

## INTEGRATING TRUST INTO THE TECHNOLOGY ACCEPTANCE MODEL: THE CASE OF MOBILE BANKING ADOPTION IN MYANMAR

### การผสมผสานการความไว้วางใจและยอมรับเทคโนโลยี กรณีศึกษาการยอมรับธนาคารบนมือถือในประเทศเมียนมาร์

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#### Abstract

This study's objective is to explore behavioral intention to adopt mobile banking in Myanmar via integrating trust into the technology acceptance model. Survey data was collected from 405 users of mobile banking service in Yangon, Myanmar. Structural equation modeling was employed for analyzing the data. The model fit result revealed that perceived ease of use, perceived usefulness, attitude, and trust positively influences mobile banking adoption. A result of this study could be guidelines for banks to attract the growing number of users in Myanmar.

**Keywords:** Technology Acceptance Model, Trust, Mobile Banking, Myanmar

#### บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาความตั้งใจเชิงพฤติกรรมในการยอมรับธนาคารบนมือถือ (mobile banking) ในประเทศเมียนมาร์ ผ่านแบบจำลองการยอมรับเทคโนโลยีและความไว้วางใจ ข้อมูลการสำรวจรวบรวมจากผู้ให้บริการ mobile banking จำนวน 405 คน ในย่างกุ้ง ประเทศเมียนมาร์ และนำมาวิเคราะห์ด้วยแบบจำลองสมการโครงสร้าง ผลการวิจัยพบว่า มิติด้านการรับรู้ว่าง่ายต่อการใช้ มิติด้านการรับรู้ว่ามีประโยชน์ มิติด้านการเจตคติต่อการใช้ มิติด้านความไว้วางใจ มีอิทธิพลในเชิงบวกต่อการยอมรับ mobile banking ผลการศึกษานี้จะเป็นแนวทางสำหรับธนาคารในการออกแบบกลยุทธ์เพื่อดึงดูดผู้ใช้งานได้มากขึ้น

**คำสำคัญ:** แบบจำลองการยอมรับเทคโนโลยี ความไว้วางใจ ธนาคารบนมือถือ ประเทศเมียนมาร์

## Introduction

With the technological advancement in the internet and smartphone, access to the digital world has become easier than ever. Banking and financial institution are facing challenges from shifting themselves toward digital banking. They need to deliver the product and service that best serve their customers in this digital era. The mobile banking (mobile banking) channel is one of the innovations that offer to the customer. Munoz-Leiva, Climent-Climent & Liébana-Cabanillas (2017) defined mobile banking as a remote service (via mobile devices) from the financial institution to serve its customers' needs. It offers customers with its convenience and ease of access. They can cash in and out, make payments, and make money transfer anywhere at any time. Mobile banking also provides several advantages for the banking industry, such as lower operating costs and increased efficiency resulting from additional revenue and a higher attrition rate (Deloitte, 2010; Moon, 2016). According to the KPMG mobile banking report (2015), globally, approximately 1.1 billion people are using mobile banking services, and the numbers are increasing every year.

In 2013, the Myanmar Ministry of Communication and Information Technology (MCIT) decided to deregulate the telecommunication industry to create efficiency in this industry (Myanmar Times, 2015). In the same period, the first internet banking and mobile banking services

were also introduced by one of Myanmar's oldest bank, the CB bank (Wilson, 2018). As a result of lifting the entry barrier, three foreign operators have entered into Myanmar's telecom sector, namely, Ooredoo (Qatar), Telenor (Norway), and MyTel (Vietnam). The liberalization of the telecom sector, as well as the succeeding investment in telco-technology infrastructure and mobile network towers, tremendously boost the growth of the mobile network and internet penetration (Myanmar Times, 2015). With advancements in the telecommunication industry, smartphones and the internet create the potential for mobile banking services to serve more consumers, especially underserved consumers, namely, rural clients. Mobile banking service can drastically improve inclusive growth due to its effectiveness in conducting mass banking.

