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Key Remarks from Managing Director of ACLEDA Institute of Business (AIB)

ACLEDA Institute of Business, the leading business school with the highest quality standard to develop future generations to support the socio-economic development in Cambodia and the Region is a subsidiary companies of ACLEDA Bank Plc's, which recognized by the Royal Government of Cambodia in 2016 as a private higher education institution was transformed from ACLEDA Training Center (ATC). The mission of AIB is to provide learners with the superior quality of higher education services and professional training in business education so that they can develop their knowledge, skills, experiences, ethics and networking in order to enhance their professional future careers.

As per basic of applied research has currently been a central focus in order to transform Cambodia into a digital economy, AIB has been committed to take part of contribution of promoting a research culture of Cambodia in line with its vision and mission. AIB has integrated industry attachment and lifelong learning into teaching and learning curriculum and extracurricular activities. For instance, the programs of AIB are conducted by using problem-based, inquiry-based, project-based, mini-research, and presentation.

As part of a strategic leadership, AIB has encouraged outstanding students to conduct thesis writing in order to fulfill their graduate requirements; and several of the top quality papers have been selected systematically by using double-blind review and editorial process, so that they could be published in AIB Research Series. Furthermore, AIB has integrated research publications into career development scheme, especially for the full-time faculty members, so that they could be promoted from a senior lecturer to an assistant professor and all the ways up to a professor title.

Last but not least, AIB is going to publish the Research Series two issues per volume annually; moreover, a local and a regional researcher will be invited to publish his or her work in AIB Research Series, so that an academic community can be initially created and sustainably developed in Cambodia and the Region.

Phon Narin, Ph.D.

Managing Director

Key Remarks from Editorial Board

Academic Affairs Committee is a technical arm of the Board of Directors of AIB to advise on teaching, learning and research domains. Quality and relevance of teaching and learning are our priority to ensure that students will be useful citizens and well accepted in the world of work after their graduation from AIB. We are committed to the empowerment of the faculty members through capacity building and professional development for the betterment of their respective services.

AIB Research Series is the first attempt to promote a sharing of knowledge. Against this backdrop, I would like to draw your attention that authors take weeks, months and years to conduct research and write research articles, but you may spend only hours and days to read and comprehend their articles. Thus, I would like to congratulate the authors on their efforts and I also encourage you to read with interest for your professional development.

On behalf of the Committee, I would like to wish the faculty members and the students of the AIB every success in their future endeavors.

Dy Sam Sideth, Ph.D.

Chairman of the AACO and Editorial Board

Key Remarks from Editor-in-Chief for AIB Research Series

We are delighted to celebrate the launch of the AIB Research Series with this inaugural volume. On behalf of the AIB Editorial Team, I would like to extend a very warm welcome to the readership of the AIB Research Series. I would like to take this opportunity to express my sincere thanks to all authors, board members, editors, and reviewers, all of whom have contributed to the success of the Research Series, which is developed in line with one of the missions of AIB to promote research activities within its academic community to ensure quality education.

AIB Research Series primarily focuses on research examining issues centering around the field of business. This provides a crucial forum to address important issues and share research findings, and discuss various aspects in business, from which the readership in the field can benefit. This volume consists of a variety of research topics which include mobile banking, use of debit card, financial management analysis, online tax payment, etc., in which the research employs qualitative and quantitative approaches.

We believe that the regular research publications in the AIB Research Series involving various topics will pave the way for AIB to become a leading institution in academic research and development in Cambodia.

Sam Chanphirun, Ph.D.

Editor-in-chief

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ABSTRACT

The advancement of technology has enabled mobile devices to be integrated with the wireless communication technology to make online payment known as mobile payment or m-payment. In Cambodia, the context of mobile payment usage has increased for several years on mobile payment penetration as part of FinTech implementation. However, it is hard to understand the behavioral intention to adopt mobile payment system owing to limitation of the studies focusing on the consumers' behavior and preferences in innovation adoption. Therefore, the study aims to identify the factors affecting the users' attitudes towards the intentions to adopt mobile payment among Cambodian youths. Furthermore, the study has proposed a conceptual model of mobile payment adoption by integrating Technology Acceptance Model with extended variables such as Trust and Perceived Compatibility. A correlation design of the Quantitative approach has been employed and data have been collected from 204 participants who had experienced using ABA mobile payment in Phnom Penh City. The majority of the respondents are company employees, accounting for 45.59% of the total respondents, 75% of whom use ABA mobile payment at least once a week. Besides, the results show a full support for the positive influence towards Intention to Use mobile payment technology from perceived usefulness, perceived ease of use, attitude as well as perceived compatibility. However, trust has a slight concern to fully influence the intention to adopt the mobile payment technology. As a result, the finding from this research yields some implications and recommendations for future researchers for mobile payment developers and literature respectively.

Keywords: Technology Acceptance Model (TAM), Mobile Payment, Mobile Application, Attitude, Behavioral Intention

1. Introduction

1.1 Background of the Study

As the world is equipped with modern innovations, the advancement of technology has enabled mobile devices to be integrated with the wireless communication technology to make online payment known as "mobile payment or m-payment". The current expansion in wireless communication technology has shaped our lives to become better and more convenient. For instance, a high growth in mobile device usage and penetration has brought a positive impact on the publicity of mobile commerce utilization (Chen & Adams, 2005). Over the past 10 years, m-payment has been brought up and acquired attention in recognition of alternative payment. It is scientifically stated that m-payment systems are the formal means of payment, containing numerous benefits over the traditional payment (Johnson, Kiser, Washington, & Torres, 2018) for personal and professional usage to purchase goods and services. Additionally, it gives direct advantages to both merchants and consumers. For, the merchants, mobile-payment services help increase the number of transactions, cost reduction, and convenience. Mobile payment initially occurred in the 1990s and acquired the patent in 2000 (Google Patents, 2019). However, it has remained a challenge to widen the m-payment system adoption at service vendors (Yao & Xu, 2017). The first m-payment initiator was Coca-Cola which allowed the consumers to buy the drink through mobile's SMS in a vending machine in Helsinki in the period of 1997 (Prime Indexes, 2018). Many forms of m-payment system are conducted and it includes but not limited to SMS payment, mobile wallets, internet payment, mobile banking, and direct billing operator (Prime Indexes, 2018).

The development of mobile payment system in Cambodia is innovatively assisted by innovation technology solutions guided by financial technology (FinTech) institutions (International Monetary Fund, 2018). Recently, banks have provided an entire spectrum of services including SMEs, businesses, and individuals and they have possessed advanced online and mobile banking services; for instance, Advanced Bank of Asia Limited, known as ABA bank in Cambodia, is one of the leading commercial banks in Cambodia with over 77 branches nationwide founded in 1996 and is a subsidiary of National Bank of Canada (ABA Bank, 2019).

1.2 Statement of the Problem

In the context of mobile payment in Cambodia, there were not many scientific studies focusing on the attitudes and behavioral intention of mobile-payment usage. Delkhosh (2020) studied mobile payment and analysis on factors affecting the user's behavioral intention to utilize mobile payment in Cambodian's behavioral content Meanwhile, the same researcher also stated that mobile payment service providers have grown exponentially, but there has been no empirical evidence showing the behavioral intention towards mobile payment service. Therefore, the study aims to identify the factors affecting the users' attitudes towards the intentions to adopt mobile payment among Cambodian youth. The behavioral intention and preferences of the consumer are required to be deeply studied to make sure that it purposely assisted the convenience, secured, and satisfaction from the consumers that the firms have been trying to acquire through various methods.

1.3 Research Objective

The study aims to find out consumers' attitudes and intentions towards using mobile payment among Cambodian youths by adopting Technology Acceptance Model (TAM) from Davis (1989) with extended variables including Perceived Compatibility and Trust.

1.4 Research Question

In order to clarify the research objective, the study formulated the following research question:

What factors affect consumers' attitudes and intentions to adopt and utilize existing mobile applications for online payment?"

