

**YANGON UNIVERSITY OF ECONOMICS**

**DEPARTMENT OF COMMERCE**

**MBF PROGRAMME**

**USER BEHAVIORAL INTENTION TO ADOPT MOBILE BANKING IN  
SELECTED PRIVATE BANKS**

**PYAE PHYO AUNG**

**DECEMBER, 2019**

**YANGON UNIVERSITY OF ECONOMICS**

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Day 1<sup>st</sup> Batch

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SELECTED PRIVATE BANKS**

**This thesis is submitted to the Board of Examiners as partial fulfillment of the  
requirements for the degree of “ Master of Banking and Finance”.**

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**ACCEPTANCE**

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

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## **ABSTRACT**

This study is to study the user behavioral intention to adopt mobile banking. The objectives of the paper are to investigate the determinants of behavioral intention of mobile banking users, to analyze the relationship between users behavioral intention and its determinants. To accomplish these objectives of the study, the analysis is conducted based on the responses of 170 respondents who are selected by convenient sampling method by using structured questionnaires in November 2019. The questionnaire are made of five-point Likert scale in order to measure the five determinants which are performance expectancy, effort expectancy, social influence, facilitation conditions and behavioral intention on mobile banking users of selected private banks in Myanmar. The finding of the study shows the average mean of effort expectancy is high. Most of the users perceive mobile banking is easy to use and users perceive that becoming skillful at using mobile banking is easy for everyone. Average mean of social influence is high. Most of the users perceive that peer can not be able to influence user behavior to use mobile banking. However, Social Influence factors does not support the significant effects on behavioral intention of using mobile banking. Therefore, performance expectancy and effort expectancy factors are considered as the most important significant factors in this study. According to the result of this survey, the highest mean score is effort expectancy. That's why, Markers from banks need to develop new marketing strategy which can give incentive current users to urge potential user to adopt mobile banking with the purpose of expanding the rate of mobile banking users in Myanmar.

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## CHAPTER I INTRODUCTION

The world is moving faster than ever before and in today's fast-paced environment, Information Technology (IT) is dynamic a major part in many industries including the banking industry. Banking is significant in the lives of people in all parts of the world and transactions such as cash and check deposits, withdrawals, encashment, fund transfers, bills payments; etc. have been completed over-the-counter. But since the inception of the internet, the rise of electronic banking and online banking has been distributed by businesses to support the needs of the clients. Electronic banking or Mobile banking is the broad term that comprises channels such as automated teller machines (ATMs), online or Internet Banking via desktop computers, laptops and mobile phones (Wu, Hsia & Heng, 2006, as cited by Effah & Nartney,2016).

Mobile Banking chains various services that can be made via the internet. It contains account access and management, funds transfer, bills payment, checkbook request, & investment account access among others (Omotayo & Adebayo, 2015). These types of channels are self-serviced channels that can be done without visiting the branch physically. Electronic banking such as online banking and online banking has many helpful factors for the clients (Qureshi, Zafar, & Khan, 2008) and can be cost-efficient to banks as compared to processing transactions over-the-counter (Tarhini, Mgbemena, Trab, & Masa'deh, 2015). Favorable for the clients because of its benefits such as accessibility and convenience where one can access accounts whenever and whatever you are and cost-efficient for the bank because of dropping cost for the manpower and over-the-counter transaction cost. A study by Campbell & Frei(2010) examined the context of electronic banking to recognize the consequences of using self-services channels to upgrade customer communications with the firm. The study witnessed that the use of online banking is associated with higher customer retention rates and lower costs for the banks.

Local banks have launched mobile banking services in Myanmar nevertheless, the functions vary from one bank to another depending on the technologies is provided by their mobile network operators. However, acknowledging its energetic role in the payment system, Central bank of Myanmar has allowed local banks to carry out in mobile banking since December 2013. The mobile banking system can be encouraged with an increased usage of mobile phones.

## **1.1 Rationale of the Study**

The number of cellular mobile telephone services (CMTS) in the Myanmar has improved steadily since the year 2011 after the country has been opened from half a century of state lenders dominated the banking system. According to Ericsson Mobility Report, Mobile subscribers globally for the third quarter come to roughly 7.3 billion, in line with the global population. Meanwhile, mobile subscriptions in Southeast Asia and Oceania will cross the 1 billion mark before 2016 and hit about 1.3 billion by 2021. Myanmar is the third-fastest-growing mobile market in the world, after India and China, and has an impressive 80 percent smartphone usage rate. Myanmar has over 37.5 million of Mobile Phone connections. Myanmar population is over 51 million of Mobile Phone coverage. Myanmar population is around 53 million (GSMA, 2016). Therefore, banks have potential to reach larger population by applying mobile phones to provide financial services to people such as account balance inquiries, monitor check account transactions, pay utility bill payments, borrow and pay loans, fund transfer, receive and send remittances, and payroll services. It is imperative distribution channels through which bank customers can be altered from brick-and-mortar branches to cut operating expenses (Peevers et al.,2008).

Although the rapid rollout of mobile services and popularity of mobile money in the country, adoption of mobile banking has been slow significantly. Using of internet and online banking in Southeast Asia countries have been considered by online bankinger of scholars namely in Brunei (Seyal, 2011; Seyal and Rahim 2011); Indonesia (Susanto et al., 2012;2013); Singapore (Gerard and Cunningham, 2003; Jaruwachirathanakul and fink, 2005); and Vietnam (Wang and Pho, 2009; Pham et al., 2013). However, there are very few studies in Myanamr.

Banks without any physical presence practice this model in order to minimize their operating costs whereas they can create high profits. However, internet only banks encounter mistrust of customers who will feel the need for face-to-face contact when performing important banking transactions. The sector of Myanmar Banking industry is rising up now and the highest quality products competition and services have been revised around the country, but mainly in Yangon, the capital of Myanmar. Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace.

Through mobile banking, including internet banking users can make basic banking functions such as balance inquiry, fund transfer, Bill payment etc, without

having to call the banks in person. The services are wider with increasing rate as it seems less costly and time saving. From the bank's point of view, mobile banking minimizes the cost of handling transactions by dropping the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. Mobile banking does not hold responsibility transactions involving cash, and a customer needs to visit an ATM or bank branch for cash withdrawals or deposits.

## **1.2 Objectives of the Study**

This study intends to achieve the following objectives.

- (1) To investigate the determinants of behavioral intention of mobile banking users.
- (2) To analyze the relationship between user behavioral intention and its determinants.

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

This study attempts to investigate the determinants of behavioral intention of mobile banking users and to analyze the relationship between user behavioral intention and its determinants. The samples were taken from 170 users of mobile banking services in Kamayut Township. All of the respondents must be bank account holder in the private banks and were selected by using purposive sampling method. This study was used the regression research method. Primary data was collected from mobile banking users by using structured questionnaire. Questionnaire was the main data gathering instrument. Secondary data and information were retrieved from previous research paper, publication sources, reports, internal source, textbook, lecture notes and internet websites.

## **1.4 Organization of the Study**

This thesis is structured by around five different chapters. Chapter one starts with an introduction about mobile banking services, rational of the study, objective of the study, scope of the study, limitation of the study and organization of the study. Chapter two contains literature review of the Mobile Banking Adoption. Chapter three gives background of development of Myanmar banking sector and profile of selected private banks. Then chapter four contains analyses on determinants factors and relationship between user behavioral intentions and determinants. Finally, in chapter

five will present with conclusions and a set of suggestions derived from the findings and the conclusions of this work.

## **CHAPTER II**

### **THEORETICAL BACKGROUND OF THE STUDY**

In this Chapter, earlier literature regarding the factors influencing on using mobile banking services in Myanmar. This chapter describes the role of mobile banking, its history and mobile banking services provided for user, risks and challenges of mobile banking, latest mobile banking systems and customer adoption process of theoretical background.

#### **2.1 Evolution of Mobile Banking in Myanmar**

Mobile Banking means to the use of a smartphone or other cellular device to conduct online transactions. The services are provided by the bank and unlike internet banking, it uses the software, called an application. Mobile banking, distinct physical banks, is open for the entire 24 hours. It is dependent on the availability of an internet or data connection to the mobile device.

In an economy that discloses stark contrasts, the technology diffusion status is not astonishing. For the time being, Myanmar is a cash-based economy with over 90% of the people currently deficient access to formal financial services. According to the survey, Salaries are mostly received in cash, and amongst bank account holders only about 5% have the habit of using ATM card.