According to the CEIC (2016) report, mobile subscribers in Myanmar tremendously raised from 6.8 million subscribers in 2013 to 50.8 million subscribers in 2016. About 74 percent of the working population uses a mobile phone, but only 8 percent access digital financial services from mobile devices (Oxford business group, 2019). Interestingly, mobile phones' use to conduct banking transactions is not widespread, as might be expected. Munoz-Leiva, Sánchez-Fernández & Luque-Martínez (2010) mentioned that insecurity and a lack of trust might cause consumers to be reluctant to use such a tool. Trust was shown to significantly influence the present and potential users of electronic banking (Alalwan

et al., 2015). For encouraging the growth of mobile banking adoption, it is necessary to realize factors that affect a consumer's intention to use mobile banking services in an emerging country like Myanmar. Therefore, this study integrates multidimensional psychographic information regarding a construct known as the Technology Acceptance Model (TAM). The model has four dimensions: perceived usefulness, ease of use, attitude, and usage intention. In order to provide a robust framework, the consumer trust dimension is included. This study's target population was bank customers who used mobile banking in Yangon, one of the largest cities in Myanmar.

### Research Objective

This study intends to develop and analyze the proposed conceptual model of mobile banking adoption by integrating trust in the Technology Acceptance Model (TAM) in Myanmar.

### Literature Review

This section includes all relevant variables in the research framework, followed by the relationship between the variables and the study's hypotheses. Lastly, a conceptual framework for this study is presented.

### The Technology Acceptance Model (TAM)

Fishbein & Ajzen (1975) developed the theory which describes the psychological determinants of behavior, namely, the

Theory of Reasoned Action (TRA). The TRA is established on the attitude-behavior paradigm from social psychology. The Technology Acceptance Model (TAM), adopted from TRA, was proposed by Davis Bagozzi & Warshaw (1989). Davis Bagozzi & Warshaw (1989) suggested two major factors influence the usage of technology: Perceived Usefulness (PU) and Perceived Ease Of Use (PEOU). Both PU and PEOU are the predictors of a person's attitude, which sequentially impact and determine the behavioral intention using the technology (Davis, Bagozzi & Warshaw, 1992; Venkatesh & Davis, 1996). The TAM has been broadly applied to numerous studies to understand factors that drive behavioral intention of adopting of technology such as mobile banking (Alalwan et al., 2016). Many researchers revealed that the external environment's impact on attitude and intentions could be other factors besides PEOU and PU. Other underlying behavioral predictors should be included to demonstrate better prediction of user's acceptance behavior. Trust (TRT), as an external predictor, has been included in the TAM as suggested by previous studies in the behavioral intention using internet banking (Alalwan et al., 2015; Ezzi, 2014; Mansour, 2016). Trust has a potential influence on acceptance and usage behavior. Page & Luding (2003) stated that the trust might be one of the most crucial drivers of internet banking adoption. Consumers might use internet banking because they trust in the technology. Thus, this study has added trust to the TAM's

primary construct to create it relevant to the mobile banking in the Myanmar context.

### Relationship of relevant variables and Research hypotheses

#### Perceived Usefulness (PU)

Perceived usefulness is the most reviewed variables for new technology adoption. Several researchers indicated that PU had been one of the most influential predictors. It was found to have a direct influence on attitude and behavioral intention (Lai & Yang, 2009; Venkatesh & Bala, 2008). Attitude defined as a composite of a consumer's belief, feeling, and behavioral intentions towards some objects. A personal attitude can hold negative or positive beliefs toward a product or service (Yin et al., 2010). For mobile banking, perceived usefulness is referred to as a better alternative kind of services, such as, internet banking (Deb & Lomo-David, 2014). If users have considered the relative advantage of mobile banking, such as mobility advantage, this perception will drive a positive attitude and adoption of mobile banking. Therefore, the hypotheses are proposed as following:

H<sub>1</sub>: PU has a significant effect on attitude toward mobile banking.