1.5 Significance of the Study

This study contributed significantly to the existing study of Technology Acceptance Model (TAM), especially the analysis on the attitude toward the intention to adopt mobile payment since there has been a lack of the academic papers focusing on this field in Cambodia. Moreover, this study benefited the management in the area of customer relations and customer service so that they can keep strengthening customer service quality by being responsive and increasing security system. Last but not least, this article would become a useful source for the future research.

2. Literature Review

2.1 Definition of Mobile Payment Technology

The mobile payment technology is described as a form of payment controlled by the electrical devices to purchase goods and services. There are existing clarifications of mobile payment with different concepts depending on personalized experiences of researchers. Mobile payment is mainly viewed as characteristic differentiation in terms of other forms of payment through mobile devices (Schierz, Schilke, & Wirtz, 2010). The concepts of cellphones were scientifically studied by some authors (Henkel, 2002), while other authors focused on communication (Zmijewska and Lawrence, 2006). Mobile payment is a beneficial initiation from the integration between information and communication technologies for making payment through mobile devices (Aydin & Burnaz, 2016). The current digital development of mobile payment contains digital receipt, payment through digital, digital coupons, permitting pliability in the payment ecosystem (Husson, 2015). There are studies which illustrate that the acceptance of m-payment utilization varies with the situation in which the customers are able to execute the use of mobile payment mechanisms. What's more, the mobile payment mechanisms are adopted based on functional services for practical reasons (Khodawandi, Pousttchi and Wiedmann, 2003).

Given the different meanings from various research studies of mobile payment, in this specific study, mobile payment is concentrated on the mobile applications (Apps) that are routinely

executed by the financial institutions. Mobile payment will be targeting the means of payment to purchase goods and services or any top-ups using mobile devices with mobile apps.

2.2 Theoretical Framework

On the fundamental of TRA and TPB theories, Davis (1989) has established Technology Acceptance Model (TAM), which suggests that perceived usefulness and ease of use are the main driven sources by individuals to determine the attitude towards adoption of specific innovations, and eventually showcases the intention of new technology adoption (Davis et al., 1989). To acquire the understanding of consumer's acceptance on the technology, it is a must to study about intention because intention determines the usage behavior to use a particular object (Fishbein & Ajzen, 1975).

Regarding technology acceptance fields, it is known that intention has been included in many previous research papers as the same as attitude: intention to use in the context of mobile service (Nysveen, 2005), and behavioral intention of users to use mobile banking (Luarn & Lin, 2005). TAM model was applied in many scientific studies in the adoption of new technology, consisting of – but not limited to – mobile services (Wang and Li, 2012), mobile banking (Mehrad and Mohammadi, 2017), mobile credit card (Leong et al., 2013; Liébana-Cabanillas et al., 2017; Ramos-de-Luna et al., 2016), mobile tickets (Suki and Suki, 2017) and wireless of mobile (Kim and Garrison, 2009). TAM is the widely-used framework which examines the technology acceptance mostly in the field of Information Technology and its solid validity proven empirically in many previous scientific research studies.

Despite the fact that TAM has been through several revisions (Lee et al., 2003), it stands as a solid, impactful, and meticulous model for investigating the acceptance behavior (Davis, 1989; Davis et al., 1989; Wu et al., 2011). Keramati et al. (2012) present the services adoption in relation to mobile payment using technological and behavioral factors of mobile payment service adoption with an established conceptual model. Some variables that were studied including perceived ease of use (PEU), perceived usefulness (PU), trust, compatibility, payment habit, norm, cost, convenience, and mobile payment knowledge, are hugely fit to the criteria and research type of mobile payment adoption according to the previous studies (de Luna, Liébana-Cabanillas, Sánchez-Fernández, & Muñoz-Leiva, 2019). Although the perceived usefulness and relative advantages of the technological perceptions have an effect on mobile payment, trust also has a strong influence on user behaviors of mobile payment (Gao & Waechter, 2017). TAM was extended with trust to discover the adoption of mobile payment in Singapore to be a remarkable anticipator of behavioral intention (Chandra et al., 2010). There was an extension of TAM Model from Shin (2010) discovering the mobile payment adoption in the US using perceived usefulness, perceive ease of use, trust, and perceived risk affect users' adoption on payment technology. In China, the implementation of the model based on trust perspectives by Yan and Yang (2015) showcased the positive impact on the user intention to adopt the technology using trust. As the result from exploring the literature from previous studies, the researcher decided to adopt Technology Acceptance Model (TAM) with an extension of perceived compatibility and trust to study the consumers' attitude towards an intention to adopt mobile payment system.

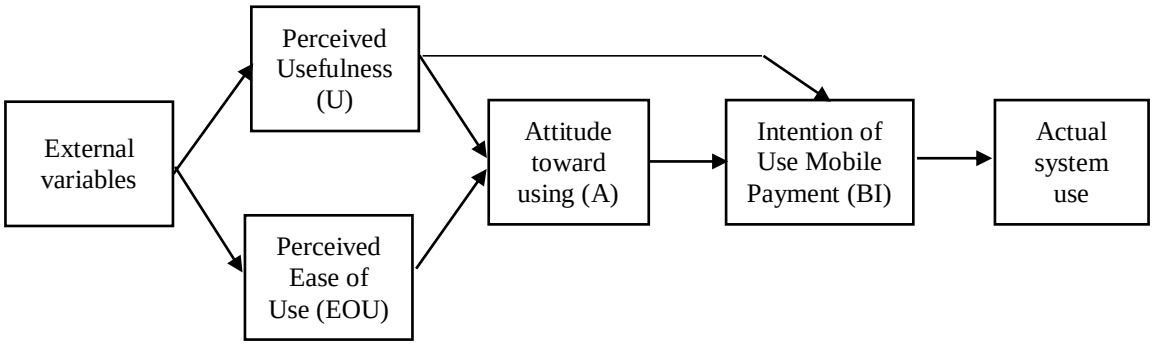

Figure 1: Technology Acceptance Model (Davis et al., 1989)

2.3 Conceptual Model

Perceived usefulness is one of the two main elements in Technology Acceptance Model that is believed to strongly affect the user's behavior in using specific technology (Davis, 1989). In his study, he explicates it as "the degree to which an individual believes that using a particular system would enhance his or her job performance" by following the words "capable of using it fully advantageously". The system contains a high level of perceived usefulness if using the system can enhance job performance. In mobile payment, perceived usefulness is defined as the scope to which other people anticipate that a mobile payment system can extensively enlarge the capacity of performance in transactions (Su, Wang, & Yan, 2018). Shin and Shin (2011) illustrate a sign of positive relationship between PU and user attitude and PU to intention to use in the context of social network games. Over a decade, extensive research has provided concrete evidence on the significant effect of perceived usefulness on attitudes towards usage (Davis et al., 1989; Jackson et al., 1997; Venkatesh and Morris, 2000; Venkatesh et al., 2003) and PU also demonstrated its direct relationship with attitudes (Muñoz, Hernández-Méndez, & Sánchez-Fernández, 2012; Shin, 2012).

Perceived Ease of Use (PEU), another constructs of TAM, is defined as "the degree to which a person believes that using a particular system would free of effort (Davis, 1989). Jogiyano (2008) has an idea on the perception of ease as an extent to which an individual believes that by using a particular technology, he/she will be free from business. Hence, if the he or she believes that information system is convenient to use, then he or she will utilize it. However, for this current research on mobile payment, perceived ease of use refers to "the degree to which individuals feel free from any difficult effort of interactions". There are previous contexts stated on the positive correlations between perceived ease of use and attitudes including the original TAM. For instance, this relationship is supported in fields of mobile services (Nysveen et al., 2005), mobile banking system (Pikkarainen et al., 2004), internet services (Lee and Chung, 2009), and mobile games (Ha et al., 2007).