In this scenario, mobile banking denotes the flawless format to simply evade a outdated banking and financial set-up and offer digital financial services via smartphone technology. Myanmar Central Bank has regulated a series of regulations for mobile financial services, with the purpose of producing resourceful and secure mobile financial service set-up in the country.

Principles permit non-bank institutions to support mobile banking services. Customers can cash money in and out using mobile wallets, make domestic payments (for example, pay utilities bills, airtime top-ups etc.), and also make money transfers in Myanmar Kyat. International remittance businesses are not allowed as per the current rules.

To deliver mobile financial services, the service providers require a capital base of 3 Billion Kyat, (US\$2.57m) and pay a license fees of 300m Kyat (US\$256,000). Alliance between foreign telecommunications service providers, banks, non-bank

financial service institutions and global suppliers in the mobile financial services space are in the working. The capital requirements and stricter application process has confirmed that the market participation is currently only open to high-end organizations, with Telenor and Myanmar Posts and Telecommunications (MPT) believed to be the major players. Telenor and Yoma Bank has launched Wave Money, the first digital payment service in the nation.

Digital finance is possibly the most effective technique for attaining financial inclusion. Mobile technology can support financial service providers to penetrate deep within the population, especially the countryside areas and low-income segments, and provide access to much-needed viable financial credit. Customers would profit greatly since currently their only means of safeguarding credit are informal moneylenders and pawnshops. Using mobile banking they would have better access, lower costs, greater convenience and more secure services than traditional banking channels.

## **2.2 Advantages and Disadvantages of Using Mobile Banking**

In Mobile banking, the user can make shifting funds from own bank account to another bank account with a electronic devices just with the connection of the internet, from anywhere to everywhere. It is accessible for 24 hours and easy and appropriate mode for many Mobile users in the rural areas. Mobile Banking is supposed to be more secure and risk-free than online Internet Banking. With the help of Mobile, banking user can transfer funds, and pay bills, checking account balance, study recent transaction, block your ATM card, etc.

Mobile Banking is not work on all mobile phone. Sometimes, it needs user to install apps on your phone to use the Mobile Banking feature which is available on the high-end smartphone. If the customer does not have a smartphone than the use of Mobile Banking becomes limited. A transaction like moving of funds is only made on high-end phones. Regular use of Mobile Banking may lead to additional charges stipulated by the bank for providing the service. Mobile banking users are at highest risk of receiving fake SMS messages and scams. The loss of a mobile customer device often means that criminals can gain access to owner of mobile banking PIN and other sensitive information. Risks associated with mobile banking apart from this there are the usual risks associated with mobile banking that could include hacking. However, one requires to be careful and not share the password, just as user apply the same

principal to the desktop. It is supposed that bulk of the banking frauds take place over known relatives. Users need to be careful when sharing mobile banking password. In fact, security experts strongly recommend that users should have a screen lock for mobile whereby nobody would be able to access the same. Steps to progress safety when banking with mobile Make sure that users do not open a link through your email that is unknown. By doing so, users are making more vulnerable to mobile banking frauds. Users do not access mobile banking from a Wi-fi spot. This can be tremendously unsafe. If users have own data card that should be good enough. Another mobile banking safety tip that users must adopt is to ensure that do not use informal passwords.

### **2.3 Theory of Mobile Banking Adoption**

Literature confesses that abundant research on electronic banking has targeted on Internet banking (also called online banking), whereas study targeting on mobile banking is relatively little and receives underrated attention (Suorantia & Mattila 2004; Laukkanen & Pasanen 2008; Puschel. 2010). By using innovation diffusion theory (IDT) and the decomposed theory of planned behavior (DTPB), Brown et al. (2003) surveyed 162 respondents and discovered that perceived advantages, the opportunity to try out cell phone banking, the number of banking services required by respondents and perceived risk significantly influenced people to adopt mobile banking. Lee et al. (2003) performed eight interviews to gather transcripts from participants and concluded that relative advantages and compatibility were positive factors affecting the adoption of mobile banking, perceived risk was negative factor affecting the adoption of mobile banking, and consumer previous experience and self-efficacy generalized their beliefs (a negative or positive attitude) toward the adoption of mobile banking.

Suoranta and Mattila (2004) used the Bass model of diffusion to separate 1253 respondents into non-users, occasional users, and regular users according to their mobile banking usage experience and density. The Bass diffusion model trusts that possible adopters of an innovation are dominated by two sort of communication channels: mass media and interpersonal word-of-mouth, and the adoption rate can be articulated by S-shaped diffusion curves. Accordingly, Suoranta and Mattila (2004) empirically identified that interpersonal influence was over mass media in affecting users to use mobile banking. Contrasting to the study of Suoranta and Mattila (2004), Laforet and Li (2005) surveyed 128 respondents randomly selected in the city streets and indicated that awareness meaningfully nominated the using of online and mobile

banking, while consumer awareness was effectively enhanced through mass media rather than word-of-mouth communications. Given the fact that the reference group did not significantly affect the using of online and mobile banking, Laforet and Li (2005) thus contended that mass media was much more vital than interpersonal word-of-mouth in affecting people to use mobile banking.

By adding one trust-based build and two resource-based constructs, Luarn and Lin (2005) applied the extended technology acceptance model (TAM) to examine behavioral intention to adopt mobile banking. Researchers collected 180 respondents and witnessed that perceived self-efficacy, financial cost, credibility, easy-of-use and usefulness had positive perception on the behavioral intention to adopt mobile banking. Likewise, According to the parsimony and predictive power of TAM, Amin et al. (2008) used an extended TAM containing five constructs-perceived usefulness, perceived ease-of-use, perceived credibility, the amount of information, and normative pressure to investigate the using of mobile banking. Researchers collected 158 valid questionnaires in Malaysia and supported that perceived ease-of-use markedly influenced perceived usefulness and credibility, and human intentions to adopt mobile banking was nominated by perceived usefulness, perceived ease-of-use, perceived credibility, the amount of information, and normative pressure.

Yang (2009) used the Rasch measurement model and item response theory to survey 178 students from one of largest university in Taiwan. Yang observed that the acceleration of transactions and special reductions in transaction fees encouraged mobile banking adoption, while factors locating mobile banking adoption were safety and initial set-up fees. Similar to the finding of Yang (2009), Cruz et al. (2010) plotted 3585 online respondents in Brazil and provided that the cost of Internet access and service and perceived risk were top significant barriers for using mobile banking services.

M-banking was learnt by many academics based on Technology Acceptance Model (TAM). The authors used Technology Acceptance Model to explore the factors that influence the using of M-banking in Kenya. The study was about the M-banking software which called M-Kesho. Researchers applied the Confirmatory Factor Analysis to analyze the data collected data. Researchers also applied the and Structural Equation Modeling to validate their proposed research model. The results showed that the Perceived Ease of Use, Perceived Self Efficacy, Perceived Usefulness, and Perceived Credibility significantly influence the customers' attitude towards the usage of M-

banking. The authors studied the factors that influence the using of m-banking in Malaysia; authors used and extend the well-known Technology Acceptance Model (TAM). Proposed model of author was able to estimate the consumer intention to use m-banking. In this research researchers are not going to be used in the TAM model; TAM have no moderate factors which was discovered to be useful and handy in studying the factors affecting the intention toward mobile banking services adoption by customers.

Unified Theory of Acceptance and Use of Technology (UTAUT) is used to examine what are the factors that can impact users to use mobile banking. Researchers observed that the individual intention to adopt m-banking was influenced by the following factors; the social influence, performance expectancy, perceived financial cost, and perceived credibility. Researchers witnessed that the consumers' behavior was also influence by the facilitating conditions. Researchers also revealed that the gender moderated the effects of performance expectancy and perceived financial cost on behavioral intention.

The authors also found that the age also moderated the effects of facilitating conditions and perceived self-efficiency on the actual adoption. In another study conducted in Jordan, Khraim and colleagues identify the underlying factors that affect mobile banking adoption in Jordan. In their study, the factors that could affect mobile phone users in Jordan to adopt m-banking services were examined. The research findings disclosed that all of the following factors: compatibility, complexity, self-efficiency, risk, and relative advantage affect the mobile banking adoption. Compared to our study; those studies did not cover any technology related factors, also they did not cover the education and Experience as moderator factors.

Finally, unlike our study which studied the factors influencing mobile banking adoption by customers, Shammot conducted a study that was concerned with the opinion of commercial bank managers (not the customers) towards the advantages of using m-Banking in Jordan. The research results stated that Amman bank managers feel that using M-Banking will provide a high degree of comfort ability for their customers. The research discoveries that the managers with less than 8 years of experience feel that using M-Banking can introduce better monitoring & following for the reports related to work more than those managers with more than or equal to 15 years of experience.

**a) Unified Theory of Acceptance and Use of Technology (UTAUT)**

The study targeted on UTAUT framework proposed by Venkatesh. UTAUT and its extended theoretical frameworks are very popular and widely used to forecast behavioral intention for the using of technology. UTAUT model recommended that there have set of factors dominate the intention of the individual user acceptance. Those factors categorized into two kind of variables, the first one called external variable which include those factors that play a critical role in the user acceptance, include Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC). While the other category means the moderator variable or control variable which include age, gender, experience and Voluntariness of Use.

**Performance Expectancy**

The degree to which an individual presumes that using the system will support users to gain in job performance. User's expectation on the performance of technology leads intention to use the technology. Past research defines the evidence of influence by perceived performance on behavioral intention to use mobile banking. Venkatesh supported evidence that customer's intention to adopt technology depends on how they perceive the usefulness of the technology. Mobile banking is supposed to be a fast and portable media of financial transaction and therefore, user's perception of the delivery of those promises regulate the success of this Endeavour. Researchers in different geographical locations considering various domains observed that performance expectation is a vital factor to aid users shape their behavioral intentions. In UTAUT, performance expectance is driven from perceived usefulness (TAM/TAM2), relative advantage (IDT), extrinsic motivates (MM), job-fit (MPCU), and outcome expectations (SCT). In mobile banking studies, Brown et al. (2003) empirically proved that the greater the perceived relative advantage, the more likely mobile banking would be adopted. Similarly, Luarn and Lin (2005), Amin et al. (2008), Riquelme and Rios (2010), Sripalawat et al. (2011), and Dasgupta et al. (2011) recognized perceived usefulness as a crucial factor, while Yang (2009) and Puschel et al. (2010) concluded that relative advantages significantly influence individual intention to adopt mobile banking. Though focusing on the adoption of mobile technology instead of mobile banking, Park et al. (2007) decided that performance expectance significantly influenced people to adopt mobile technologies via 221 samples.

### **Effort Expectance**

The degree of ease associated with the use of the system. Experts in technology adoption models stressed that user's perception of ease of use determines the acceptance of the technology. Easy to use and requirement of less effort is one of the main reasons the users of Mobile Banking services using the technology. The services are supposed to make their life easy by helping a user-friendly interface and quick set payment setups. The concept has been surveyed in the past by many researchers. Drawing upon other competing models, Venkatesh et al. (2003) seized the concept of perceived ease-of-use (TAM/TAM2), complexity (MPCU), and easy-of-use (IDT) to define effort expectation as the degree of ease associated with technology use. Prior empirical studies of mobile banking adoption (Luarn & Li 2005; Amin et al. 2008; Puschel et al. 2010; Sripalawat et al. 2011; Dasgupta et al. 2011) supported perceived ease-of-use as a determinant impacting people to use mobile banking. Grounded in UTAUT, Park et al. (2007) and Lu et al. (2009) employed three constructs of performance expectancy, effort expectancy, and social influence to discover what influences individual intention to accept mobile technology and data service, respectively. Both studies supported that effort expectance significantly influenced human intention to use mobile technology or service.

### **Social Influence**

The degree to which an individual knows that important others believe users should use the new system. Venkatesh recognized the importance of social influence in the adoption of technology in work. Researchers applied various predecessor frameworks such as TRA, TAM2, TPB/DTPB, etc. To understand how social influence shape the buying intentions in customers. In his work Singh stated that decision to adopt mobile commerce services had influence from near and dear ones. Being a part of his surrounding human cannot ignore the social influence in day to day life. The intention to merger in or connects inspires people to use and innovation adoption studies support this fact. Venkatesh et al. (2003) used social influence to signify subjective norm in TRA, TAM2, TPB/DTPB, and C-TAM-TPB, social factors in MPCU, and image in IDT. In a survey of 158 customers from a major bank in Malaysia, Amin et al. (2008) empirically found that individual intention to use mobile banking was significantly affected by people surrounding them. Like a manner, Singh et al. (2010) discovered that individual decisions to adopt mobile commerce services were prejudiced by friends

and family members. Empirical evidence from Puschel et al. (2010), Riquelme and Rios (2010), and Sripalawat et al. (2011) showed that subject norm was a salient influence, while Laukkanen et al. (2007) and Dasgupta et al. (2011) observed that perceived image was a significant factor for people willingness to adopt mobile banking. The above might explains why Singh et al. (2010) argued that mobile commerce users are not just technology users, but also part of social network.

### **Facilitating Conditions**

By taking the concepts of perceived behavioral control (TPB/DTPB, C-TAM-TPB), facilitating conditions (MPCU), and compatibility such as work style (IDT), Venkatesh et al. (2003) defined facilitating conditions as the degree to which an individual believes that an organizational and technical infrastructure exists to support technology use. In UTAUT, Venkatesh et al. (2003) integrated 32 factors used in eight competing models into five constructs and empirically identified that behavioral intention and facilitating conditions were two direct determinants of adoption behavior. In the mobile banking adoption literature, Joshua and Koshy (2011) showed that the more convenient the access of respondents to computer and Internet, the more proficient their use of the computer and Internet, which results in a higher adoption rate of respondents consuming electronic banking.

### **Behavioral Intention**

Consistent to all models drawing from psychological theories, which argue that individual behavior is expectable and dominated by individual intention, UTAUT contended and showed behavioral intention to have significant influence on technology usage (Venkatesh et al. 2003; Venkatesh & Zhang 2010). Given that the ultimate goal of businesses (i.e., banks) is to hunt consumers to use their services rather than the intention to adopt services, extensive research has examined the relation between behavioral intention and actual use. However, only one work in extant mobile banking studies has occupied this relation into the research structure (Sripalawat et al. 2011), which encourages a need to investigate the relationship between behavioral intention and actual behavior in the mobile banking setting.

## Moderators

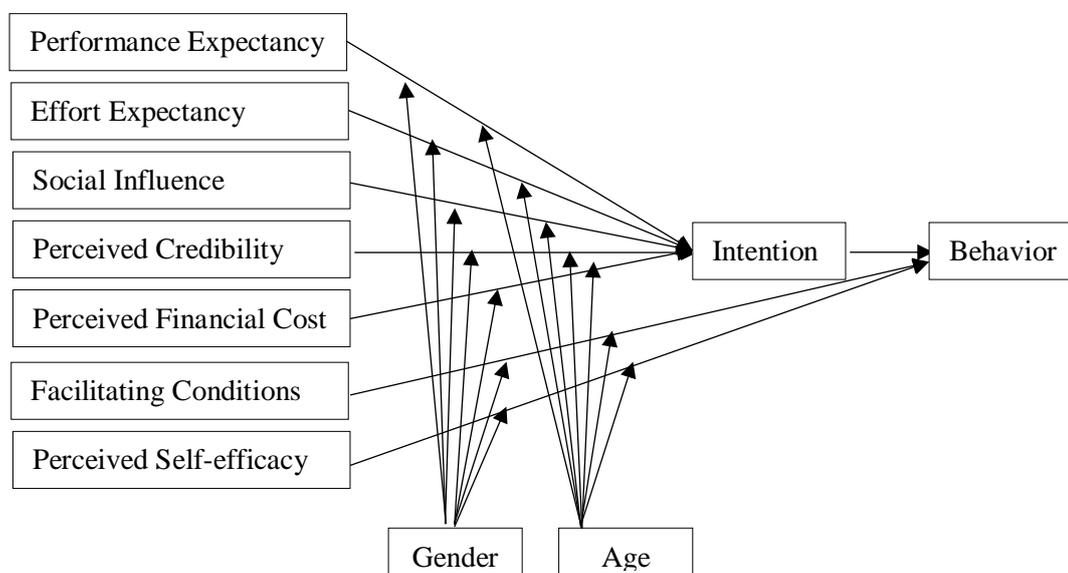
This include age, gender, experience and Voluntariness of Use, where Voluntariness of Use is the extent to which potential adopters notice the adoption decision to be non-mandatory.

## 2.4 Previous Research Studies

There are many research papers of mobile banking adoption using different adoption theories. Among them, three research papers are extracted for this study.

Yu, (2012) studied the factors affecting individuals to adopt mobile banking in Taiwan. In that study, performance expectancy, effort expectancy, social influence, perceived credibility, perceived financial cost, facilitating conditions, perceived financial cost were used as the independent variables and behavioral intention was used as the dependent variable. The finding is that although the rapid increase of many wireless commercial services, using mobile banking services remains very small rather than the entire banking transactions. Given that the widespread diffusion of cell phones does not reflect the adoption of mobile banking, there is a require to explore what factors influence individuals to adopt mobile banking. The proposed research structure is shown in Figure (2.1).

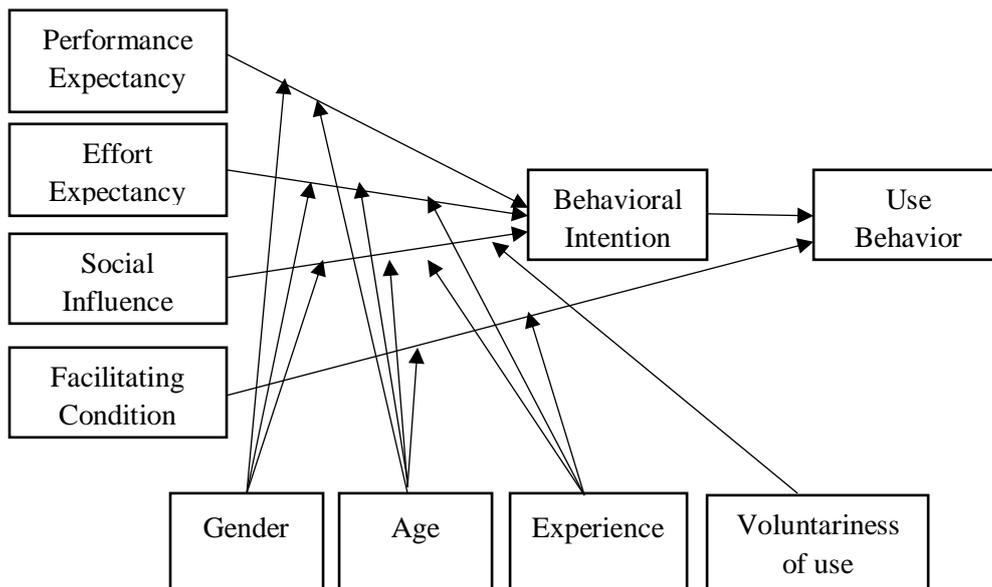
**Figure (2.1) The Proposed Research Structure**



Source: Yu, (2012)

Nassar (2012) studied the Factors Affecting the Adoption of Mobile Banking in Jordan. In that study, performance expectancy, effort expectancy, social influence, security factor, design issues and facilitating conditions were used as independent variables and behavioral intention was used as a dependent variable. The finding is that the most significant factor on the intention to adopt mobile banking services is Security. The results show that the Facilitating Conditions is the most powerful effect in the actual use of mobile banking services. UTAUT Model is shown in figure (2.2).

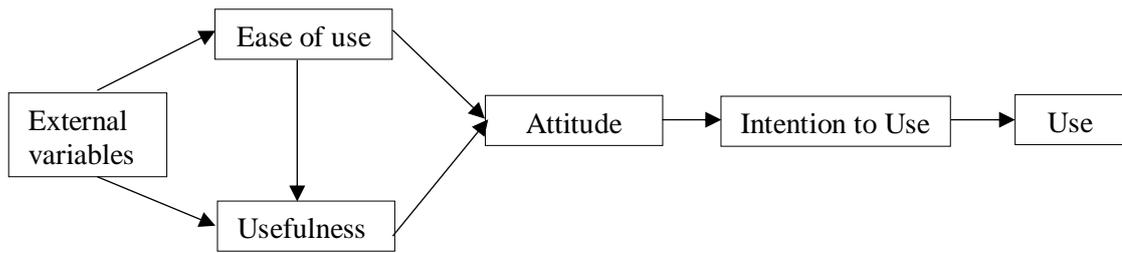
**Figure (2.2) UTAUT Model**



Source: Venkatesh et al., (2003)

Franciso and Bidarra (2013) studied the analysis and modeling of the determinants of mobile banking acceptance Spain. In that study, external variable, usefulness, ease of use, attitude were used as the independent variables and intention to use was used as the dependent variable. The finding is that user's attitude toward the use directly influences positive and strongly, the intention to use. If a customer has a favorable attitude toward using mobile banking applications, there will be a high potential for user to make a coherent and consistent behavior toward the acceptance and use of this application. TAM Model is shown in figure (2.3).

**Figure (2.3) TAM Model**



Source: Davis et al., (1989)

According to objectives and literature reviews above, the study used UTAUT model in order to examine determinant factors of using mobile banking and moderating factors. UTAUT Model is shown in figure 2.2.

This study based on UTAUT framework proposed by Venkatesh. This theoretical model is globally used to forecast behavioral intention of using mobile banking. This model indicates that there have many factors which can influence the intention of the mobile banking user. Basically, factors are classified into two group. In the first group, factors which are vital role in the user adoption, include Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC). In the second group, factors which moderate the user adoption, include gender, age, experience, voluntariness of use.

## **Chapter III**

### **USER BEHAVIORAL INTENTION TO ADOPT MOBILE BANKING**

This chapter is divided into two parts. The first part presents Myanmar banking sector development. The second part presents profiles of selected private banks.

#### **3.1 Banking Sector Development of Myanmar**

Since the economic revolutions started by government after the 2010 election, the banking industry has been in the forefront of the sweeping changes in Myanmar. In the public sector, the past year has observed the establishment of independent Central Bank with more power and authority vested in its proceedings than ever before. In the private sector, we saw the rise of local private banks which now total 22 in number.

Myanmar's banking sector, under-developed and underutilized after years of mismanagement, has a lot of room for development and possibilities. According to a 2013 report by the International Finance Corporation (IFC), the percentage of the population (about 60 million) with access to formal banking system is less than 5%. In 2013, there were only 863 bank branches in total in the country-compared with 7855 in Thailand, the bordering country with a similar population size. Furthermore, as multi-national corporations (MNC's) initiate to roll into Myanmar, they are expecting the banking sector to perform up to the international standards.

Encouraged by the deregulations being assumed and the size of the potential market with one eye on the looming foundation and operation of the Myanmar Stock and Securities Exchange in October 2015, local banks have been trying to come up with innovative explanations to continue competitive. One of the latest services presently developing in Myanmar's banking industry also the most often demanded by the incoming MNC's for their financial management is online banking.

Online banking, including internet banking and mobile banking, lets bank users to manage their accounts on computers, tablets, or mobile phones via the internet. With the support of today's IT technology, it offers users the option of evading the time-consuming, paper-based aspects of traditional banking. Through online banking, users can achieve basic banking functions such as balance inquiry, fund transfer, bill payment, etc., without having to visit the banks in person. By permitting clients to manage their assets more speedily and resourcefully at any place and any time, it offers a much more appropriate way for customers to deal with banks.

From the bank's point of view, online banking aids bankers to cut operation expenditures by dropping costly paper handling and teller communications in an increasingly competitive banking environment. By saving customers from having to visit the banks in person, it also decreases gathering in banks and empowers the banks to run with fewer staff. Online banking is currently one of the services pursued enthusiastically by the banking industry in Myanmar. It is seen as a influential value-added service to attract and retain new and existing customers.

Banking experts believe that online banking will eventually undertake an important role in the expansion and progression of businesses in Myanmar. According to Colin Thura Maung, Assistant General Manager of the Strategic Planning Department of Ayeyarwady (AYA) bank, the early stages of online banking features in Myanmar will be similar to the traditional brick and mortar banking services such as balance inquiry, payment, funds transfer, and statement. Finally, as it develops, online banking will become an intermediate of exchange of funds, provide trade parties with chances to use debit or credit transactions, and aid introduce e-commerce to businesses in Myanmar.

Since 2012, the majority of private banks in Myanmar are already providing some of the online banking services such as ATMs, point of sale (POS), and debit cards. According to Thet Lwin Shwe, Chief Operating Officer of Asia Green Development (AGD) bank. AGD Bank has been offering online payment services such as telephone bill payment, electricity bill payment, internet bill payment, online remittance, and tele-banking since a few years ago. At the time of writing this article, there are 12 local banks that have their own ATMs and 7 who plan to do so in the near future. According to Zaw Lin Htut, Deputy MD and the head of the Wholesale and Card Division of Kanbawaza (KBZ) Bank, there are around 600,000 customers in Myanmar using ATM cards and about 200,000 of them are KBZ card holders. Of more than 500 ATMs machine in Myanmar, KBZ has over 140 ATMs with the majority focused in Yangon.

In Order to enable inter-bank fund transfer, Myanmar Payment Union (MPU), known as National Payment Network and Switch, was established in the same year jointly by the Central Bank of Myanmar and 19 private banks, with the technical assistant from Myanmar Information Technology (MIT). Now, in addition to the local banks, global payment networks such as VISA, MasterCard, JCP and CUP are vigorously competing in the banking sector in Myanmar.

The latest entry to the online banking arena is the launch of mobile money and transfers following the Mobile Banking Directive by the Central Bank of Myanmar in December 2013. As the number of Smartphone users in the country increases, Myanmar banks are now trying to take advantage of this trend by offering mobile banking service to their customers. The Mobile Banking Directive limits the amount per transfer to 500,000 Kyats (about US\$500) and permits up to three transactions per day. Nevertheless, the total withdrawal amount in a day cannot exceed 1,000,000 Kyats (about US\$1,000). Currently CB bank and Innwa Bank are offering online money transfer services to their account holders. Leading banks such as AGD bank, Kanbawza Bank, and CB Bank have also settled their own mobile banking applications. The two new mobile telecom operators-Ooredoo and Telenor-also have plans to offer mobile banking services in conjunction with financial institutions once their operations kick off.

Myanmar, online banking commences in 2012. This Service was launched to customers through bank. In Myanmar AYA, CB and KBZ Banks are leading private banks for online banking. They have thrown the internet banking/mobile banking channel to the bank customer since 2012. However, the popularity of the usage of mobile banking launched on 2015. Customer adoption of mobile banking is knowingly growing since 2014 onward.

Mobile Banking Service is an electronic service offered by bank to permit the customers to make transactions etc, over the internet-through a mobile's application. There are a lot of advancement of using the mobile banking. With the mobile banking, customer can achieve banking transactions from the comfort of home. Mobile banking gives a comprehensive range of online transactions and information that can assist customer better manage own finances. Customers with bank account number register for and use mobile banking. All account with the same ID can be connected with the mobile banking. Bank customers can register for mobile banking at bank branches.

Mobile Banking permits bank users to handle their accounts on tablets or mobile phone via the internet. One of the major challenges to the development of the online banking system is the lack of awareness among the population. Myanmar has always been a cash economy for very long, so most of the bank users do not comprehend the profits and the cost and time saved by swapping to use online banking. Notwithstanding there are quite a few customers who already have habit of using online banking abroad,

the overall customer attitude requires to change before online banking can become truly popular.

Most importantly, the critical issue barricading the development of online banking in Myanmar is its inadequate infrastructure, especially in telecommunications and electricity. Currently, banks have to rely on IP star satellite (C band), ADSL, and 3G (GPRS) connections for ATM transactions. However, the internet connection has been less than reasonable. Online banking also requires fixed electricity supply to run effectively. In order to be successful online banking, perennial infrastructure matters such as inadequate internet bandwidth, jammed mobile networks, and frequent power outages need to be addressed.

Another challenge is the safety of mobile banking financial transactions. Presently, the Myanmar government has yet to permit have laws regarding mobile banking. As a result, users cannot put down complete trust in mobile banking citing card issues and the lack of rules and regulations on card fraud and security breaches. “Without regulatory framework, trust, security and customer and business protection, the project of mobile banking could not be fruitful in Myanmar,” Colin stressed.

### **3.2 Profiles of Selected Private Banks**

AYA bank established its banking license from the Central Bank of Myanmar on 2 July 2010 and run full-fledged operations on 11 August 2010. The first branch of AYA Bank was opened at Naypitaw. Paid up capital of the bank is Kyats 20 Billion (USD 25 million). The bank is authorized to operate as an investment or development bank for the domestic market and the permitted banking activities include;

- Borrowing or raising of money
- Loaning or advancing of money either secured or unsecured
- In receipt of securities or valued for safekeeping
- Gathering and transmitting money and securities
- Providing International Banking Services including international remittance, Payment and trade services.

AYA Bank is upgrading its international financial services depending on the state of economic development of the country. It subscribes to global standards in governance, risk and compliance in its management and operations. The bank has managed talents with both domestic and international exposures and has financed

significantly in training and technology so as to ensure long term sustainable growth for the bank and for the community it serves.

AYA Bank is expanding its branches network throughout Myanmar. It will continue to emphasis on building relationship with customers, providing excellent customer service, and leverage on technology as the enabler to boost its customer base. At the same time, the bank purposes is to reinforce its governance, risk and compliance structure as a measure to guarantee balance and sustain growth.

AYA bank offers 26 products to its customer across the nation. Saving account and fixed account are designed for customer who would like to save money and to earn interest. Current account is designed for customer who would like to draw a cheque and make cashless payment. Payroll management service is designed for firms and group of companies which would like to make salary payment by cards. Cash collection service is designed for Multinational company which has outlet across the nation. Overdraft service and demand loan service are designed for customer who would like to borrow capital and make business extension. Credit card is designed for middle-level class who would like to boost the purchasing-power.

Safe Deposit Boxes service is designed for customer who would like to save precious stone, jade, bill of exchange, movable properties, documents. Bank Guarantees service is designed for customer who would like to make tender for the business purpose with government. Domestic telegraphic transfer is designed for customer who would like to make cash movement across the nation. Payment order service is designed for customer who would like to make secure payment with third party.

Automatic teller machine service is designed for customer who would like to access cash (24/7). Internet Banking service and Mobile Banking service are designed for customer who would like to access banking service anywhere at (24/7). E-commerce service is designed for customer who would like to make online shopping payment.

Cross-border remittance service is designed for customer who would like to cash movement, import payment, export payment across the globe. Foreign currency account is designed for customer who would like to save foreign currencies against exchange fluctuation. Foreign currency exchange service is designed for customer would like to sell and buy foreign currencies. Letter of Credit service is designed for customer would like to make business trade with foreign countries.

Co-operative Bank Ltd. (CB Bank Ltd) was merged in 21<sup>st</sup> August 1992 through the rule of Company Act and Myanmar Financial Institution laws. CB bank Ltd is operating as a 100% privately owned bank under the license of the Central Bank of Myanmar. In 2004, Co-operative Bank Ltd changed its legal business structure into Public Company Under the Myanmar Companies Act. Doing Merger and Acquisition process, the Co-operative bank, the Co-operative farmer bank and the Co-operative promoter bank become the under one umbrella of Co-operative bank, (Mostly known as CB Bank).

At 2011, Myanmar economy is re-opened and international banking services are allowed to offer the private commercial banks. CB bank has been the forerunner in the local banking area for several new projects, such as international cards services, mobile banking, internet banking and many types of international banking services. Currently, CB Bank expands its branch networks totally 200 around Myanmar. It seems their primary strategy is branchless banking, digital banking in Myanmar.

The management do parallel processing expand branch network, as well as upgrade international standard technology. They are the market leader in advance technology usage in banking systems. CB Bank introduces the debit Master card, Visa Card, China Union Pay card and JCB card at late 2012, and early 2013. It displays that Myanmar Banking Sector first step into the cashless society.

Myanmar Banking sector confronted with the severe crisis on 2003 and the Central Bank of Myanmar criticize the new branch opening and providing new banking services. Therefore, all the commercial banks can do the traditional banking services such as accepting the deposits and lending to the business and remitting the money in the branch network within Myanmar.

KBZ bank was established as a private bank on 1<sup>st</sup> July 1994 with the Permission of central bank of Myanmar and the financial institution of Myanmar Bank law in Taungyi, Southern Shan State. The meaning of Kanbawza presents traditional name of the Shan state, an ethnic minority state of the Republic of the Union of Myanmar. Initially, the bank supplied the local population of Taungyi and opened the first branch of KBZ Bank. Nowadays, it is the biggest and leading bank in Myanmar. In late 1999, The chairman of KBZ bank is U Aung Ko Win. During his administration, he preformed and managed the bank into the largest bank in Myanmar in term of branches, deposit, transactions and employee.

KBZ bank is one the diversified business of KBZ Group of Companies. In April 2000, KBZ headquarter was relocated to Yangon, the economic city of Myanmar. Head office of KBZ Bank is located in No.615/1, Pyay Road, Kamayut Township, Yangon. Starting with an initial capital of MMK (477)million in 1999. KBZ bank has expanded the capital of MMK (69)billion in year 2012. Maintaining itself as a leading bank with the largest network of branches and the biggest customer base with on third of the market share, KBZ has expanded network up to over 500 branches as of October,2017. Under the instruction of central bank of Myanmar, over 500 branches have been opened across the country with nearly 1200 ATMs and over 200 currency exchange counters and over 60 mini branches network has been expanded all over the country in 2017. KBZ bank has over 17,000 employees as of October,2017. Not only nationalities but also expatriate are employed in workforce of KBZ Bank.

KBZ bank, a subsidiary organization of Kanbawza Group of Companies, embrace the core values including honesty, enthusiasm, mutual trust and respect, integrity, leadership and dedication, which set by chairman for the development of the bank in the interest of the national economy. Motto of KBZ bank is “Strength of Myanmar”.

### **3.3 Mobile Banking Services Provided by Private Banks in Myanmar**

There are 4 local stated owned banks, 10 semi government banks and 14 private banks in Myanmar as of 2015 Private Banks are dynamically working toward to more to technology and modern banking. Among 14 private banks in Myanmar. I would like to select AYA, CB and KBZ to do analysis and categorize mobile banking services. These 3 banks are top 3 private banks in Myanmar in term of Deposit size and branch network. The following features are general mobile banking services provided by private banks in Myanmar.

- 1.Funds transfer
- 2.Own account transfer
- 3.Internal account transfer
- 4.Bills payment (YCDC bill, YESC bill, Credit card bill, etc.)
- 5.Phone bill top-up

6. Check the account/balance

7. ATM locations

8. Daily foreign exchange Rate

Unlike international banks, Myanmar local banks permit above described services to customer. However, different banks provide slightly different services to their customers. Gradually, country infrastructures are developed and upgraded from time to time. Subsequently, banks are supposed to invest in information System and develop the better mobile banking services to provide their customer and develop aggressive marketing strategies for mobile banking users.

## **Chapter IV**

### **ANALYSIS ON DETERMINING FACTORS AND RELATIONSHIP BETWEEN USER BEHAVIORAL INTENTION AND ITS DETERMINANTS ON USING MOBILE BANKING**

This chapter is concerned with the analysis on motivation factors to use mobile banking. There are seven sections in this chapter. The first one is research design, the following are demographic profile of respondents, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Behavioral intention. The next sessions are relationship between Performance Expectancy, Effort Expectancy, Social Influence and Behavioral intention.

#### **4.1 Research Design**

The survey is used to determine the determinants factors of using mobile banking and analyzing relationship between determinants factors and behavioral intention of using mobile banking. The primary data were collected by using the structuring questionnaire that composed two parts. The first part measures the demographics which include gender, age, marital status, education level, income level and type of employment. The second part measures both the independent and dependent variable which include Performance Expectancy, Effort Expectancy, Social Influence, Facilitation Conditions and behavioral intention with 5-point Likert scale questions (1 = strongly disagree/ 5= strongly agree). All measurement designs were adapted according to the relative literatures.

In this study, total of 170 respondents were randomly selected. Statistical Package for Social Science (SPSS) program was used to descriptive and analyze independent and dependent variables. Multiple Regression are used to specify the significant levels.

#### **4.2 Profile of Respondents**

Profile of respondents consists of six characteristics such as gender, marital status, age level, education level, income level and type of employment. These are presented and analyzed below.

**a) Gender**

In this study, gender can be classified into two groups, male and female. Table 4.1 describe the gender of the 170 respondents.

**Table (4.1) Number of Respondents by Gender**

<b>Gender</b>	<b>Number of Respondents</b>	<b>Percent</b>
Male	78	45.9%
Female	92	54.1%
<b>Total</b>	<b>170</b>	<b>100%</b>

Source: Survey data, 2019

As shown in Table (4.1), The majority of the total respondents are 92 female respondents out of 170 and it is accounted for 54.1% whereas there are 78 male respondents, which made 45.9%. So, based on the sample data, it can say that the gender of the majority respondents are female.

**b) Age of the Respondents**

In this Study, age is divided into five groups, consist of below 20 years, 21-30 years, 31-40 years, 41-50 and above 51 years.

**Table (4.2) Number of Respondents by Age**

<b>Age</b>	<b>Number of Respondents</b>	<b>Percent</b>
Below 20	33	19.4%
21-30	68	40.0%
31-40	43	25.3%
41-50	24	14.1%
Above 51	2	1.2%
<b>Total</b>	<b>170</b>	<b>100%</b>

Source: Survey data, 2019

As shown in Table (4.2), 68 respondents in the 21 to 30 age of the category represent 40.0% which is the largest group of all. 43 respondents were 31-40 years representing 25.3% and 33 respondents were below 20 years representing 19.4% and 24 respondents were 41-50 years representing 14.1%. The age of the category of above 51 years is only 2 respondents representing 1.2% respectively. So, based on the sample data, it can say that the age of the majority respondents are 21-30 years.

**c) Level of Education**

The educational background of the respondents is classified into five group, High School level, Graduate level, Master level and other.

**Table (4.3) Number of Respondents by Educational Background**

<b>Education</b>	<b>Number of Respondents</b>	<b>Percent</b>
High School	1	0.6%
University Student	73	42.9%
Graduate	70	41.2%
Master	5	2.9%
Other	21	12.4%
<b>Total</b>	<b>170</b>	<b>100%</b>

Source: Survey data, 2019

As shown in Table (4.3), 73 respondents are university student holders which is the largest segment of the respondents at 42.9%. 70 respondents representing 41.2% possess Bachelor degree, 21 respondents representing 12.4% are other qualification, 5 respondents are master degree holders representing 2.9% and 1 respondent is high school level representing 0.6% respectively. So, based on the sample data, it can say that the educational background of the majority respondents are university students.

**d) Marital Status of Respondents**

Marital status is classified into three group: Married, Single and Divorce.

**Table (4.4) Marital Status of Respondents**

<b>Marital Status</b>	<b>Number of Respondents</b>	<b>Percent</b>
Single	109	64.1%
Married	61	35.9%
<b>Total</b>	<b>170</b>	<b>100%</b>

Source: Survey data, 2019

As shown in Table (4.4), 109 respondents are single representing 64.1% and 61 respondents are married representing 35.9%. So, based on the sample data, it can say that the marital status of the majority respondents are single.

**e) Income level of respondents**

The income level of the respondents is classified into five group, less than 200000, 200001-500000, 500001-800000, 800001-1100000 and above 1100000 kyats.

**Table (4.5) Income level of Respondents**

<b>Income level (Kyats)</b>	<b>Number of Respondents</b>	<b>Percent</b>
Less than 200000	36	21.2%
200001-500000	60	35.3%
500001-800000	50	29.4%
800001-1100000	14	8.2%
Above 1100000	10	5.9%
<b>Total</b>	<b>170</b>	<b>100%</b>

Source: Survey data, 2019

As shown in Table (4.5), 60 respondents are income level between 200,001-500,000 which is the largest segment of the respondents at 35.3%. 50 respondents are income level 500001-800000 representing 29.4%, 36 respondents representing 21.2%

are income level less than 200000, 14 respondents are income level 800001-1100000 representing 8.2% and 10 respondents is income level above 1100000 representing 5.9% respectively. So, based on the sample data, it can say that the income level Of the majority respondents are between 200001-500000.

**f) Voluntariness of Use**

This variable was to investigate the extent of user perception on the voluntariness of use. The following Table (4.6) describe the mean value and standard deviation for statement concerning voluntariness of use.

**Table (4.6) Voluntariness of Use**

<b>Sr</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	My use of mobile banking is entirely voluntary.	3.81	0.784
<b>Overall Mean</b>		<b>3.81</b>	

Source: Survey Data (2019)

According to Table (4.6), the average mean of voluntariness of use is 3.81. As a result, the level of agreement is satisfactory for voluntariness of use. Survey data showed that using of mobile banking is entirely voluntary is (mean value=3.81). As a result, the level of agreement is satisfactory for using of mobile banking is entirely voluntary.

**4.3 Behavior Intention of using Mobile Banking**

In this study, the respondents were requested to examine influencing factor on using mobile banking. The data collected were summarized into strongly disagree, disagree, neutral, agree, and strongly agree based on a five-point Likert scale. Thus, each factor has been described in term of the mean vale and the standard deviation of each statement.

Standard Deviation (SD) is applied to compute the amount of discrepancy or dispersion of a set of data values. A low standard deviation displays that the data points tend to be close to the mean (so called the expected value) of the set, while high standard deviation displays that the data points are spread out over a wide range of

values (Bland and Altman, 1996). The standard deviation is generally applied to measure confidence in statistical conclusions.

According to Best (1977), the values of mean in five-point Likert scale items were represented as follows:

The mean score among 1.00-1.80 designates lowest.

The mean score among 1.81-2.61 designates low.

The mean score among 2.62-3.41 designates moderate/average

The mean score among 3.42-4.21 designates good/high

The mean score among 4.22-5.00 designates very good/highest

**a) Performance Expectancy**

This variable was to investigate the extent of user perception on the performance expectancy. The following Table (4.7) describe the mean value and standard deviation for each statement concerning performance expectancy.

**Table (4.7) Performance Expectancy**

<b>S r</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	I expect using mobile banking would improve my performance.	3.81	0.784
2	I expect using mobile banking would save my time	3.74	0.801
3	I would use mobile banking anyplace.	4.06	0.871
4	I would find mobile banking useful.	4.20	0.806
<b>Overall Mean</b>		<b>3.95</b>	

Source: Survey Data (2019)

According to Table (4.7), the average mean of performance expectancy is 3.95. As result, the level of agreement is high for performance expectancy. Survey data showed that users find mobile banking useful is (mean value=4.20). As a result, the level of agreement is high for mobile banking is useful. Users perceive that mobile banking can use anyplace is (mean value=4.06). As result, the level of agreement is high for mobile banking can be used anyplace by users. Users perceive that using mobile banking would improve my performance is (mean value=3.81). As a result, the

level of agreement is high for mobile banking improve user performance. and Users perceive that using mobile banking would save time is (mean value=3.74). As a result, the level of agreement is high for mobile banking save my time.

**b) Effort Expectancy**

This variable was to investigate the extent of user perception on the effort expectancy. The following Table (4.8) describe the mean value and standard deviation for each statement concerning effort expectancy.

**Table (4.8) Effort Expectancy**

<b>Sr</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	I expect learning how to use mobile banking is easy for me.	3.97	0.643
2	I expect becoming skillful at using mobile banking is easy for me.	4.00	0.788
3	I expect interaction with mobile banking is easy for me.	3.97	0.929
4	I would find mobile banking is easy to use.	4.00	0.788
<b>Overall Mean</b>		<b>3.99</b>	

Source: Survey Data (2019)

According to Table (4.8), the average mean of effort expectancy is 3.99. As result, the level of agreement is high for effort expectancy. Survey data showed that users expect becoming skillful at using mobile banking is easy for mobile banking users is (mean value=4.00). As a result, the level of agreement is high for becoming skillful at using mobile banking is easy for users. Users would find mobile banking is easy to use is (mean value=4.00). As a result, the level of agreement is high for users would find mobile banking is easy to use. Users expect learning how to use mobile banking is easy for mobile banking user is (mean value=3.97). As a result, the level of agreement is high for users expect learning how to use mobile banking is easy. Users expect interaction with mobile banking is easy for mobile banking user is (mean value=3.97). As a result, the level of agreement is high for users expect interaction with mobile banking is easy.

**c) Social Influence**

This variable was to investigate the extent of user perception on social influence. The following Table (4.9) describe the mean value and standard deviation for each statement concerning social influence.

**Table (4.9) Social Influence**

<b>Sr</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	People who are important to me think I should use mobile banking.	3.95	0.760
2	People who influence my behavior think that I should use mobile banking.	3.69	0.784
3	Most people surrounding me use mobile banking.	3.76	0.830
<b>Overall Mean</b>		<b>3.80</b>	

Source: Survey Data (2019)

According to Table (4.9), the average mean of social influence is 3.80. As result, the level of agreement is high for social influence. Survey data showed that people who are important to users attract to use mobile banking is (mean value=3.95). As a result, the level of agreement is high for people who are important to users attract to use mobile banking. Most people surrounding users use mobile banking is (mean value=3.76). As result, the level of agreement is high for most people surrounding users use mobile banking. People who influence user behavior think that user should use mobile banking is (mean value=3.69). As a result, the level of agreement is high for people who influence user's behavior think that user should use mobile banking.

**d) Facilitating Conditions**

This variable was to investigate the extent of user perception on facilitating conditions. The following Table (4.10) describe the mean value and standard deviation for each statement concerning facilitating conditions.

**Table (4.10) Facilitating Conditions**

<b>Sr</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	I have necessary resources to use mobile banking.	3.76	0.837
2	I have necessary knowledge to use mobile Banking.	3.87	0.810
3	I could get help from others when I have difficulties using the mobile Banking.	3.9	0.765
<b>Overall Mean</b>		<b>3.87</b>	

Source: Survey Data (2019)

According to Table (4.10), the average mean of facilitating conditions is 3.87. As result, the level of agreement is high for facilitating conditions. Survey data showed that users could get help from others when encounter with difficulties using the mobile Banking is (mean value=3.90). As a result, the level of agreement is high for users could get help from others when encounter with difficulties using the mobile Banking. User have necessary knowledge to use mobile Banking is (mean value=3.87). As result, the level of agreement is high for users have necessary knowledge to use mobile Banking. Users have necessary resources to use mobile banking. is (mean value=3.76). As a result, the level of agreement is high for users have necessary resources to use mobile banking.

**e) Behavioral Intention**

This variable was to investigate the extent of user perception on the behavioral intention. The following Table (4.11) describe the mean value and standard deviation for each statement concerning behavioral intention.

**Table (4.11) Behavioral Intention**

<b>Sr</b>	<b>Descriptions</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	I intend to use mobile banking soon.	3.87	0.818
2	I predict I would use mobile banking soon.	3.70	0.712
3	I plan to use mobile banking soon.	4.10	0.676
<b>Overall Mean</b>		<b>3.89</b>	

Source: Survey Data (2019)

According to Table (4.11), the average mean of behavioral intention is 3.89. As result, the level of agreement is high for behavioral intention. Survey data showed that users plan to use mobile banking soon is (mean value=4.10). As a result, the level of agreement is high for users plan to use mobile banking soon. Users intend to use mobile banking soon is (mean value=3.87). As result, the level of agreement is high for users intend to use mobile banking soon. Users predict users would use mobile banking soon is (mean value=3.70). As a result, the level of agreement is high for users predict that user would use mobile banking soon.

**f) Analysis on Relationship between Performance Expectancy, Effort Expectancy, Social Influence, Behavioral Intention and Moderators**

In this study, the three independent variable which are performance expectancy, effort expectancy, social influence and behavioral intention and dependent variable moderators of mobile banking have been surveyed. The correlations between the independent variables and dependent variable were tested by using Pearson's Correlation analysis. The results of the correlations at 95% confident interval level of the measured variables are shown in Table (4.12)

**Table (4.12) Correlation between Performance Expectancy, Effort Expectancy, Social Influence, Behavioral Intention and Moderators**

<b>Sr No.</b>	<b>Description</b>	<b>Performance Expectancy (P value)</b>	<b>Effort Expectancy (P value)</b>	<b>Social Influence (P value)</b>	<b>Behavioral Intention (P value)</b>
1.	Gender	.278	.529	.625	.619
2.	Age	.323	.395	.101	.353
3.	Experience	-	.141	.076	.845
4.	Voluntariness of Use	-	-	.556	.512

Correlation is significant at the 0.05 level (2-tail).

\*\* . Correlation is significant at the 0.01 level (2-tail).

Dependent variable: Moderators

Source: Survey Data (2019).

According to the result, the P value are greater than 0.05. Therefore, there is no relationship between performance expectancy, effort expectancy, social influence, behavioral intention and moderators.

**g) Analysis on Relationship between Performance Expectancy, Effort Expectancy, Social Influence and Behavioral Intention**

In this study, the three independent variable which are performance expectancy, effort expectancy and social influence and dependent variable that behavioral intention of mobile banking have been surveyed. The correlations between the independent variables and dependent variable were tested by using Pearson’s Correlation analysis. Correlation is statistical technique that can show whether and how strongly pairs of variables are related. Correlation coefficient ranges from -1.0 to +1.0. If the value is positive, its means that one variable gets larger, the other gets larger. If the value is negative, its means that as one variable gets larger, the other gets smaller. If the value is 0, there is no correlation between variables. The results of the correlations at 95% confident interval level of the measured variables are shown in Table (4.13)

**Table (4.13) Correlation between Performance Expectancy, Effort Expectancy, Social Influence and Behavioral Intention**

<b>Sr No.</b>	<b>Description</b>	<b>Pearson's Correlation Coefficient</b>	<b>P value</b>
1.	Performance Expectancy	0.171*	0.026
2.	Effort Expectancy	0.216**	0.005
3.	Social Influence	0.193*	0.012

Correlation is significant at the 0.05 level (2-tail).

\*\* . Correlation is significant at the 0.01 level (2-tail).

Dependent variable: Behavioral Intention on mobile banking.

Source: Survey Data (2019).

According to the result, there is a positive correlation with the behavioral intention at 0.05 level (2-tail) and 0.01 level (2-tail). The result show that effort expectancy has positive correlation with behavioral intention at correlation coefficient of ( $r=0.216$ ,  $p<0.01$ ) and then the performance expectancy and social influence have also positive relationship with behavioral intention at correlation coefficient of ( $r=0.171$ ,  $p<0.05$ ) and ( $r=0.193$ ,  $p<0.05$ ).

#### **h) Effect of Performance Expectancy, Effort Expectancy, Social Influence on Behavioral Intention**

The multiple regression analysis was conducted to test the proposed objective of the relationship between Performance Expectancy, Effort Expectancy, Social Influence as independent variable and Behavioral Intention as dependent variable. The multiple regression result is shown in Table (4.14)

**Table (4.14) Effects of Performance Expectancy, Effort Expectancy, Social Influence on Behavioral Intention**

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	VIF
	B	Std. Error	Beta			
Constant	2.380**	0.380		6.267	0.000	
Performance Expectancy	0.146*	0.063	0.172	2.328	0.021	1.000
Effort Expectancy	0.129*	0.064	0.163	2.010	0.046	1.206
Social Influence	0.110*	0.071	0.127	1.563	0.120	1.206
R square	0.089					
Adjusted R square	0.073					

Source: SPSS Outputs

Note: Significant level indicate that \*\*0.01(1%) and \*0.05(5%)

According to the result indicator, performance expectancy and effort expectancy are positive significant impact on behavioral intention of using mobile banking with (b = 0.146, t = 2.328, p<0.05) and (b = 0.129, t = 2.010, p<0.05). That means there is positive relationship at 95% confidence interval, since the value of R square is 8.9% which can be found in Table (4.14). the model can explain 7.3% about the variance of the independent variable and dependent variable because the adjusted R square is 7.3%. However, Social Influence factors does not support the significant effects on behavioral intention of using mobile banking. Therefore, performance expectancy and effort expectancy factors are considered as the most important significant factors in this study.

## **CHAPTER V**

### **CONCLUSION**

In this chapter of research, findings are summarized and concluded to derive the answers. This chapter describes three main sections: findings, suggestions and need for further research. First part consists of the findings of the study and research analysis of factors influencing on mobile banking services in selected banks of Myanmar. Second Part consists of the suggestion and fact to adopt mobile banking for all users. Third part. It presents the limitation and needs for further research.

#### **5.1 Findings**

This Study studies the factors influencing on mobile banking services provided by local private banks in Yangon. The two main objectives of this study are to investigate the determinants of behavioral intention of mobile banking users and to analyze the relationship between behavioral intention and its determinants. The required data of the objective are collected through sample survey. The total 170 respondents who are already being mobile banking customers of AYA, CB and KBZ were surveyed to represent the behavioral intention on using mobile banking services. The demographic factors include age group, educational level, occupation level, income level and usage time of mobile banking.

In first section of the survey questions, the survey questionnaires are for customers' demographic characteristics. The gender of female is more than male that use the mobile banking. The higher percentage of respondents' age is 21-30 years, the second highest is 31-40 and age group above 51 is the lowest percentage share. The highest percentage of education degree of respondents' age is under-graduate and the second highest is Bachelor degree. The majority of the respondents were single. The highest income level per month of respondents is income level between 2-5 lakhs and the second highest income level per month of respondents is income level 5-8 lakhs and followed by the third highest income level is less than 2 lakhs.

In second section of the survey questionnaires, the survey questionnaires are for customer behaviors and attitude toward using mobile banking. The most used bank for mobile banking by customer is KBZ bank mobile banking after that AYA bank and least customer use CB bank mobile banking. The mainly reason for using mobile banking is useful and easy to use. According to the result that there is no relationship

between performance expectancy, effort expectancy, social influence, behavioral intention and moderators.

In third section of the survey questionnaires, the influencing of mobile banking are analyzed firstly by “Five-Point- Likert”. The respondents demonstrated a high degree. The other main reason is the knowledge using mobile banking services. Even in the urban population has limited knowledge about using mobile banking services, it will be more difficult for the people who is in rural area. In Myanmar, there has been many decades of using cash and physical which is familiar method of payment for majority of population. People in Myanmar have bear in mind that technology is complicated and there is little awareness of the digital payment system in Myanmar. Banks in Myanmar are not easily reachable.

## **5.2 Suggestions**

Mobile banking in Myanmar should be developed in order to minimize cash economy to reduce cost and save time by switching to mobile banking. The entire customer attitude needs to transform to become truly utilization of mobile banking. Private banks in Myanmar also need to educate people to trust the mobile financial transactions. It is needed to create regulatory framework, trust and security and consumers are business protection among people of Myanmar. The banks will need to undertake for better solutions upon language and technical barriers so as to develop the sector on mobile banking application of users in Myanmar.

Although mobile banking in Myanmar is still in fetal stage, it has marvelous potential to become the preferred way of banking, Myanmar’s speedily growing financial industry will have to contend with many challenges in the political, economic, social, technological, environment and legal environments.

In order to growth and develop the usage of mobile banking, Government has to develop necessary infrastructure, especially in telecommunication and electricity. Perennial infrastructure issues such as insufficient internet bandwidth, congested mobile banking networks and frequent power outages need to be addressed.

### **5.3 Needs for Further Study**

This thesis explored the factors influencing on mobile banking services in three private banks. In this study, it is selected only 3 top local private banks (AYA, CB and KBZ) because these are leading banks in private commercial banking sector.

The respondents comprise only 170 users because of time constraint and financial constraint. Therefore, it is suggested the future studies should gather data based on more customers to get more precise data. This study only focus on selected three commercial banks. Consequently, It was focused and emphasized only on customers' using of selected three private banks. Consequently, further study should conduct customers using on any other banks in Myanmar.

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#### **Website**

17. <https://www.ayabank.com.mm>
18. <https://www.cbbank.com.mm>
19. <https://www.kbzbank.com.mm>

## APPENDIX I

The purpose of this study is to investigate the determinants of behavioral intentions of mobile banking users and to analyze relationship between user behavioral intentions and the determinants. This study is being conducted through the KBZ Bank, AYA Bank and CB Bank. This questionnaire asks about your personal beliefs and intention to use mobile banking. Do not write your name on this questionnaire. Your response will be anonymous. This questionnaire survey is conducted for the research purpose, confidentially will be strictly maintained. Your participation is entirely voluntary. If there are items you do not feel comfortable answering, please skip them.

### **Demographic Characteristic**

#### **Gender**

Male

Female

#### **Age**

Below 20 years

Between 20-30

Between 31-40

Between 41-50

Between 51-60

Above 61 years

#### **Educational Analysis**

High School

University Student

Graduate

Master

Ph.D

Other

#### **Income (Monthly Income)**

Less than (MMK) 100,000

(MMK) 100,001-300,000

(MMK) 300,001-500,000

(MMK) 500,001-700,000

(MMK) 700,001-900,000

Above (MMK) 900,001

#### **Type of Employment**

Student

Unemployed

Civil

Servant

Company Staff

Self-employed

NGO /

#### **Marital Status**

Single

Married

Divorce

Which of the following local bank would you be most likely to use in your mobile banking Transactions?

KBZ  AYA  CB

How long have you been using mobile banking service?

< 0.5year  0.5 year to < 1 year  1 year to <2 years   
 Above 2 years

<b>Survey Questions</b>						
<b><u>Performance Expectancy (PE)</u></b>						
No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree
1	I expect using mobile banking would improve my performance.					
2	I expect using mobile banking would save my time.					
3	I would use mobile banking anyplace.					
4	I would find mobile banking useful.					
<b><u>Effort Expectancy (EE)</u></b>						
No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree

1	I expect learning how to use mobile banking is easy for me.					
2	I expect becoming skillful at using mobile banking is easy for me.					
3	I expect interaction with mobile banking is easy for me.					
4	I would find mobile banking is easy to use.					

**Social Influence (SI)**

No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree
1	People who are important to me think I should use mobile banking.					
2	People who influence my behavior think that I should use mobile banking.					
3	Most People surrounding me use mobile banking.					

**Facilitating conditions (FC)**

No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree

1	I have necessary resources to use mobile banking.					
2	I have necessary knowledge to use mobile Banking.					
3	I could get help from others when I have difficulties using the mobile Banking.					

**Behavioral Intention (BI)**

No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree
1	I intend to use mobile banking soon.					
2	I predict I would use mobile banking soon.					
3	I plan to use mobile banking soon.					

**Voluntariness of Use**

No	Particular	Strongly Disagree	Somewhat Disagree	Natural	Somewhat Agree	Strongly Agree
1	My use of mobile banking is entirely voluntary.					

Thank you so much for your selfless assistance.