H<sub>2</sub>: PU has a significant effect on behavior intention.

#### Perceived Ease of Use

Davis, Bagozzi & Warshaw (1989) define perceived ease of use as "an individual's perception that is using a system with less effort". PEOU construct has been extensively

used as a predictor of new technology in many studies like mobile payment, internet banking, and e-commerce (Alalwan et al., 2015). Venkatesh & Davis (2000) stated that perceived ease of use was found to become a much more reliable predictor towards the user's attitude as the length of use increased. For mobile banking, PEOU is referred to as simple to perform with less effort (Deb & Lomo-David, 2014). If users spend less substantial effort using mobile banking service, namely, user-friendly applications, this perception will lead to a positive attitude toward the use of mobile banking. Therefore, the following hypothesis is proposed:

H<sub>3</sub>: PEOU has a significant effect on attitude.

Previous studies have discovered a positive association between PEOU and positive PU (Ezzi, 2014). Thus, the following hypothesis is proposed:

H<sub>4</sub>: PEOU has a significant effect on PU.

#### Attitude

According to the Theory of Plan Behavior (TPB) as introduced by Fishbein & Ajzen (1975), behavioral intention is directly determined by attitude toward that behavior. Many studies have empirically validated the relationship between attitude and behavioral intention and found a significant correlation (Lin, 2011; Chau & Ngai, 2010). Thus, the following hypothesis is proposed:

H<sub>5</sub>: Attitude toward mobile banking has a significant effect on behavior intention.

#### Trust

Trust is essential to a healthy relationship; it is a feeling of confidence and security

(Thagard, 2018). Rousseau et al. (1998) defined trust as “perceptions about others’ attributes and a related willingness to become vulnerable to others,” as cited in Mansour (2016). In uncertain circumstances, trust lessens vulnerability and grows human confidence to engage in activities; the lack of trust may negatively influence behavioral intention through negative attitude. Besides, past studies revealed that the users’ perceived ease of use and perceived usefulness are highly influenced by trust (Chandio et al., 2013). Thus, based on the discussion above,

the following hypothesizes are proposed:

H<sub>6</sub>: Trust has a significant effect on PEOU.

H<sub>7</sub>: Trust has a significant effect on PU.

H<sub>8</sub>: Trust has a significant effect on attitude.

H<sub>9</sub>: Trust has a significant effect on behavior intention.

### Framework of Study

The proposed framework was based on the Technology Acceptance Model (TAM) and adding trust as an independent variable, as illustrated in Figure 1.