Consumer's intention towards an acceptance of mobile payment is driven by trust, which plays a major role in the usability of mobile payment. Trust is defined as a prominent feature of social and economic interactions in which the uncertainty is addressed as the present (Pavlou, 2003). It can also be explained, in B2C e-commerce, as the beliefs that allow consumers to voluntarily become vulnerable to web retailers after the consideration of

the retailers' characteristics (McKnight & Chervany, 2002). Trust is one among the critical factors in the online field in which users are not able to have a direct control over the actions of each transaction (Roca, Gacia, & de la Vega, 2009). What's more, trust has been an essential element to influence consumer's behavior owing to high level uncertainties and risk involvement in commercial transactions. Therefore, trust is critically established for understanding user's behavior in the online payment and mobile commerce as Yan and Pan (2014) imply that trust in online payment stands as a key initial trust towards mobile payment and when the user's experience with mobile payment is doubtful, they will rely on online payment. Accordingly, Gu et al. (2009) have proved that trust is one of the crucial determinants of behavioral intention. Mu and Lee (2017) have also stated their findings that user's intention is driven by their trust on their third-party mobile payment that they have studied on Alipay and WeChat apps environment. In this research context, perceived usefulness and perceived ease of use are the foremost variables for mobile payment adoption. Hence, we expect trust to be another variable in online payments for influencing beliefs in mobile payment adoption.

We extend original TAM model with an additional factor of perceived compatibility for measuring mobile payment service adoption. Perceived Compatibility was defined as an extent to which innovation suits consumer's experiences or activities (Roger, 1962). On the other end, in a wide term, compatibility is entitled as "a degree to which an innovation is perceived being consistent to existing values, demands, and prior experiences of capable adopters" (Roger, 1983, p.15). In case of translation as a group for this definition, in perspective of an organization, consistent innovation with organizational needs, goals, structure, and culture is crucial for compatibility (Sonnenwald et al., 2001). Tornatzsky and Klein (1982) have found that the perceived compatibility of an individual is a crucial feature leading to an acceptance of a new or particular technological innovation. Hence, perceived compatibility is assumed to be a practical extension of TAM model with an incline of its forecasted power (Schierz, Schilke, & Wirtz, 2010). Likewise, there is an indication to believe that perceived compatibility has a direct influence towards intention to adopt an innovation (Mallat et al., 2006; Cooper & Zmud, 1990).

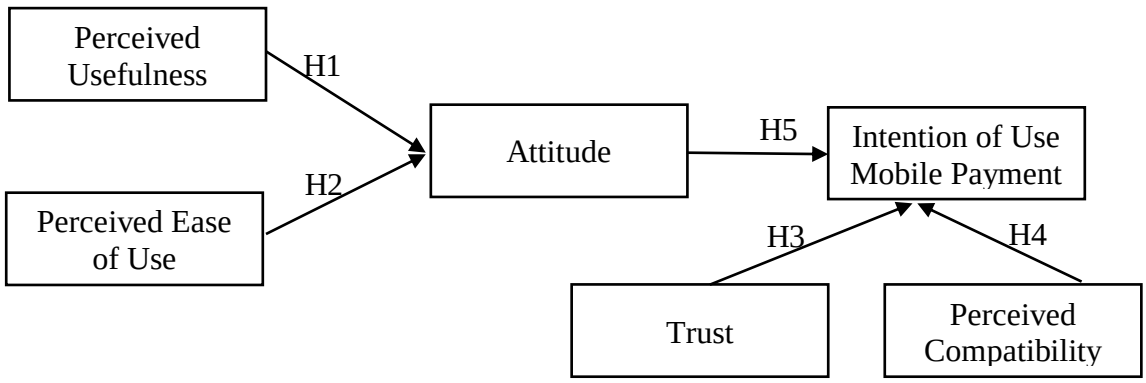

Figure 2: Conceptual Framework Model on TAM adoption

Overall, this model was established to figure out the factors affecting consumers' attitudes and intentions to adopt and utilize existing mobile applications for online payment by combining TAM model (Perceived Usefulness & Perceived Ease of Use) and external variables (Trust & Perceived Compatibility) that have a positive influence on the consumers' attitudes and intentions to adapt with mobile payment technology.

2.4 Summary of Research Hypotheses

In accordance with the developed conceptual model, the hypotheses were specifically formulated for this research as follows:

- H_1: Perceived usefulness has a positive influence on his/her attitudes toward an intention to adopt ABA's Mobile Application.
- H_2: Perceived ease of use has a positive influence on his/her attitudes toward an intention to adopt ABA's Mobile Application.
- H_3: Consumer's trust has a positive influence on his/her intention to adopt mobile payment system.
- H_4: Perceived compatibility has a positive influence on his/her intention to adopt mobile payment system.
- H_5: Attitude has a positive influence on his/her intention to use mobile payment system.

3. Research Methodology

3.1 Research Design

This research study employed correlational study of quantitative approach since it involved analyzing relating variables using statistical analysis and then interpreting the result, requiring an explanation on the relationship among variables, and collecting the numerical data using instruments on the target groups that researcher desired with the requirement of answering the questions (Creswell, 2012). Additionally, the hypotheses of extended TAM model focused on the group of individuals who have had mobile devices (Smartphones) and internet connections to penetrate the mobile payment system. First and foremost, the researcher conducted exploratory research using correlational study for reviewing previously studied literatures and conceptualized the model to fit with mobile payment adoption. Second, the data collection focused on the population in Cambodia based on the number of users in the data from ABA Bank nationwide. The samples were selected based on the age categories from 18 years old to above 40 who have used the mobile payment app and been able to execute the online payment. Third, after the data was gathered from the samples, it was analyzed to find out the consumers' attitudes and intentions to adopt mobile payment, using SPSS.

3.2 Research Site

This study was conducted in Phnom Penh City by focusing on the consumers' attitudes toward the intention to adopt the mobile payment of ABA App. The site was selected because a large majority of the participants use mobile phone and get access to Internet.

3.3 Target Population and Sample

Sample size was determined by the population of ABA's mobile app users, accounting for approximately 307,100 (ABA, 2019). Hence, the sample size was determined by formulas, specifically established by Yamane (1967) for known proportions. The sample size was calculated with a desired sample size, population size of 307,100, precision level (e) of 7%, interval of 95%, and P = 5%. Henceforth, the sample size of 204 respondents was chosen for this particular study. Particularly, the researcher targeted samples addressed as students, households, business people, and staffs who had mobile devices and utilize ABA's mobile application. The researcher collected the data through survey questionnaires which were mainly distributed in Google Form format. The Google Form could generate and categorize the data which showcased clear results from desired samples.

Table 1: Summary of the Measurement Constructs

Constructs	Items	References
Perceived Usefulness	- Using ABA App would improve my performance in making payment. - Using ABA App would enhance my effectiveness in making payments. - Using ABA App would allow me to make payment more quickly (e.g. online shopping, ticket purchase…) - Overall, ABA app provides a useful mode of payment.	Bhattacherjee (2001) Daştan and Gürler (2016) Davis (1989) Schierz, Schilke and Wirtz (2010)
Perceived Ease of Use	- I think learning to use ABA app is easy. - Interaction with the tools in ABA app is flexible. - Interaction with the tools in ABA app is clear and understandable. - Overall, it is easy to interact with ABA app.	Daştan and Gürler (2016) Davis (1989) Schierz, Schilke and Wirtz (2010)
Trust	- The ABA app is trustworthy. - The ABA app is one that keeps promises and commitment. - I believe that ABA app is reliable for making payments online. - Overall, I trust the ABA app because it keeps my best interest in mind.	Pavlou (2003)
Perceived Compatibility	- Using ABA App would enhance my effectiveness in making payments. - Using ABA App would allow me to make payment more quickly (e.g. online shopping, ticket purchase…) - Overall, ABA app provides a useful mode of payment. - I would appreciate using mobile payment services of ABA App instead of alternative modes of payment (e.g., credit card, cash).	Moore and Benbasat (1991) Plouffe et al. (2001)

(Continued)

Table 1: Summary of the Measurement Constructs

Constructs	Items	References
Attitude	- Using mobile payment services of ABA App is a good idea. - Using mobile payment services of ABA App is beneficial. - Using mobile payment services of ABA App is wise. - Using mobile payment services ABA App is interesting.	Oh et al. (2003) van der Heijden (2003)
Behavioral Intention	- I Intend to use ABA App in paying for products whenever I buy. - I intend to use ABA App in paying for service whenever I use. - I intend to use ABA App in paying for product whenever I buy online. - I will strongly recommend others to use ABA App	Davis (1989) Gefen et al. (2003) Venkatesh and Davis (2000)

3.5 Data Collection

The primary data for this study focused on the responses from the selected respondents. Since this research was purely quantitative, 204 respondents requested to fill the questionnaire form (google form). The form was mainly distributed through social media platform (Facebook, Instagram, LinkedIn…) to those who have experienced in using digital payment of ABA's mobile application. The respondents were considered trusted sources who could give concrete and necessary responses which would be useful for data analysis.

3.6 Data Analysis Method

The data were analyzed after they had been collected. The data generated from Google form was input into SPSS for further analysis using descriptive statistics such as mean, frequency, percentage, and standard deviation to examine levels of agreement. Correlation of each variable, validity, and Linear Regression analysis were employed in the study using inferential statistics.

3.7 Reliability Test

Reliability is the extent to which an instrument will generally give the consistent outcomes on similar topics under similar circumstances and certain measurement of its precision (George, Ioana, & Adriana, 2013). One of the commonly used reliability estimators is Cronbach's alpha, introduced in 1951 by Cronbach as a generalized estimator established in 1931 by Kuder and Richardson (George, Ioana, & Adriana, 2013). The Cronbach's Alpha is portrayed as essential and persuasive statistics in research relating to the constructs and usage of the test (Cortina, 1993) to an extent that the research compiled with multiple-construct measurements is considerately a routine (Schmitt, 1996). The accepted value of Cronbach's alpha is 0.7; however, values above 0.6 are also accepted (Griethuijsen et al., 2015; Taber, 2018).

Table 2: Reliability Test of Cronbach's Alpha on Each Variable

Nº	Item	Cronbach's Alpha (n=30)	Cronbach's Alpha (n=204)
1.	Perceived Usefulness	0.815	0.795
2.	Perceived Ease of Use	0.833	0.861
3.	Perceived Trust	0.892	0.865
4.	Perceived Compatibility	0.749	0.834
5.	Attitude Towards Intention to Adopt	0.783	0.871
6.	Behavioral Intention	0.700	0.800

According to the Table 2, the Cronbach's Alpha of all constructs scored more than 0.7 in both pilot test (n=30) and the actual result (n=204), which was classified that the constructed variables and factors are reliable to be implemented in this research (Nunnally, 1994). Therefore, the constructs are good to be used to acquire the consumers' intention to adopt mobile payment system.

4. Data Findings and Discussion

4.1 Data Findings

4.1.1 Demographic Factors

The result illustrated that among the 204 respondents, female respondents accumulated to 57.3% higher than males, accounting for 43.7%. Additionally, the age gaps showed that the respondents' age between 21 to 30 years old has got the highest response at 74.3%, followed by the 20.9% of the age under 20 years old, while the remaining 4.4% at the ages between 31 to 40 years old and 0.5% at above 40 years of age. For their educational background, the result showed that approximately 70% respondents were undergraduates, followed by 29.6% of graduates and the rest were high school students and doctorate holders. Regarding employment status, the majority of respondents were company employee accounting for 45.6%, while 27.7% of them were currently unemployed. However, business owner and others were at 14.6% and 12.1%, respectively. Last but not least, the frequency of ABA usage showed that the users who use ABA app once a week were dominant at 68.9% compared to at least once a month at 16% and the others at 15.1%.

4.1.2 Analysis of Level of Agreement

Based on the research stated of evaluation criteria (Armstrong, 1987), the variable becomes essential when score is higher. They questionnaires of variables were conducted in five-point scale as follows:

- Strongly Agree ranges from 4.20 to 5.00
- Agree ranges from 3.40 to 4.19
- Neutral ranges from 2.60 to 3.39
- Disagree ranges from 1.80 to 2.59
- Strongly Disagree ranges from 1.00 to 1.79

As far as the result has shown in Table 3, 5 variables were stated as "Agree" while one variable which is perceived usefulness had the greatest result indicated the "Strongly Agree" Level.

Table 3: Level of Agreement

Nº	Variable	Min	Max	Mean	SD	Level of Agreement
1.	Perceived Usefulness	1.75	5.00	4.2770	0.61127	Strongly Agree
2.	Perceived Ease of Use	1.50	5.00	4.1213	0.62554	Agree
3.	Perceived Trust	2.25	5.00	3.9007	0.67613	Agree
4.	Perceived Compatibility	1.75	5.00	3.9743	0.66558	Agree
5.	Attitude	1.75	5.00	4.0208	0.64889	Agree
6.	Behavioral Intention	2.00	5.00	3.9130	0.67601	Agree

**Note: Neutral: 2.60 – 3.39, Agree: 3.40 – 4.19, Strongly Agree: 4.20 – 5.00*

4.1.3 Correlation Analysis

Correlation Analysis was used to test correlation level and validity among all the six constructs. According to Pearson (1926), the correlation's values range between –1 to +1, meaning that the closer of number in each variable reaching nearly +1, the stronger the correlations.

Table 4: Pearson Correlation Matrix

Nº		1	2	3	4	5	6
1.	Perceived Usefulness	1					
2.	Perceived Ease of Use	0.666**	1				
3.	Perceived Trust	0.534**	0.657**	1			
4.	Perceived Compatibility	0.537**	0.577**	0.603**	1		
5.	Attitude	0.625**	0.638**	0.626**	0.733**	1	
6.	Behavioral Intention	0.497**	0.544**	0.572**	0.707**	0.656**	1

***Correlation is significant at the 0.01 level (2–tailed)*

Table 4 illustrates that all the variables are significantly correlated at the significant level of 0.01 (2-tailed). The results also showed the favorable and positive correlations between variables with the lowest of 0.497 of perceived usefulness towards behavioral intention and highest of 0.733 of perceived compatibility with attitudes.

4.1.4 Regression Analysis

F-test was applied and p-value showed whether or not it was significant to reject null hypothesis. If the p-value is less than sufficient level, the regression model fits with the data than the model that has no independent variable. According to Thomas, Bayarri and Berger (2001), when p-value is between 0 and 0.05, the null hypothesis is rejected; Otherwise, it is true.

4.1.5 Analysis of the Variance

Table 5: ANOVA

Model	Sum of Square	df	Mean Square	*F*	Sig.
Regression	51.792	5	10.358	50.053	0.000**
Residual	40.976	198	0.207		
Total	92.768	203			

***. Correlation is significant at the 0.01 level (2–tailed)*

Table 5 showed that null hypothesis was rejected because the p-value of F-test was 0.000 less than 0.05. There is evidence that at least one of the independent variables influencing Intention to use mobile payment (dependent variable).

4.1.6 First Block of Regression Analysis

Table 6 showed the multiple regression analysis between perceived usefulness and perceived ease of use as independent variables and attitude as a dependent variable. As the significance level was 0.000 less than 0.05, the result illustrated that perceived usefulness and perceived ease of use had an impact on attitude at with β = 0.359 and β = 0.399 respectively.

Table 6: Trust and Perceived Compatibility towards the Attitude to use Mobile Payment

Model	Unstandardized Coefficients		Unstandardized Coefficients	*t*-value	*p*-value
	Regression Coefficient	Standard Error	Beta		
Perceived Usefulness	0.381	0.072	.359	5.260	.000
Perceived Ease of Use	0.414	0.071	.399	5.852	.000

Dependent Variable: Attitude

4.1.7 Second Block of Regression Analysis

Furthermore, Table 7 showed the multiple regression analysis between trust, perceived compatibility, and attitude as independent variables; and Intention to use mobile payment as a dependent variable. With the significance level 0.000 less than 0.05, the result showed that trust, compatibility, and attitude had a positive impact on the Intention to use mobile payment with β = 0.229, β = 0.569, and β = 0.656 respectively.

Table 7: Trust and Perceived Compatibility towards the Intention to Use ABA

Model	Unstandardized Coefficients		Unstandardized Coefficients	*t*-value	*p*-value
	Regression Coefficient	Standard Error	Beta		
Trust	0.229	0.060	0.229	3.783	0.000
Perceived Compatibility	0.578	0.061	0.569	9.406	0.000
Attitude	0.684	0.055	0.656	12.360	0.000

Dependent Variable: Intention to Use

4.2 Discussion

The Table 8 illustrated the summary result from the tested hypotheses in the regression analysis that indicated the supported results of all 5 hypotheses at significant levels as following:

Table 8: Hypotheses Result

	Hypotheses	Sig	Result
H1:	Perceived usefulness has a positive influence on his/her attitudes towards the adoption of ABA's Mobile Application.	0.000**	Supported
H2:	Perceived ease of use has a positive influence on his/her attitudes toward the adoption of ABA's Mobile Application.	0.000**	Supported
H3:	Consumer's trust has a positive influence on his/her intention to adopt mobile payment system.	0.000**	Supported
H4:	Perceived Compatibility has a positive influence on his/her intention to adopt mobile payment system.	0.000**	Supported
H5:	Attitudes has a positive influence on his/her intention to use mobile payment system.	0.000**	Supported

The researcher found out that TAM Model, which includes perceived usefulness and perceived ease of use, had a positive effect on Attitudes towards the adoption ABA app, which is consistently aligned with the previous research studies of Davis (1989); Venkatesh and Davis (1996); Bhattacherjee (2001); Schierz et al. (2010); Yang, H. dong and Yoo (2004). For this part, consumers actually thought that the app was functionally useful in terms of making effective payment. The researcher also found out that the app was convenient for users to use with its flexibility and understandability on the app. Hypothesis 3 (H3) showcased trust towards an intention to adopt ABA app and was significance and positive. This result also implied that trust played an essential role on online payment in mobile payment context because if the technology is not fully trusted, they will not use that technology to an extent over the concern of the loss. The result was actually consistent on the direct support of trust towards an intention to use a technology with previous research findings of Yan and Pan (2014), Gu et al. (2009), Lu et al. (2011), Mu and Lee (2017), Lee, Kang, and McKnight (2007), whose findings showcased a genuine positive and significance on trust in that the users' intentions were more likely driven by trust to adopt a particular mobile payment technology. Another important finding that determined the consumer's intention to adapt the technology was perceived compatibility towards the acceptance of particular technology that showcased the significant and positive effect on the intention to use the technology. As the result, the users' experiences on the App were considerately compatible for their purchasing routines and must frequently be highlighted to fit their lifestyles. This result was consistent with the previous findings of Tornatzsky and Klein, (1982), Mallat et al., (2006), Cooper and Zmud (1990), and Roger (1995) in which there is a direct positive influence of perceived compatibility towards intention to adopt a technology. However, there was a contradictory result of the study of e-commerce on the

impact of perceived compatibility in Malaysia (Hussin & Noor, 2005); ICT adoption of in rural area of Central Iran (Moghaddam & Khatoon-Abadi, 2013), and of E-government Adoption in ASEAN (Sang et al., 2010). What's more, the crucial finding that determined mobile payment adoption was attitude towards Intention to use the technology that positively had greater effect on intention to use the mobile payment, which was consistent to (Amoako-Gyampah and Salam, 2004; Daştan and Gürler, 2016; Schierz et al., 2010; Taylor and Todd, 1995; Cheng, Phou, & Phoung, 2018). As the result, users' attitudes were significantly substantial on the willingness to use the service and its beneficial factors that bring to them to positively adapt the mobile payment technology.

5. Conclusion and Recommendation

5.1 Conclusion

The establishment of this study is to identify and investigate the factors affecting the users' intention to adopt ABA mobile payment platform among Cambodians' ABA app users. This study is crucial for conducting and analyzing the case study on the mobile payment adoption because of the limitation of existing research within the field of FinTech, specifically focusing on mobile payment environment in Cambodia. The studies on this field using TAM model have not commonly been found in journals or research papers; therefore, there are still gaps in finding the authentic factors in Cambodia to drive the penetration of mobile payment service and limitations in adapting the existing literatures and models from global researchers, leading this study to use TAM model with two additional variables namely trust and compatibility. The findings showed that all the five hypotheses were supported; that is, perceived usefulness and perceived ease of use had an impact on attitude toward the adoption of mobile payment; and perceived compatibility, trust and attitude had the positive influence on the intention to use mobile payment of ABA App.

5.2 Implication for Academic and Financial Service Providers

The implication of this study will then shed the light for future research regarding the TAM model and the extended variables such as trust and perceived compatibility to be referred to as literature in the context of mobile payment in Cambodia. The study should help the marketers to promote the mobile payment adoption and policy-makers making informed decision based on established data to focus on increasing the usability, security and keep on improving the service and functionality to answer the needs of clients who have used the app and to attract more users that have not registered in the apps by showcasing its benefits to people.

5.3 Limitations and Further Research

This research only focused on the specific group of the samples who live in Phnom Penh city without including elders. In this sense, the results did not cover all aspects of samples. In addition, this study employed two extended variables such as trust and perceived compatibility on the analysis of Technology Acceptance Model. Therefore, other aspects of

essential variables were not covered in this study including risk, ubiquity, network externalities, etc. Furthermore, this study only focused on the adoption intention of ABA Bank mobile payment system which excluded mobile payment systems of other financial institutions. The study suggested that future researchers should cover all aspects of the samples nationwide and employed a qualitative approach on the insight of consumers attitude towards the intention to adopt mobile payment system in Cambodia.

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Consumers' Attitudes toward the Use of Debit Card of Commercial Banks in Cambodia

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ABSTRACT

This study aims to examine the factors that attract consumers to use debit card in Cambodia. The study examines three variables, extracted from the model namely; The Unified Theory of Acceptance and Use of Technology (UTAUT), consisting of effort expectancy, social influence and facilitating condition that would affect customer's attitude to use debit card in Cambodia. This study uses quantitative method, using survey questionnaire to address the research problem and objectives. The survey questionnaire was distributed through Google forms for the data collection in Phnom Penh city, Cambodia with the total sample size of 115 respondents who have experience in using debit card in Cambodia. Data analysis was conducted using descriptive statistics and regression. The results have revealed that effort expectancy is the most significant variable that influences consumer's attitude toward the use of debit card service in Cambodia, followed by social influence and facilitating condition at significant level of 0.05. The most influential variable accounts for 59.4% of the variation in attitude towards usage of debit cards. The debit card usage during shopping has increased drastically over the few years. The customers find it easy, secure, and more convenient in using debit card to make payments than using direct cash payment. Using debit card also reduces the burden of carrying huge amount of cash to every place. The underlying reasons for using debit cards among customers will help financial institutions to design and market the most desirable products for their customers.

Keywords: Debit card, Consumers, Attitudes, Behavior intention, Regression analysis, and UTAUT

1. Introduction

Banks are financial institutions and financial intermediaries which accept deposits and channel those deposits into lending activities which play a very important role in the economic growth and development of a country. The efficient payment systems through banks contribute to smooth functioning of the financial market (Qureshi et al., 2018). Nowadays, the information technology is widely developed. In order to reduce the risk of physically handling large amounts of cash, financial institutions have joined the usage of the Internet for money transactions, which include the applications of electronic fund transfers, Internet and mobile banking, credit cards and debit cards.

The advanced technology has resulted in the convenient cash management for people through the Internet without having to carry lots of cash and check books. At present, debit card has become the convenient mode of payments for many users. For instance, in Cambodia, the consumer base of plastic cardholders is increasing. The National Bank of Cambodia (2016, 2017) has shown that 2.5 million debit cards were issued up to December 2017, which recorded further growth in years ahead. This statistic exhibits a growth of plastic card users within a short period of time.

However, there has not yet been a study on this issue in the Cambodian context, while there are only a few studies on credit cards. This has necessitated this current study on the use of debit cards in Cambodia to fill in the knowledge gap in the existing body of knowledge in the field. Therefore, this study mainly aims to address this research gap by examining the factors that attract consumers to use debit card of commercial banks in Cambodia. In this regard, the study looked into three main factors such as Effort expectancy, Social influence, Facilitating condition based on the model namely; Unified Theory of Acceptance and Use of Technology (UTAUT). This research will be of significance to local and foreign consumers in making informed decision in using debit cards. The study can be of good use to the bank in creating effective strategies to better their product and service for their consumers' satisfaction. In addition, it is beneficial to students in the field of finance and banking in particular to broaden their understanding about this issue and to refer to it for their research. The study can serve as a starting point for some researchers who intend to further their study on debit service.

2. Literature Review

2.1 Definition of Debit Card

Ambati (2018) defines debit card as a plastic payment card that can be used instead of cash when making purchases; and debit card is a payment card that deducts money directly from a consumer's checking account to pay for a purchase (Fontinelle, 2020). A debit card is a payment card that lets you make secure and easy purchases online and in person (Tierney, 2020). Based on the above definition, debit card can also refer to the type of plastic money that makes the cardholder easy to pay for goods and services with certain safety.

2.2 Theoretical Background

2.2.1 The Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) was introduced and developed by Venkatesh et al. (2003). This theory is used to identify motivation and intention to use technology and actual user behavior. The UTAUT theory was developed through synthesis and an integration of eight previous adoption theories through empirical studies. It suggested four major constructs, performance expectancy, effort expectancy, social influence, and facilitating conditions that predict user behavioral intention to use a certain technology (Junadi & Sfenrianto, 2015).

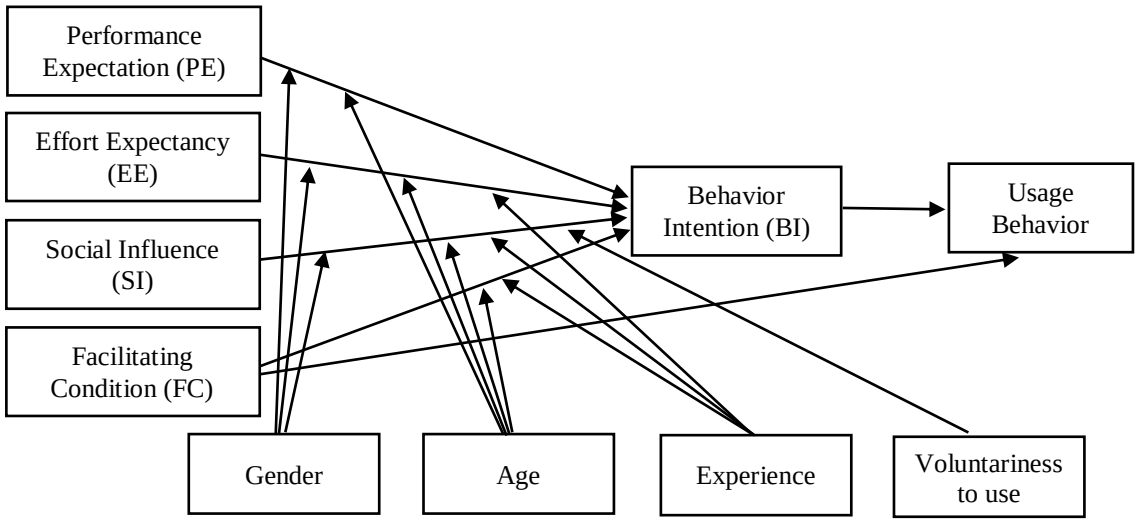

Figure 1: The Unified Theory of Acceptance and Use of Technology by Venkatesh et al. (2003)

2.3 Conceptual Framework

Some variables in the Theory of UTAUT are proposed in this research in order to find out the consumers' attitudes toward the use of debit card in Cambodia. The main variable of interest to the researcher in this study is Behavioral intention of consumers toward the use of debit card. Mowen & Minor (1998) refer behavioral intention as consumer intention to act in a certain way in order to obtain, dispose and use product or service.

2.3.1 Effort Expectancy and Hypothesis

Effort expectancy is defined as the level to which consumers perceive the new technology as easy to use (Venkatesh et al., 2003) and it is repeatedly recognized as a critical predictor of user's behavioral intention (Wong et al., 2015). In this context, effort expectancy refers to the perception of ease using the debit card service. This means that effort expectancy refers to the level of effort needed to use the system, whether it is simple or complicated. Prior studies suggest that effort expectancy played a crucial role in determining behavioral intention to use and actual use of technology. Therefore, due to the particular nature of mobile payment, which required a certain level of knowledge and skill, effort expectancy could play a crucial role in determining the customers' intention to use such technology

(Alalwan et al., 2016). The studies conducted by Thakur (2013) has shown that the extent to which an individual perceives the system as easy to use has been found to significantly affect intention to use mobile payment services. Hence, we proposed that:

H1: Effort Expectancy has an impact on consumer's behavioral intention on the use of debit card.

2.3.2 Social Influence and Hypothesis

Social influence was defined as the degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh et al., 2003). In this study, we defined social influence as the extent to which consumers perceives that influence of important others who encourage consumers to use debit card services. That importance others are referred to organization, families, couples or group friends. This also includes the social status level, innovativeness and education level. For example, individual's behavior intention in using a mobile payment could be affected by advertisement appeared in television, newspapers, radio and Internet. These advertising mediums were categorized as mass media influence. Furthermore, Taylor (2011) also testified that young adult's intention to use mobile payment was significantly affected by peers rather than family members based one survey conducted in the US Midwest universities. Moreover, social influence strongly influenced customers' behavioral intention especially in social networking payment compared with other mobile payment (Kucukemiroglu & Kara, 2015). Zhou et al. (2010) has stated that social influence referred to the customers' friends and family valued the use of mobile payment, and they used mobile payment influenced by their friends and family. Therefore, we proposed the following hypothesis.

H2: Social influence has an impact on consumer's behavioral intention on the use of debit card.

2.3.3 Facilitating Condition and Hypothesis

Facilitating condition is the level to which an individual believes that an organizational and technical infrastructure exists to support use of the system (Venkatesh et al., 2003). For the purpose of the study, facilitating condition is defined as the extent in which consumers believe that administrative and technical structures exist to support the use of debit card services. Facilitating conditions is the environment where the technology is used. It includes use of EFTPOS to accept the debit card and the available support. It includes the knowledge of consumer him/herself as well as the retail outlets that accept the debit card. Therefore, customers could be more motivated to use mobile payment if they have a certain level of support service and resource and perceive mobile payment as compatible with other technologies already used by them. Additionally, when customers had any doubts about how to use the mobile payment service, they would have a support line or an account manager to help them (Zhou et al., 2010). Hence, the researcher proposed that:

H3: Facilitating condition has an impact on consumer's behavior intention on the use of debit card.

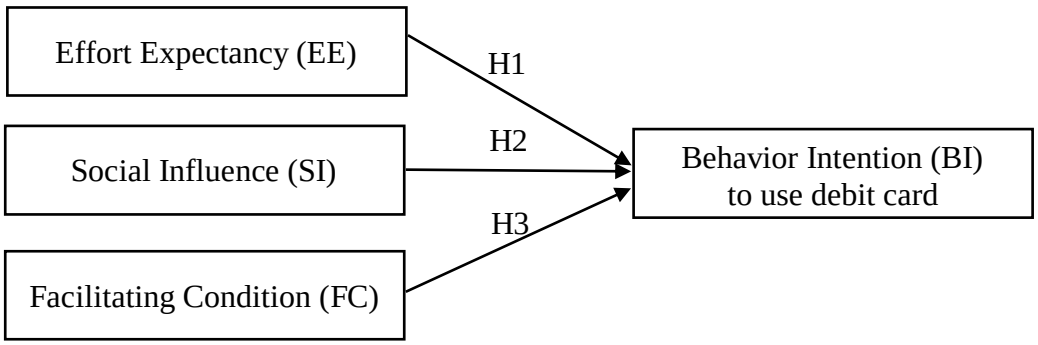

Figure 2: Conceptual model of consumer's behavior toward the use debit card

3. Methods

3.1 Research Design

This study employed a survey design with quantitative data to examine that factors affecting the use of the debit card in Cambodia. The research design employs descriptive statistics and quantitative survey to address the research problem and objectives.

3.2 Research Site

The research paper is designed with the intention to find out about Cambodian consumers' attitudes toward debit card usage and the factors inspiring them to use debit cards based on responses given by the consumers who live in Phnom Penh City of Cambodia only.

3.3 Population and Sample

The target population in this study was the Cambodian people who live in Phnom Penh City only whose ages range between 18-45 years old. The samples/participants contained people from both males and females with diverse occupations including undergraduates, graduates, and the staff members of a bank. Regarding the calculation of sample size, the researcher used the formula by Cochran (1963); and the selected sample size was 115. Since this research report is a statistical study with a descriptive purpose, the researcher used only probability sampling design; that is random sampling.

3.4 Research Tools

In order to collect the data, the researcher used a survey questionnaire, which is a series of predetermined set of questions that researcher create to ask adults (university students and employees) in Phnom Penh city about the factors that lead the consumer to use the debit card. The questionnaire is structured based on two main types of questions; that are, (1) questions on general information and (2) specific questions addressing the objectives of the research. The questionnaires were distributed personally by researcher to 115 respondents in Phnom Penh City which have experienced in using debit card. The questionnaires can be considered as the primary data whereas secondary data is getting from journal papers, and internet. After collecting all the questionnaires from the respondents, the researcher proceeded to data analysis.

Table 1: Summary of Construct Measurements

Variables	Description of measures	References
Effort Expectancy	- Easy to pay for the products and other service and feel relaxed not to carry cash all the time. - It secures for managing cash. - Get discount when buying product. - Using debit card saving my time.	(Zinman, 2009)
Social Influence	- Create good image in society. - Using debit card shows that I am a well-educated person. - Because all of my friends use debit card. - Because my parents/people that important to me influenced me to use debit card. - Using debit card shows that I am a high income earner.	(Simon et al., 2010)
Facilitating Condition	- Bank solved the problem about the debit card as fast as possible. - Solves the problem so fast when machine swallow card. - Availability of receipt - Availability of bank's booth	(Carbó-Valverde & Liñares-Zegarra, 2011)
Behavior Intention	- I have the intention to continue using debit card as a means of payment. - I will introduce it to other people to know. - I intend to continue to use debit card service in the future	(Tu et al., 2011)

According to evaluating criteria of Armstrong (1987), the higher the score, the more important the variable is. Five-point scales were applied to measure the factors which influence the customers in Phnom Penh, Cambodia to use debit card. For measuring factor basis satisfaction, a 5 point Likert-type scale has been used ranging from strongly disagree (1) to strongly agree (5). With five-point scales, the items with scores fall between the ranges of:

1) 4.20-5.00 are classified as Strongly Agree
2) 3.40- 4.19 are classified as Agree
3) 2.60-3.39 are classified as Neutral
4) 1.80-2.59 are classified as Disagree
5) 1.00-1.79 are classified as Strongly Disagree

3.5 Data Analysis

The researcher used the statistical study with descriptive and inferential statistics on the consumer's behavior toward the use of debit card. The study analyzed and interpreted the data quantitatively; the computation operation on the variable would use quantitative data analysis which was employed with reliability analysis, Pearson's correlation analysis, descriptive statistics, and simple regression analysis. In a quantitative study, the reliability of measurements could be seen via Cronbach's Alpha which is more than 0.7 indicates a high reliability (Nunnally, 1994). Moreover, Pearson's Correlation Analysis defines the association between each variable and its extent towards the intention of debit card. In summary, the

higher correlation score is translated into the higher intention by the debit cardholders. For descriptive statistics, in order to summarize the demographic profile of the respondents, general statistical formulas to be used are frequency, percentages. Mean and standard deviation of each variable are applied to analyze on the validity of the responds received. Last, simple regressions are the significant level of the 3 independent variables towards the dependent variable.

3.6 Result of the Instrument Test

The questionnaire was made based on three independent variables of theoretical framework and 1 dependent variable. In total, there are 30 questionnaires that need to be answered by the respondents. The questionnaire was distributed via online survey Google Form. The questionnaire was tested two times to check the reliability.

Table 2: The variables' reliability

N°	Research Variables	Number of Measurements	Pilot Cronbach's Alpha (n=23)
1.	Effort Expectancy (EE)	5	0.824
2.	Social Influence (SI)	6	0.838
3.	Facilitating Conditions (FC)	5	0.783
4.	Behavior Intention (BI)	3	0.734

Consequently, the 23 sets of questionnaires were applied for pilot test and the results of reliability test revealed that the reliability scores are consistently high in all variables which have Cronbach's alpha ranges from value of 0.734-0.838. Nunnally (1994) asserts that the Cronbach's Alpha which has the value more than 0.7 indicates a high reliability; and as the result of all scores for the constructs of all variables that used in this survey are above the 0.7 point. Hence, all the variables of this research are reliable.

4. Results and Discussions

4.1 Results

4.1.1 Findings on Respondents' Demographic information

The research finding began with the analysis of end-users' demographic information. Out of 115 respondents, the result indicated that 55 and 60 respondents were female and male, accounting for 48.5 and 52.2 percent respectively. The study has found that 25.2 percent of the users belong to 26-35 age group, while the highest number of users belong to 18-25 age group, accounting for 73 percent. Most of about 84.3 percent of the respondents belong to Bachelor's degree while very few about 5.2 percent belong to Master's degree. The research revealed that majority of respondents have monthly income that fall between 150$ to 300$ approximately 41.7 percent. Furthermore, the result has shown that the highest percent (37.4 percent) are students.

Table 3: Respondents' Profile

Demographic Profile		Frequency	Percentage
Gender	Female	55	47.8
	Male	60	52.2
Age	18-25 years old	84	73
	26-35 years old	29	25.2
	36-45 year old	2	1.7
Marital Status	Single	95	82.6
	Married/Divorce	20	17.4
Educational Level	High School	12	10.4
	Bachelor	97	84.3
	Master Degree	6	5.2
Monthly Income	No Income	17	14.8
	150-300	48	41.7
	300-450	19	16.5
	450-600	17	14.8
	Over 600$	14	12.1

4.1.2 Analysis of level of Agreement

Table 4: Level of Agreement

Variables	N	Min	Max	Mean	SD	Level of Agreement
EE	115	2.25	5.00	3.9348	0.67545	Agree
SI	115	1.00	5.00	3.4343	0.83260	Agree
FC	115	2.00	5.00	3.6370	0.58606	Agree
BI	115	3.00	5.00	3.9623	0.45833	Agree
Valid N	115					

Note: 2.60-3.39 as neutral, 3.40-4.19 as an agree, and 4.20-5.00 as strongly agree

The descriptive statistics table, this tabular column above shows the level of Agreement of all variables in this research study. In order to analyze the level of Agreement, the researcher have divided its level into 5 groups as strongly disagree, disagree, neutral, agree and strongly agree. Depending on the above results, all the values of Mean fall between 3.40 t0 4.19 which indicated an agreement. As a result, all the variables reached the level of agreement as "agree" in this study.

4.1.3 Correlation Analysis

Table 5: The Pearson's Correlation of research variables

	EE	SI	FC	BI
EE	1			
SI	0.483**	1		
FC	0.512**	0.678**	1	
BI	0.594**	0.456**	0.493**	1

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

Pearson's correlation analysis has been performed to analyze the relationships between two variables with a range from +1 (positive relationship) to -1 (negative relationship) (Pearson, 1926). If the value closer to+1 or -1, it indicates a stronger relationship between two variables. A positive sign suggests a positive correlation between two variables, meaning that an increase in one variable results in an increase in the other. On the other hand, the negative sign suggests negative collection, meaning that an increase in one variable results in a decrease in the other variable.

4.1.4 Linear Regression Analysis

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.639[a]	0.408	0.392	0.35738

Table 7: ANOVA of regression significance

Model		Sum of Squares	df	Mean Square	*F*	Sig.
1	Regression	9.771	3	3.257	25.501	0.000[b]
	Residual	14.177	111	0.128		
	Total	23.948	114			

The level of explanation of consumer's attitude towards debit card usage by effort expectancy, social influence, and facilitating condition is low as represented by the low value of coefficient of determination (R2). In addition, the research model reaches statistical significance (Sig. = 0.000) and has the R-square in this research was 0.408 which explained that independent variable had 40.8% of the influence toward the consumer's attitude towards debit card usage in Cambodia.

Table 8: Regression Analysis on Effort Expectancy

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.376	0.205		11.592	0.000
	EE	0.403	0.051	0.594	7.851	0.000

From the regression analysis, the standardized coefficient (β) between Effort Expectancy and behavioral intention is 0.594 with p-value of 0.00 which is significant at α equals to 0.05. Hence, the result supports the first hypothesis in that EE is expected to have greater extend of significantly influence on consumer's behavioral intention to use debit card.

Table 9: Regression Analysis on Social Influence

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.100	0.163		19.040	0.000
	SI	0.251	0.046	0.456	5.445	0.000

Meanwhile, the standardized coefficient (β) between Social Influence and behavioral intention is 0.456 with p-value of 0.000 which is significant at α equals to 0.05. It indicated that social influence also has a significant effect on the behavioral intention towards the use of debit card service. So, the second hypothesis is accepted.

Table 10: Regression Analysis on Facilitating Condition

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.560	0.236		10.859	0.000
	FC	0.385	0.064	0.493	6.022	0.000

In testing the last hypothesis (H3); the standardized coefficient (β) between Facilitating Condition (FC) and behavioral intention is 0.493 with p-value of 0.000 which is significant at α equals to 0.05. It showed that there is positive relationship between facilitating condition and behavioral intention. Thus, the result accepts the third hypothesis which is Facilitating condition have a significant effect on consumer's attitude toward debit card usage in Cambodia.

4.2 Discussion

Table 11: Result of Hypothesis Test

	Hypotheses	Sig.	Result
H1:	Effort Expectancy (EE) has an impact on behavior intention on the use of debit card.	0.000**	Supported
H2:	Social influence (SI) has an impact on behavior intention on the use of debit card.	0.000**	Supported
H3:	Facilitating condition (FC) has an impact on behavior intention. on the use of debit card.	0.000**	Supported

First of all, the results from the study indicated that there is a significant positive relationship between Effort Expectancy and Behavioral Intention on consumer's attitude

toward the use of debit card in Cambodia, which means that effort expectancy has an impact on behavioral intention toward use of debit card. Most of respondents agreed that debit card is a type of card which is secure and easy to use to pay for all purchasing transactions which include both goods and services as proposed in the studies conduct by Wong et al. (2015) and Thakur (2013). Secondly, from the finding suggests that there is a significant positive relationship between Social Influence and Behavioral Intention toward debit card usage in Cambodia. Furthermore, social influence positively contributes ($\beta = 0.456$) to respondents' usage of the debit card. That is, the encouragement from other users has an impact on participants' behavioral intention to use the debit card services. The standard coefficient (β) implies that social influence has a significant effect on behavioral intention of debit card holders in the Cambodian society. The majority of the respondents in this study have agreed that people who are important to them are recommended and they are also expected to use debit card service to assist their transaction method as stated in Zhou et al. (2010), Taylor (2011) and Kucukemiroglu & Kara (2015). Lastly, as the result of above analysis, it showed that there is a positive relationship between facilitating condition and behavior intention toward debit card usage in Cambodia. It also indicated that there is a significant effect of facilitating condition on debit card holder and even facilitating condition has a small effect on behavioral intention than other variables. Thus, it is deemed necessary to provide required resources, information and continuous support to encourage users. As stated in the study of Zhou et al. (2010), the respondents have agreed that the availability of bank's booth also boosts the behavioral intention of the debit card users as it is the factor facilitating the bank transaction.

5. Conclusion and Recommendations

5.1 Conclusion

The key objective of this research is to identify the factors that influence behavioral intention of consumers toward debit card usage in Cambodia. From demographic information, it shows that a large proportion of the sample belongs to the young group of people. Most of them are males who have monthly salary between 150$ to 300$ and are students which belong to 18-25 age group. The majority of respondents have agreed that they choose to use debit card because of its security, convenience and fast payment method. The Correlation of constructs has shown that each variable in this study model has a strong correlation with each other, ranging from 0.456** to 0.678** closed to 1. Moreover, the result of linear regression of three proposed variables are statistically significant at the p-value= 0.000 smaller than 0.005. The analysis of the participants' responses using regression model revealed that about 59.4% of the variation in the attitude towards usage debit cards is explained by effort expectancy. Of all the factors, the most significant element that could influence the consumer's behavioral intention to use debit card is effort expectancy, followed by facilitating condition and social influence. In conclusion, the study confirmed positive relationships between effort expectancy, social influence, facilitating conditions and behavioral intention toward the use of debit card.

5.2 Implications for Finance and Banking

Previously, there was no existing research made in terms of identifying the behavioral intention of consumers toward debit card usage in the Cambodia context. Thus, this research could help the Cambodian banks and debit card issuers to strategize their plan in regard to debit card programs. They could use this research to improve and maintain their strategies on how to attract more consumers for their own company by understanding what he problem that consumers have faces is in order to fulfil their own demands. The underlying reasons for consumers to use debit cards will help financial institutions to design and market the most desirable products for their customers. In addition, understanding the main factors that affect consumer's behavioural intention to use debit card is necessary for effective planning, better and successful future development.

5.3 Limitations and Recommendation for Future Research

The samples cannot represent the entire population in Cambodia for two reasons. First, the sample size of this research study is relatively small and the scope of study area is only in Phnom Penh City. Thus, in order to gain a result that is more precise and representative; the research can be enlarged in future study. Second, the age group and occupation group are too concentrated. Most of respondents are students aged between 18 and 25. Thus, different groups of people with various types of occupations should be considered to reflect upon their preferences in the future research.

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Consumers' Attitudes toward Intention to Adopt Mobile Banking: The Adoption of Diffusion of Innovation Theory on the Study of ABA Mobile Bank

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ABSTRACT

Upon the arrival and radical development of technology in Cambodia, mobile banking has provided its users with the remote gateway to conduct financial transactions and control through electronic devices. This qualitative research aims to investigate the five factors inspiring consumers' attitudes toward the intention to adopt mobile banking in Cambodia and their relationship with the attitudes. The factors are derived from the five innovation attributes, namely relative advantage, compatibility, complexity, trialability, and observability whose natures are determined by Diffusion of Innovation Theory. Regardless of age or status, ABA Mobile Bank users were randomly selected for participation in responding to the questionnaire administered through Google form. The data were analyzed using descriptive statistics, regression and correlation. The results have indicated that the five innovation attributes are the key drivers of financial users' attitudes toward the mobile banking application which is the important antecedent that formulates the intentional adoption as justified in Theory of Planned Behavior by Ajzen (1991). This encourages the banks to further examine the other features adding more values to their application in order to have its users' interest and attention by making mobile banking more advantageous, comprehensive, captivating, reliable, and ubiquitous. The consideration for future research is to more diversify the sample, extend the model, and broaden the area of their research.

Keywords: Consumers' attitudes, