developed in 2011 as a National Payment Switch for Myanmar by Myanmar banks, i.e. a network that supports non-cash payments from electronic platforms such as ATMs, POS terminals, mobile banking, etc. Banks and other stakeholders have partnered together since 2013 to develop payment services, including internet and mobile banking. CBM-Net, the first real-time gross settlement (RTGS) in Myanmar, was implemented in January 2016. Large payment transactions can be made via CBM-Net, while retail payment facilities

are provided by the MPU.

In May 2018, Myanmar Credit Bureau Limited obtained a license from CBM to become Myanmar's first credit agency. It is formed as a joint venture between MB Investment Limited, a proxy company for MBA, and Asia Credit Bureau Holding Limited, formally known as the Singapore NSP Holdings Pte Ltd, sharing 60:40 stakes, respectively. To provide credit ratings, the Credit Bureau must receive credit information from individuals and companies. It will sell this data for sound lending decisions to financial institutions. The International Finance Corporation (IFC) has funded the office's credit history and taxation data collection and is helping to build CBM's necessary regulatory capability.

Financial exclusion is still a big challenge for the development of Myanmar, especially in rural areas. In 2017, less than 26% of the Myanmar population aged 15 years or older had an account at a formal financial institution. However, due to the advancement of mobile financial services financial inclusion is increasing.

### **3.2 Mobile Financial Services in Myanmar**

The guidelines and regulations have been issued by the Myanmar Central Bank. There are two models in Myanmar for the operation of mobile financial services: bank-led mobile banking services and providers of mobile financial services.

**Bank-led Mobile Banking Services** – CBM Directive (No.4/2013) requires banks to run a bank-led model of mobile banking services. Under this model, banks are required to obtain permission from CBM to operate mobile banking services either on their own or in partnership with a mobile money company, use Mobile Network Operators (MNOs) technology support and mobile banking solution providers to establish mobile banking product and platforms. CBM permits mobile banking services such as domestic and international inward remittances, debiting and crediting of cash in local currency through agents, bank branches, ATMs and mobile operator branches, payments from person to business and vice versa, government payments to individuals and vice versa, payments between individuals and repayment of loans from microfinance and other small-scale payments such as health insurance.

**Mobile Financial Service Providers (MFSPs)** - The 2016 Mobile Financial Services Regulation published by CBM laid down the framework for licensing and supervising mobile financial services providers (MFSPs), which includes non-bank

financial institutions and mobile network operators (MNOs). MFSPs are required to apply directly for a CBM Mobile Financial Service License, whereas in this model banks act only as deposit-taking institutions for MFSPs with additional cash and liquidity management services.

### **3.3 Mobile Banking Services of Selected Private Banks**

In Myanmar, there are many banks that can provide the services of mobile banking. KBZPay, AYA mBanking and CB Pay are the most common uses of mobile banking services in Myanmar. These banks offer different ways to access mobile banking through a mobile website, mobile applications, or text banking.

KBZ Bank offers two types of KBZPay and KBZ mobile banking services. KBZPay offers customer services through KBZ trained agents, and KBZPay users will be able to conduct financial services electronically through mobile user apps and/or agents appointed by KBZ.

Two types of account were given by KBZPay. The customer will self-register KBZPay via the mobile phone of the user at level 1 customer account. At level 2 customer account, customers can upgrade to this type of account in compliance with KBZ Bank KYC policy at KBZ appointed KBZ branch agents and/or other KBZ approved channels only. KBZPay users can cash out from any of the 1500 KBZ ATMs across the country using their mobile wallets.

Remit2U features at KBZ mobile banking will allow the sender to remit money via online banking to the beneficiary by simply knowing the beneficiary's NRIC and telephone number. At one time, the cumulative transaction limit is 500,000.00 kyat and the average transaction limit is 3,000,000 kyat. Transfer fees are 0.125 percent per transaction (min. 300MMK).

KBZPay mobile upload enables customers to download e-load directly from all Myanmar telecom operators such as MPT, Telenor, Ooredoo, MEC and MyTel via fingertips without incurring any service fees. With the availability of the favorite mobile top-up method, a limit of 5 numbers can be saved under favorite features so that repeated telephone numbers do not have to be entered for next top-ups. For 49 townships in Yangon, Mandalay and Bago Divisions, KBZPay provided meter bill payment.

KBZPay customers who make at least 3 business transactions (purchase fee, not including top-up) per month received 3 times the average monthly balance in their personal KBZPay wallet free life insurance. Maximum pay out is 300,000.00kyat.

AYA Mobile Banking 2.0, also referred to as AYA mBanking. Users can request money from other AYA account holder at AYA mBanking by submitting user's bank account QR code and asking payee to simply scan and pay. It is possible to make Easy Payments using QR code.

For Yangon City, Mandalay City and Nay Pyi Taw area, remittance fees on AYA mBanking are free. Transaction charges for Muse, Myitkyina and Myawaddy are 0.10% (min MMK 200) and all other transaction charges are 0.03% (min MMK 200). AYA Mobile Banking is transferred to other AYA USD accounts or own USD accounts followed by the transfer time exchange rate.

CB Pay is CB Bank Ltd's new mobile banking service. CB Pay service allows users who have CB Bank Account to conveniently self-register online. CB Pay can use mobile phone number, account number or ATM card number to transfer money. Use QR code or telephone number to make payment or request payment. The beneficiary may obtain the funds from any branch of CB Bank and from any agent of CB Bank. You will automatically save electronic receipt in the user's phone gallery. Users can save their favorite or most commonly used account number or CB Pay Number. Receive notification after the transaction is made and any payments are received. CB Pay covers meter charges, landline bills, premium life insurance and municipal taxes. Transfer charges for same branch is free and 0.15% for different region. At CB Pay maximum transaction limit is 1,000,000.00 kyat per day.

### **3.4 Mobile Financial Service Providers in Myanmar**

There are three MFSPs authorised in Myanmar as of August 2018, namely Wave Cash, OK Dollar, and M-Pitesan. In October 2016, Wave Money became the first MFSP to obtain a license under the licensing regime for non-bank financial institution. It has four shareholders as of August 2018: Telenor (51%), Yoma Strategic Holdings (34%), First Myanmar Investment (10%) and Yoma Bank (5%). Wave Money expanded its agent network to about 33,000 by September 2018 from 5,000 in early 2017. It holds the largest market share among the three MFSPs with more than 2 million customers. In August 2017, OK Dollar, owned by Internet Wallet Limited, issued an MFSP license. OK dollar currently has about 1 million registered users, making it the second highest of the three MFSPs. In September 2017, M-Pitesan was released by Ooredoo. The company has already signed up to 5,000 agents in the first four months of its service. MPT, the state-owned Telecom,

too, is in the process of obtaining an MFSP license and will soon launch its own products.

MFSPs have proved to be very innovative and their networks and customer bases have expanded rapidly. Wave Money garnered a monthly revenue growth of 22% from January 2017 to January 2018, with 30% growth in transfer volume in the same period. It launched payment services at Wave Money outlets for "Pick" drivers (online call taxis). It has also collaborated with the United Nations World Food Program to transfer monthly stipends from the Kachin State border to refugee families. OK Dollar has recently launched OK Taxi, where customers can request taxis from their OK Dollar account via the OK Taxi app and pay the driver directly. Unlike other taxi services, such as Grab and Oway, drivers do not have to pay commission fees. On October 18, 2018, Mytel was officially licensed to become Myanmar's fourth operator.

## **CHAPTER 4**

### **ANALYSIS ON FACTORS INFLUENCING OF CUSTOMER USAGE OF MOBILE BANKING SERVICES**

This chapter presents the results and findings of the answers and consists of six sections of the data. These include research design, respondent background characteristics, and assessment of the scale of reliability for the studied variable, analysis of the determinant of customer use of mobile banking services, relationship between determinants and use of mobile banking services, and analysis of influencing factors in the use of mobile banking services. Descriptive analysis is performed to analyze the customer's use of mobile banking services. The mean values, standard deviation and coefficient of correlation are calculated from questionnaire collected data. Finally, by using multiple linear regression models described in this chapter, we analyze the influencing factors of customer use of mobile banking services.

#### **4.1 Research Design**

This study analyzed the use of mobile banking services by customers in Myanmar. Mobile banking users who live in Parami Housing, Hlaing Township, Yangon Region were studied. In addition, given traditional ways, the report also focuses on the factors influencing the use of mobile banking services. To know the reasons for accuracy, information is collected from the sample using a simple method of random sampling.

The required information was collected via survey to support this research. A standardized questionnaire was used as a survey tool. The questionnaires include two sections. First section is compromised with the background features of respondents such as gender, age, marital status, occupation, income and level of education, and average monthly income. In the last segment, the key successful factors of mobile banking such as perceived ease of use, motivating factor, security and perceived usefulness of using mobile banking services are addressed.

In this sample, the quota sampling was used as a sampling method, using this research paper to approach the respondents and collect the data on time and also to avoid low response rates. The 160 questionnaires are distributed by hand during the sampling process and the respondents are given sufficient time to complete the questionnaire to minimize the error. For this particular, descriptive analysis, the Statistical

Package for Social Science (SPSS Version 25) is used to analyze the data through a statistical tool. Finally, these analyzes are discussed with regard to influencing factors on the use of mobile banking services by customers.

#### 4.2 Background Characteristics of Respondents

The first section of this study analyzes respondents' background features. Respondents' characteristics were divided into respondents' demographic profile and mobile banking users' experience.

**Table 4.1 Demographic Profile of Respondents**

<b>Gender</b>	<b>Number</b>	<b>Percent</b>
Male	48	30
Female	112	70
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Age</b>		
18-25	20	12.5
26-30	60	37.5
31-40	62	38.8
41-50	14	8.8
Above 50	4	2.5
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Marital Status</b>		
Married	87	54.4
Single	72	45.0
Widowed/Divorced	1	0.6
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Educational Level</b>		
Under Graduate	22	13.8
Bachelor Degree	74	46.3
Master Degree	64	40
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Occupation</b>		
Business Owner	22	13.8
Government Employee	52	32.5
Private Employee	79	49.4
Student	3	1.9
Other	4	2.5
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Monthly Income (Kyat)</b>		
<100,000	5	3.1
100,001 – 200,000	24	15
200,001 – 300,000	57	35.6
300,001 – 400,000	13	8.1
>400,000	61	38.1
<b>Total</b>	<b>160</b>	<b>100</b>

Source: Survey Data (2019)

The majority of mobile banking users are female respondents than male respondents, according to the data. The highest use of mobile banking services is between the ages of 31-40. The outcome reveals that most respondents are married. Many users of mobile banking are holders of bachelor's degree. Many mobile banking consumers operate in the enterprise of the private sector. The most respondents using the mobile banking service are earning more than 400,000 Kyat salaries.

**Table 4.2 Experience of Mobile Banking Users**

<b>Bank Name</b>	<b>Number</b>	<b>Percent</b>
AGD	2	1.3
AYA	34	21.3
CB	49	30.6
YOMA	3	1.9
KBZ	68	42.3
MAB	2	1.3
UAB	2	1.3
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Usage Duration</b>		
Less than one year	28	17.5
Between 1-3 year	57	35.6
Above 3 year	75	46.9
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Frequency of using mobile banking services per month</b>		
1 - 5	12	7.5
6 - 10	23	14.4
11 - 15	57	35.6
16 - 20	39	24.4
21 - 25	29	18.1
<b>Total</b>	<b>160</b>	<b>100</b>
<b>Purpose of using mobile banking services per month</b>		
Money Transfer	102	63.7
Telephone bill and Electricity Bill	52	32.5
Account information and balance enquiry	18	11.3
Due installment enquire	51	31.9
Payroll services	140	87.5
<b>Unique Feature of Mobile Banking Services</b>		
24hour/7day operation	101	63.1
Time saving	20	12.5
Free Checking account	10	6.3
Using for movies ticketing	16	10

Source: Survey Data (2019)

According to table 4.2, the majority of respondents use KBZ mobile banking services. The most of mobile banking customers who have been using mobile banking above 3 year and 35.62% of respondents have used mobile banking services 11-15 times per month. The purpose of most mobile banking users is for payroll services. 24 hour/7day operation is the most favorable reason for using mobile banking services.

### 4.3 Assessment of Reliability Scale for Studied Variable

In this research, Likert scales have been commonly used. Therefore, the reliability of each dimension should be tested before they are used. Reliability refers to the degree to which techniques and analytical procedures for data collection produce comparable results to those of previous researchers. Reliability tests have continuity in variables calculation. Reliability of internal consistency ensures continuity in variables calculation. External reliability is the psychometric indicator most widely used to test survey instruments and competencies (Zhang, Waszink & Wijngaard, 2000). Cronbach alpha is the basic factor for internal consistency-based reliability determination (Kim & Cha, 2002).

The alpha value of Cronbach is used as a measure of the internal consistency of the scales used in the questionnaire in this study. If alpha is weak, then at least one item is unstable and must be detected through the process of item analysis. Nevertheless, the alpha value of the Cronbach should preferably be above 0.7, as per DeVellis (2003).

**Table (4.3) Results of Cronbach's Alpha Value**

Scale	No. of Items	Cronbach's Alpha
Perceived Ease of Use	5	.970
Motivating Factor	3	.966
Security	5	.804
Perceived Usefulness	5	.913
Usage	4	.899

Source: Survey data (2019)

The findings of the alpha value of the Cronbach above 0.7 show very good internal accuracy and reliability with this sample for the size. In this study, constructs were tested for internal consistency reliability using Cronbach's alpha test as depicted in above Table (4.3).

#### 4.4 Analysis on the Determinants of Customer Usage of Mobile Banking Services

In this study, determinants of the usage of mobile banking services namely ease of use, motivating factor, security and perceived usefulness are measured with 18 statements. Perceived Ease of use are measured with 5 statements, motivating factors are measured with 3 statements, securities are measure with 5 statements, perceived usefulness are measure with 5 statements, respectively. Each statement is measure on five-point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly agree). The mean score is calculated and addressed for each statement. Because each statement is calculated with a Likert scale of five points, the minimum, middle, and maximum mean scores are 1, 3, and 5. Furthermore, if the mean scores are higher than 3, respondents can be considered to be accepted while if the mean score is lower than 3, it can be concluded that respondents are not accepted.

##### 4.4.1 Perceived Ease of Use

One of the important factors of usage of mobile banking service is perceived ease of use. That is, it must be easy to learn and easy to use the mobile banking system. The mean and standard deviation of each statement is determined as the descriptive measure in order to determine the agreement level of ease of use towards the use of mobile banking. The mean and standard deviation of each statement in perceived ease of use factor are found and the results are shown in Table (4.4).

**Table (4.4) Perceived Ease of Use Factor of Respondents**

No.	Statement	Mean	Standard Deviation
1.	Easy to learn how to use mobile banking	3.66	.213
2.	Easy for getting salary through mobile banking.	3.53	.213
3.	Mobile banking service is available at any time	3.63	.211
4.	It is easy to make transfer money.	3.81	.130
5	Ease to check account balance	3.67	.196
<b>Average</b>		<b>3.66</b>	

Source: Survey data (2019)

According to the Table (4.4), it indicates that respondents agreed the perceived ease of use dominate the usage of mobile banking services since the overall average value this dimension is 3.66 which is greater than the statistical average 3. Among five statements in ease of use factor, learning easily to use mobile banking is the highest mean score 3.81 and a little standard deviation .130. Therefore, it can be concluded that respondents are agreed mostly that mobile banking is easy to learn how to use it.

#### 4.4.2 Motivating Factor

Motivating factor toward the usage of mobile banking services include modernism, low cost of transaction and time saving. And the mobile banking system lack an above motivating factor, respondents are not using the mobile banking service anymore. That why, motivating factor is accounted significantly affects the respondents' usage of mobile banking. In order to determine the agreement level of motivating factor toward the usage of mobile banking, the mean and standard deviation of each statement are calculated as the descriptive analysis. The mean and standard deviation of each statement in motivating factors are found and the results are shown in Table (4.5).

**Table (4.5) Motivating Factor of Respondents**

No.	Statement	Mean	Standard Deviation
1.	Using mobile banking is modernism.	3.47	.093
2.	The cost of transactions can be minimized by mobile banking.	3.42	.135
3.	Using mobile banking can save time.	3.51	.171
<b>Average</b>		<b>3.47</b>	

Source: Survey data (2019)

According to the Table (4.5), it indicates that respondents agreed the motivating factor encouragement the usage of mobile banking services since the overall average value this dimension is 3.47 which is greater than the statistical average 3. Among three statements in motivating factor, using mobile banking can save time is the highest mean score 3.51 and a little standard deviation .171. Therefore, it can be concluded that respondents are agreed mostly that mobile banking can help them to save their time.

#### 4.4.3 Security

It is very vital to use the mobile banking services is secure while the user doing the financial transaction and using for other services. Fear of the lack of security is one of the factor that affecting the growth and development of mobile banking services. As a consequence, the security is to be accounted in one of the factor that explain the usage of mobile banking. In order to determine the agreement level of security toward the usage of mobile banking, the mean and standard deviation of each statement are calculated as the descriptive analysis. The mean and standard deviation of each statement in security are found and the results are shown in Table (4.6).

**Table (4.6) Security Factor of Respondents**

No.	Statement	Mean	Standard Deviation
1.	Mobile banking system safely maintains customer's information and data.	3.50	.076
2.	My transactions are strongly secured.	3.19	.106
3.	Mobile banking security is safe and prevented.	3.30	.033
4.	Bank takes responsibility if customer forget user name and password.	3.38	.057
5.	Someone may access my bank details if my phone is stolen.	3.19	.106
<b>Average</b>		<b>3.31</b>	

Source: Survey data (2019)

According to the Table (4.6), it indicates that respondents agreed the security encouragement the usage of mobile banking services since the overall average value this dimension is 3.31 which is greater than the statistical average 3. Among five statements in security factor, having a strongest transactions security is the highest mean score 3.50 and a little standard deviation .076 which indicate there is no variation among respondents. Therefore, it can be concluded that respondents agreed mostly that mobile banking system safely maintain customer's information and data because it is important for both customers and banks alike. Customers want to be sure that their data and money is safe and sound when using mobile application.

#### 4.4.4 Perceived Usefulness

People evaluate the consequence of their behavior in terms of perceived usefulness and their behavioral choices are based on the attractive of the perceived usefulness. Therefore, perceived usefulness was accounted as an important factor in fostering a positive attitude toward the usage of mobile banking services. In order to determine the agreement level of perceived usefulness toward the usage of mobile banking, the mean and standard deviation of each statement are calculated as the descriptive analysis. The mean and standard deviation of each statement in perceived usefulness are found and the results are shown in Table (4.7).

**Table (4.7) Perceived Usefulness Factor of Respondents**

No.	Statement	Mean	Standard Deviation
1.	Using Mobile banking saves time.	3.41	.106
2.	Using Mobile banking is convenient for business.	3.79	.162
3.	Using Mobile banking is safe for business transactions	3.71	.102
4.	Mobile banking reduces the stress of face to face banking.	3.63	.057
5.	Using mobile banking services meet my needs.	3.87	.188
<b>Average</b>		<b>3.68</b>	

Source: Survey data (2019)

According to the Table (4.7), it indicates that respondents agreed the perceived usefulness influence the usage of mobile banking services since the overall average value this dimension is 3.68 which is greater than the statistical average 3. Among five statements in perceived usefulness, using mobile banking services meet needs has the average score of 3.87 and a little standard deviation .188. Therefore, it can be concluded that respondents agree mostly that using mobile banking services meet their needs.

According to the above results, overall average mean value for perceived ease of use is 3.66, motivating factors is 3.47, security is 3.31 and perceived usefulness is 3.68 respectively. Therefore these four factors are effect on customer usage of mobile banking services. Among them perceived usefulness is the most effective factor on customer usage of mobile banking services.

#### 4.5 Relationship between Determinants and Usage of Mobile Banking Services

Correlation is a measure of the relationship between two variables; statistical value(-1 to 1) is given by the correlation coefficient for measuring direction and intensity of the linear relationship between two variables. For this analysis, the correlation coefficients of the individual were determined by bivariate regression. Bivariate correlations, which test the strength of the relationship between two variables without taking into account some other variable to the intervention, may trigger the relationship between the two variables being tested. In this study, relationship between each determinant such as perceived ease of use, motivating factor, security, perceived usefulness and usage of mobile banking services are conducted. The average scale scores were determined for each scale to perform the study and determine the studied objective and to find the correlation coefficient for each pair of variables. Table (4.8) shows the relationship between average scores of usage of mobile banking and its determinant factor.

**Table (4.8) Correlation Coefficient between Usage of Mobile Banking Services and Its Determining Factors**

<b>Determining Factor toward the Usage of Mobile Banking Services</b>	<b>Correlation Coefficient</b>
Perceived Ease of Use	.781**
Motivating Factor	.790**
Security	.806**
Perceived usefulness	.840**

Source: Survey data (2019)

Note: \*\* Correlation is significant at the 0.01 level of significant (2-tailed)

Table (4.8) demonstrates the correlation coefficient between usage of mobile banking services and its determining factors. The correlation coefficient between customer usage of mobile banking services and perceived ease of use is 0.78, motivating factor is .79, security is .81 and perceived usefulness is .84 respectively. All factors are significant at 1% level. As indicated by the results of correlation analysis, determination factor of customer's usage of mobile banking services are positively

correlated with customer usage of that services. Perceived usefulness is the highest correlation among four determination factors.

#### 4.6 Analysis of Influencing Factors of the Usage of Mobile Banking Services

In this analysis, multiple linear regression model is used to evaluate the factors that lead to the use of mobile banking for Hlaing Township by the respondents. The result from this model is as shown in following Table (4.9).

**Table (4.9) Regression Result of Usage of Mobile Banking Service and its Influencing Factors**

Influencing Factor	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
Constant	.321	.150		2.147	.033
Perceived Ease of use	.301	.082	.283	3.242	.008
Motivating Factor	.179	.075	.204	2.397	.018
Security	.314**	.087	.292	3.627	.000
Perceived Usefulness	.391**	.083	.389	4.708	.000
N= 160    Adjusted R Square= .759    F = 101.119 (p-value = 0.000)    DW = 1.724					

Dependent Variable: Usage of Mobile Banking Services

Source: Survey Data (2019)

Notes: \*\* Significant at 1% level, \* Significant at 5% level,

The above results show that all the coefficients in the model are jointly significant at 1% level, which is indicated by the value of F-statistic. It can be clearly seen that all of the four independent variables in the model namely perceived ease of use, motivating factor, security and perceived usefulness are totally significant in usage of mobile banking services according to F statistic 101.12. As a result of adjusted coefficient of determination is .759. Therefore, it can be concluding that the 75.9% of the variation of four influencing factor is explained by the variation of the respondents' usage of mobile banking services.

## **CHAPTER 5**

### **CONCLUSION**

This chapter consists of the finding of the study, suggestions and needs for further study.

#### **5.1 Findings**

This study analyses the factor influencing on customer usage of mobile banking services provided by local private banks in Yangon. There are two main objectives in this study: to identify the customer practices of the mobile banking services provided by private banks in Myanmar and to explore the factors influencing on customer usage of mobile banking services in Yangon.

The required data of the objectives are collected through structured survey form. The total 160 respondents who are already being customers of private banks were surveyed to represent the factor influencing on customer usage of mobile banking services. The demographic factors include age level, gender level, education level, marital status level and income level.

The early survey questionnaires are background characteristic of respondents. The gender of female is more than the male that use the mobile banking. It also found that the middle age customers whose ages between 30 to 40 years old are greater users of mobile banking services as this age level is more interested in new innovation and technology. The majority of the respondents were married. Furthermore, the majority of mobile banking users are graduated as they have sufficient knowledge on mobile banking. The largest group of users is private employee whose monthly income is above 400,000Kyat.

The result also showed that majority of respondents have used mobile banking services of KBZ Bank is above three years and usage times is 11-15times per month. The mainly reason for using mobile banking is customer like 24hour/7day operation.

For this analysis, the theoretical structure is based on the Technology Acceptance Model (TAM). This model included many factors which are important antecedents of customer usage of mobile banking services. The two main factors of this model are perceived ease of use and perceived of usefulness. The other variables are security and motivating factors.

Customers result for security of mobile banking is the lowest effect among other factors but having positive attitude towards the mobile banking services. The statistical results show that perceived ease of use and perceived of usefulness are the main effected factors on the customer usage. Moreover, the outcome presented perceived usefulness is the most influencing factor on customer usage among the others influence factors. Customers feel that mobile banking services make it easier to perform banking activities more quickly and efficiently. The conclusion was reached that customer usage of mobile banking services is influenced by multiple factors.

## **5.2 Suggestions**

Based on the study results, suggestions are proposed to help improve the practical use of the network by mobile banking users. Private banks ' mobile banking systems are dedicated to competition in technology. The following recommendations are made in highlighting the research findings: private banks in Myanmar should place more emphasis on mobile banking and other technology innovation, including special promotional communication drives to inform and convince the ease of using mobile banking. Mean score for security is 3.31 so that the respondents accept mobile banking security is neutral level. This observation suggested that private banks in Myanmar pay attention to the mobile banking system to ensure that users are trusted. The bank also wants to provide the best services to current users to encourage their colleagues, acquaintances, and family members to take on the service.

## **5.3 Needs for Further Study**

The scope of this study is focused on influencing factors of customer usage of mobile banking services in Myanmar. . This study is only focus on customer who live in Parami Housing, Hlaing Township, Yangon Division. For one mega metro city, this is a very small scale analysis, whereas there are some avenues for future research as well.

First, a similar study can be conducted on a larger sample size, selected through random sampling technique to have more authenticated results that can be generalized to the general population.

Second, there was limited time available to conduct the research. Changes in customer usage cannot be measured over time, so the thesis is limited by the due date. To order to monitor improvements, more research is required. Different customers have different expectations, so this test could be applied differently in the future.

Thirdly, this investigation focused solely on the use of mobile banking services, but not on other electronic transactions such as internet banking and online transactions, which appear to be its delimitation. Therefore, additional variables and factors might be selected and ascertained in future.

## References

1. Ajzen, I., & Fishbein, M(1980). “Understanding attitudes and predicting social behavior”.
2. Ayeyarwady Bank, AYA (2010). Home Page of AYA Bank:  
<http://www.ayabank.com>
3. Benamati,J.S.,&Rajkumar,T.M (2002). The application development outsourcing decision: An application of the technology acceptance model. *Journal of Computer Information Systems*, Page 42(4), 35-43.
4. Carlos Martins Rodrigues Pinho, J., & Soares, A. M (2011). “Examining the technology acceptance model in the adoption of social networks.” *Journal of Research in Interactive Marketing*, 5(2/3), 116-129.
5. Co-operative Bank, Home Page of CB Bank: <http://www.cbbank.com>
6. Central Bank of Myanmar FY 2108 Transition Period Report,  
<http://www.cbm.gov.mm>
7. Ei Ei Phyu (2018). “Attitude towards the Use of Mobile Wallet and Mobile Payment Services in Myanmar.”
8. Fishbein, M., &Ajzen, I. (1975). “Belief, attitude, intention and behavior: An introduction to theory and research.”
9. Grace Makongoro, (2014). “Factors Influencing Customer Adoption of Mobile Banking Services in Tanzania.”
10. GIZ report 2018. Myanmar’s Banking Sector in Transition.
11. Htet Htet Htun (2017). “Customer adoption on mobile banking of KBZ Bank.”
12. Kazi, Abdul Kabeer and Mannan, Muhammad Adeel (2013). “Factors affecting adoption of mobile banking in Pakistan”. *Empirical Evidence. Published in: International Journal of Research in Business and Social Science*, Vol. 2, No. 3 (15 July 2013): pp. 54-61.
13. Kanbawza Bank, Home page of KBZ bank: <http://www.kbzbank.com>
14. Mahmood Jasim Alsamydai, SaadGalib Yassen, Husam Mustafa Alnaimi, Dima Mousa Dajani & Ihab Ali Al-Qirem. “The Factors Influencing Customer Usage Of Mobile Banking Services In Jordan”. *International Journal of Business Management & Research (IJBMR)*, Vol. 4, Issue 2, Apr 2014.

15. Pavlou, P. A. "Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model". *International journal of electronic commerce*, 7(3), 101-134 (2003).
16. Remina Malhotra (2011). "Factors affecting the adoption of mobile banking in New Zealand"
17. Shu, W., & Cheng, C. Y. (2012). "How to improve consumer attitudes toward using credit cards online". *Journal Electronic Commerce Research and Application*, Volume 11 Issue 4, July 2012, Page 335-345
18. Yahaya, S., & Haji-Othman, Y. (2014). "Determinants of attitude of customers towards usage of Islamic credit card: A Study of Graduate students of Kolej University Insaniah". *European Journal of Business and Management*, .6(32), 145- 152

## **APPENDIXES A**

### **Mobile Banking Questionnaire (for users)**

The following questions are asking your assent/views towards customer usage of mobile banking services of private banks. Results are for partial fulfillment of Master Degree Program. Please choose a (√) sign to indicate your preference. I am appreciative of your patient responding of answering the questions below.

#### **Part I**

#### **Background Characteristic of Respondents**

##### **1. Gender**

- Male
- Female

##### **2. Age**

- 18 – 25 year
- 26 – 30 year
- 31 – 40 year
- 41 – 50 year
- Above 50 year

##### **3. Marital Status**

- Single
- Married
- Widowed/Divorced

##### **4. Education Status**

- Undergraduate
- Bachelor Degree
- Master Degree

##### **5. Education Status**

- Business owner
- Government Employee
- Private Employee
- Student
- Other

**6. Monthly Income (Kyats)**

- <100,000
- 100,001 – 200,000
- 200,001 – 300,000
- 300,001 – 400,000
- Above 400000

**7. Bank Name**

- AGD
- AYA
- CB
- YOMA
- KBZ
- MAB
- UAB

**8. Usage Duration**

- Less than one year
- Between 1-3 year
- Above 3 year

**9. Frequency of Using Mobile Banking Services per Month**

- 1 - 5o
- 6 -10
- 11 -15
- 16 - 20
- 21 - 25

**10. Purpose**

- Money Transfer
- Telephone Bill and Electricity Bill
- Account information and balance enquiry
- Due installment Enquire
- Payroll Services

### 11. Reason

- 24 hour/7day operation
- Time saving
- Free Checking Account
- Using for movies ticketing

### Part II

#### Questionnaires on Customer Usage of Mobile Banking services of Private Banks.

Please indicate the levels of agreement on each of the following statement by selecting a (√) mark in the appropriate box.

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

Ease of Use						
No	Statement	1	2	3	4	5
1.	Easy to learn how to use mobile banking.					
2.	Easy for getting salary through mobile banking.					
3.	Mobile banking service is available at any time.					
4.	It is easy to make transfer money.					
5.	Ease to check account balance.					
Motivating Factors						
1.	Using mobile banking is modernism.					
2.	The cost of transactions can be minimized by using mobile banking.					
3.	Using mobile banking can save time.					
Security						
1.	Mobile banking system safely maintains customer's information and data.					
2.	My transactions are strongly secured.					
3.	Mobile banking security is safe and prevented.					
4.	Bank takes responsibility if customer forgets user name and password.					
5.	Someone may not access my bank details if my phone is stolen.					
Perceived Usefulness						
1.	Using Mobile banking saves time.					
2.	Using Mobile banking is convenient for business.					
3.	Using Mobile banking is safe for business transactions.					
4.	Mobile banking reduces the stress of face to face interaction.					
5.	Using mobile banking services meet my needs.					

	<b>Usage of Mobile Banking Services</b>					
1.	I am very confident to use mobile banking services.					
2.	I'm sure to use mobile banking continuously in the Future.					
3.	I recommend my friends to use mobile banking services.					

**Thanks for Your Time.**