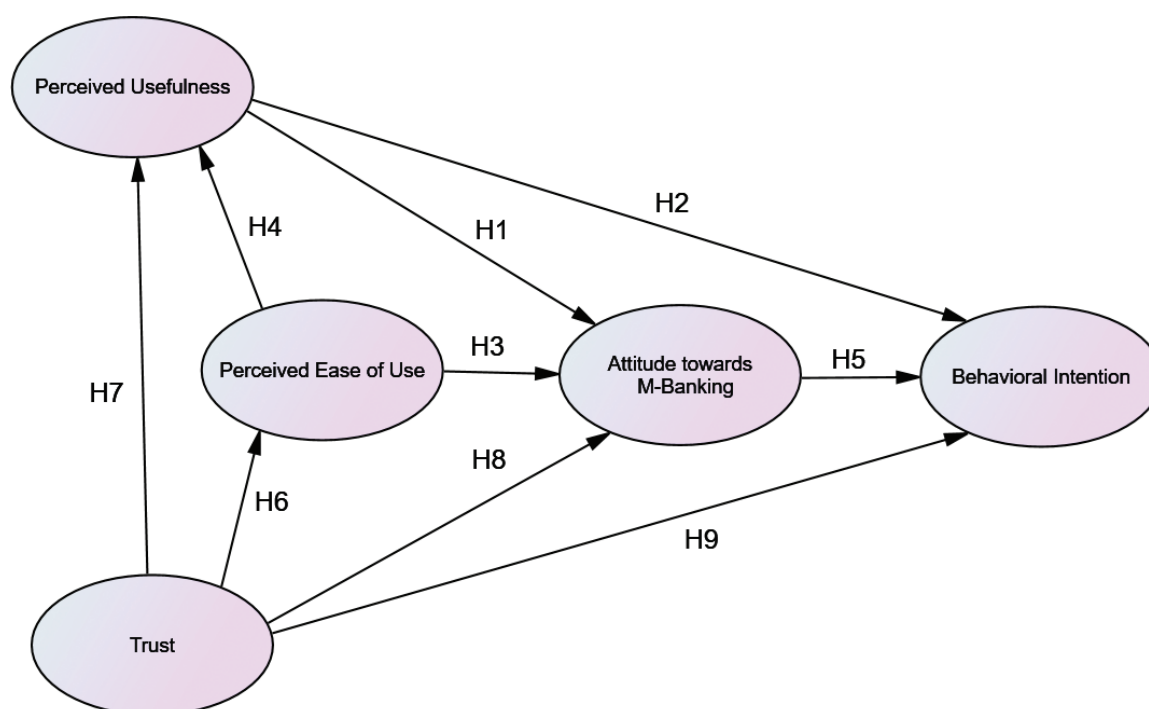


Figure 1 Proposed Framework (Adopted from Mansour (2016))

### Methodology

The study uses both qualitative and quantitative approaches. The questionnaire’s design to properly suit the banking industry was a qualitative study and was based on the TAM model as well as integrated documentary

research, field study, non-participatory observation, and key informant interviews. The methodological triangulation method was employed in which data was collected based on a purposive sampling technique. The key informants consist of bank managers, bank

employees, and bank customers. The interviews were conducted in a semi-structured environment. The use of note-taking and/or the tape recorder were used as tools for data collection.

As for the quantitative approach, this research aimed to analyze the behavior intention to use mobile banking in Yangong, one of the largest cities in Myanmar. This study's target population was bank customers who used mobile banking. By choosing this specific target group, the researcher can identify the key determinants that influence the intention to adopt mobile banking. Convenience sampling was employed in the target group during November 2017. The Statistical Package for Social Science was employed in this study.

The required sample size should be between 10 to 20 times the total number of items (Hair et al., 2010). In this study, there were

27 items (statements). Therefore, the sample size should be between 270 to 540 samples. A total of 405 samples were collected. The primary study questionnaire contains two parts: the demographic data section and the research framework section with five variables. A five-point Likert response scale was employed as a measuring scale.

The Exploratory Factor Analysis (EFA) procedure was employed (Table 1). The sample was suitable for employing EFA as suggested by (Hair et al., 2010). The value of KMO (0.911) was high. The value of Bartlett's test of sphericity was significant,  $p < 0.005$ . Following the EFA analysis, those scale items with factor loadings value under 0.5 on the intended factors were dropped (Hinkin, 1995; Malhotra & Dash, 2011). In the final structure obtained after EFA, all scale items' factor loading was well loaded from 0.658 to 0.832.

**Table 1** Exploratory factor analysis

Construct	Loading	After EFA	Sources
Perceive ease of use (Cronbach's $\alpha = 0.848$ )			
PEOU1: Learning to use mobile banking is easy for me.	0.746	Retained	Davis (1989); Agarwal & Prasad (1997); Gefen, Karahanna & Straub (2003); Wang et al. (2003)
PEOU2: I find it easy to get mobile banking to do what I want to do it.	0.832	Retained	
PEOU3: My interaction with mobile banking is easy moreover, understandable.	< 0.50	Removed	
PEOU4: It is easy for me to become skillful at using internet banking.	0.803	Retained	
PEOU5: It is easy for me to remember how to perform tasks using mobile banking.	< 0.50	Removed	
PEOU6: Overall, I find mobile banking easy to use.	0.687	Retained	

Table 1 Exploratory factor analysis (Cont.)

Construct	Loading	After EFA	Sources
Perceived Usefulness (Cronbach's $\alpha$ = 0.865)			Davis (1989); Agarwal & Prasad (1997); Gefen, Karahanna & Straub (2003); Wang et al. (2003)
PU1: Using mobile banking makes it easier to do my job.	0.772	Retained	
PU2: Using mobile banking helps me accomplish tasks more quickly.	0.789	Retained	
PU3: Using mobile banking increase my productivities.	< 0.50	Removed	
PU4: Using mobile banking saves me time.	0.770	Retained	
PU5: Using mobile banking gives me greater control over banking transaction (for example, checking balance, transferring, paying bills).	0.658	Retained	
PU6: Overall, I find mobile banking is useful.	0.767	Retained	
Attitude toward mobile banking (Cronbach's $\alpha$ = 0.800)	0.678	Retained	Deb & Lomo-David (2014)
ATT1: Using mobile banking would be a good idea.	0.731	Retained	
ATT2: Using mobile banking would be a wise idea.	< 0.50	Removed	
ATT3: I like the idea of using mobile banking.	0.748	Retained	
ATT4: Using mobile banking would be pleasant.	0.671	Retained	
ATT5: In my opinion, it is desirable to use mobile banking			
Trust (Cronbach's $\alpha$ = 0.840)			Mukherjee & Nath (2003); Ramsay & Smith (1999); McKnight & Chervany (2002)
TRT1: I trust that the mobile banking systems not to disclose my personal information.	0.741	Retained	
TRT2: I trust the banks to keep customer data securely.	0.728	Retained	
TRT3: I trust the technology of mobile banking.	0.797	Retained	
TRT4: I trust the privacy statement on the bank's web page to guarantee the privacy of my data.	0.758	Retained	
TRT5: I trust that the banks to keep customers' interest in mind.	< 0.50	Removed	
Usage Intention (Cronbach's $\alpha$ = 0.854)			Moorthy et al. (2014)
INT1: I intend to use mobile banking in the future.	< 0.50	Removed	
INT2: I intend to use mobile banking to increase convenience.	0.745	Retained	
INT3: I intend to learn how to use mobile banking.	0.807	Retained	
INT4: I intend to use mobile banking more often.	0.823	Retained	
INT5: I intend to recommend mobile banking to my friends.	0.727	Retained	

Note: KMO = 0.911; Bartlett's Test of Sphericity = 4328.559; p = 0.000

Source: Prepared by the author

## Results

The demographic profile contains gender, age, average monthly income, and usage frequency. The collected sample consists of 42.50% females and 57.50% males. There were totally five age groups: 18-25; 26-35; 36-45; 46-55; over 55 years old. The majority of respondents, 44.40%, were between 26 and 35 years old, 29.10% were in the range of 36 to 45 years old, 18.30% were 18 to 25 years old, and 8.20% were over 45 years old. For average monthly income, 49.60% of the respondents earned more than 500,000 Kyats (Ks), 34.60% of respondents earned 100,001 Ks to 300,000 Ks, 300,001 Ks to 500,001 Ks, 14.30% of the respondents earned 300,001 Ks to 500,000 Ks, and 1.50% of respondents earned less than 100,000 Ks. About 42% of respondents were using mobile banking a few times per week, 35.80% of respondents were using mobile banking once per week or less, and 22.20% of respondents were using mobile banking at least once daily.

**Table 2** Model goodness of fit

Fit indices	Criteria*	Measurement model	Structural model
$\chi^2/df$	< 3	2.451	2.551
GFI	> 0.9	0.905	0.901
AGF	> 0.8	0.877	0.873
CFI	> 0.9	0.938	0.934
NFI	> 0.8	0.901	0.896
TLI	> 0.9	0.928	0.923
RMR	< 0.1	0.034	0.040
RMSEA	< 0.08	0.060	0.062

\*References: Hair et al., 2010, Hu & Bentler, 1999. Steiger, 1990.

Source: Prepared by the author

The model fit indices for measurement model was presented in Table 2. The model

fit indices were within acceptable range. The model fit indices for structural model were also within acceptable range. Thus, the fit of the proposed structural model was good. It could provided a reasonable level of overall fit with the real world data.

The hypothesized paths were checked with the help of standardized path coefficients and their respective critical ratios (t-values). The results showed that each hypothesis in this study was supported as shown in Table 4.

**Table 4** Summary of Testing Hypotheses

Hypothesis Path	Standardized Coefficient ( $\beta$ )	C.R. (t-value)
H <sub>1</sub> : PU → ATT	0.388**	4.845
H <sub>2</sub> : PU → INT	0.277*	3.025
H <sub>3</sub> : PEOU → ATT	0.195**	3.431
H <sub>4</sub> : PEOU → PU	0.293**	6.091
H <sub>5</sub> : ATT → INT	0.250*	2.957
H <sub>6</sub> : TRT → PEOU	0.551**	8.812
H <sub>7</sub> : TRT → PU	0.361**	6.790
H <sub>8</sub> : TRT → ATT	0.179*	2.847
H <sub>9</sub> : TRT → INT	0.253**	3.510

Note: \* p < 0.05, \*\* p < 0.001

Source: Prepared by the author

## Discussion

This study was conducted with the objective of finding out the major influencing factors to banking consumers' behavior and intention to use mobile banking in the context of Myanmar. A conceptual model consisting of parameters from TAM, Perceived Usefulness (PU), Perceived Ease of Use (PEOU) along with other two parameters Attitude and Trust was proposed. The statistical results supported the



predicting efficiency of the proposed model to explain considerable variance in behavioral intention to use mobile banking.

The study's statistical results strongly showed that PU with the regression weight of 0.277 is the key variable in predicting Behavior Intention. It means that banking customers from Myanmar are more willing to use mobile banking services if they perceive it to be more useful, practical, and productive. The high regression weight of 0.253, the perceived trust, also proves to be the second key factor in explaining and predicting consumers' behavior intention. The banking consumers of Myanmar are more willing to use mobile banking services if they perceive the mobile banking as trustworthy and provides the expected result. The result shows a positive relationship between consumers' attitude and their behavioral intention to use mobile banking. When consumers develop a positive attitude towards mobile banking, they are more inclined to use mobile banking activities.

As all the variables PU, PEOU, and Trust are shown to have a positive relationship with the consumers' attitude, it is clear that they have a significant influence in predicting consumers' attitudes and behavioral intentions. The customers will have a favorable attitude towards mobile banking if they realize that mobile banking services can be used without any complication with not much effort and energy. Also, since the consumers have to use such applications by own without assistance from others, PEOU has a crucial role in influencing consumers' attitude and behavioral

intention to adopt Mobile banking. A study by Kasheir et al. (2009) also resulted in similar significant relation between PEOU and behavior (Kasheir & Ashour & Yacout, 2009).

### Conclusion and Recommendations

For Myanmar, mobile banking is still in a nascent stage, and there has not been adequate research on this subject. Therefore, this paper's findings can provide some crucial recommendations to the government, banks, and software engineers that can help in designing and marketing effective mobile banking services for sustainable development in Myanmar.

As mobile banking is relatively new to the Myanmar banking system, it is crucial to make consumers aware of the mobile banking services first. Media campaigns can help make people aware of the mobile banking services, their usefulness, and their effectiveness, particularly in rural areas. Also, the bank should educate them on how to use mobile banking to manage personal finance as an aim for poverty reduction about its usefulness

Customers should be given training on how to use mobile banking apps to gain confidence in their function. Mobile banking applications must be easily accessible and user friendly such that even a non-specialist with no technical knowledge can use them well.

For gaining trust, the mobile banking applications must be safe and secured. Information availability in every stage of services has to be provided. Banks and other

financial institutions should assure their clients that mobile banking services are effective in their functions, and people's money will always be safe. At the initial stage, giving a free trial of applications for a certain period with guarantee security can help develop confidence in mobile banking. The government should enable mobile banking based operations by entrusted agreement with the governance functions such as payment for utilities. Also, there must be regular monitoring from the government on banking and

telecommunication service providers so that the general people do not get cheated.

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### References

- Agarwal, R. & Prasad, J. (1997). The role of innovation characteristics and perceived voluntariness in the acceptance of information technologies. *Decision Sciences*, 28(3), 557-582.
- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P. & Simintiras, A. C. (2016). Jordanian consumers' adoption of telebanking: influence of perceived usefulness, trust and self-efficacy. *International Journal of Bank Marketing*, 34(5), 690-709.
- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., Lal, B. & Williams, M. D. (2015). Consumer adoption of internet banking in Jordan: examining the role of hedonic motivation, habit, self-efficacy and trust. *Journal of Financial Services Marketing*, 20(2), 145-157.
- Ceic.com. (2016). *Myanmar Number of Subscriber Mobile from 1960 to 2016*. Retrieved March 5, 2018, from <https://www.ceicdata.com/en/indicator/myanmar/number-of-subscriber-mobile>
- Chandio, F. & Irani, Z. & Abbasi, S. & Nizamani, H. (2013). Acceptance of online banking information systems: An empirical case in a developing economy. *Behavior and Information Technology*, 32.
- Chau, V. & Ngai, L. (2010). The youth market for internet banking services: Perceptions, attitude, and behavior. *Journal of Services Marketing*, 24, 42-60.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- Davis, F. D., Bagozzi, P. R. & Warshaw, P. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982-1003.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132.

- Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- Deb, M. & Lomo-David. (2014). An empirical examination of customers' adoption of m-Banking in India. *Marketing Intelligence & Planning*, 32(4), 475-494.
- Deloitte. (2010). *Mobile banking a catalyst for improving bank performance*. Retrieved February 22, 2019, from [https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Process/mobile\\_banking\\_bank\\_performance.pdf](https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Process/mobile_banking_bank_performance.pdf)
- Ezzi, S. Z. (2014). A theoretical model for internet banking: Beyond perceived usefulness and ease of use. *Archives of Business Research*, 2(2), 31-46.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley
- Gefen, D., Karahanna, E. & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(1), 51-90.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate Data Analysis* (7<sup>th</sup> ed.). NJ: Pearson Prentice-Hall, Upper Saddle River.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967-988.
- Hu, L. T. & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling*, 6, 1-55.
- Kasheir, D. & Ashour, A. & Yacout, O. (2009). Factors Affecting Continued Usage of Internet Banking Among Egyptian Customers. *Communications of the IBIMA*, 9, 252-263.
- KPMG. (2015). *Mobile Banking, 2015*. Retrieved March 19, 2018, from <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/08/mobile-banking-report-2015.pdf>
- Lai, J. & Yang, C. (2009). Effects of employees' perceived dependability on the success of enterprise applications in e-business. *Industrial Marketing Management*, 38, 263-74.
- Lin, Hsiu-Fen. (2011). An empirical investigation of mobile banking adoption: The effect of innovation attributes and knowledge-based trust. *International Journal of Information Management - INT J INFORM MANAGE*, 31, 252-260.
- Malhotra, N. K. & Dash, S. (2011). *Marketing Research: An Applied Orientation* (6<sup>th</sup> ed.). Pearson Education, Noida.
- Mansour, K. (2016). An analysis of business' acceptance of internet banking: An integration of e-trust to the TAM. *Journal of Business & Industrial Marketing*, 31(8), 982-994.
- McKnight, D. & Chervany, N. (2002). What trust means in e-commerce customer relationships: an interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, 6(2), 35-59.

- Moon, J. (2016). *Mobile Banking Adoption: Where Is the Revenue for Financial Institutions?* Retrieved January, 19, 2018, from <https://www.fiserv.com/blog/the-point/mobile-banking-adoption-where-revenue-financial-institutions-blog.aspx>
- Moorthy, M., Samsuri, A., Hussin, S., Othman, M. & Chelliah, M. (2014). E-Filing Behaviour among Academics in Perak State in Malaysia. *Technology and Investment*, 5(2), 79-94.
- Mukherjee, A. & Nath, P. (2003). A model of trust in online relationship banking. *International Journal of Bank Marketing*, 21(1), 5-15.
- Munoz-Leiva, F., Climent-Climent, S. & Liébana-Cabanillas, F. (2017). Determinants of intention to use the mobile banking apps: An extension of the classic TAM model. *SPANISH JOURNAL OF MARKETING – ESIC*, 21(1), 25-38.
- Muñoz-Leiva, F., Sánchez-Fernández, J. & Luque-Martínez, T. (2010). How to improve trust toward electronic banking. *Online Information Review*, 34(6), 907-934
- Myanmar Times. (2015). *Mobile Penetration Reaches Half the Country*. Retrieved February 24, 2018, from <https://www.mmtimes.com/business/technology/14815-mobile-penetration-reaches-half-the-country.html>
- Myanmar Times. (2015). *Myanmar named fourth-fastest-growing mobile market in the world by Ericsson*. Retrieved February 24, 2018, from <https://www.mmtimes.com/business/technology/17727-myanmar-named-fourth-fastest-growing-mobile-market-in-the-world-by-ericsson.html>
- Oxford Business Group. (2019). *The Report Myanmar 2019*. Retrieved January 08, 2020 from <https://oxfordbusinessgroup.com/overview/open-account-liberalisation-efforts-and-focus-mobile-banking-are-setting-stage-rapid-gains>
- Page, C. & Luding, Y. (2003). Bank managers' direct marketing dilemmas – customers' attitudes and purchase intention. *International Journal of Bank Marketing*, 21, 147-163.
- Ramsay, J. & Smith, M. (1999). Managing customer channel usage in the Australian banking sector. *Managerial Auditing Journal*, 14(7), 329-338.
- Rousseau, D., Sitkin, S., Burt, R. & Camerer, C. (1998). Not so different after all: a cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Steiger, J. H. (1990). Structural Model Evaluation and Modification: An Interval Estimation Approach. *Multivariate Behavioral Research*, 25(2), 173-180.
- Thagard, P. (2018). *What is Trust? Trust is an emotional brain state, not just an expectation of behavior*. *Psychology Today*. Retrieved October 11, 2019 from <https://www.psychologytoday.com/us/blog/hot-thought/201810/what-is-trust>
- Venkatesh, V. & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: four longitudinal field studies. *Management Science*, 46(2), 186-204.

- Venkatesh, V. & Davis, F. D. (1996). A Model of the Antecedents of Perceived Ease of Use Development and Test. *Decision Sciences*, 27(3), 451-481.
- Venkatesh, V. & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences - DECISION SCI.*, 39, 273-315.
- Wang, Yi-Shun & Wang, Yu-Min & Lin, Hsin-Hui & Tang, Tzung-I. (2003). Determinants of User Acceptance of Internet Banking: An Empirical Study. *International Journal of Service Industry Management*, 14, 501-519.
- Wilson, E. (2018). *Mobile money services make waves in Myanmar*. *Asian Money*. Retrieved October 20, 2019 from <https://www.euromoney.com/article/b17f84w654nscv/mobile-money-services-make-waves-in-myanmar>
- Yin, S., Wu, L., Du, L. & Chen, M. (2010). Consumers' purchase intention of organic food in China. *Journal of the Science of Food and Agriculture*, 90(8), 1361-1367.



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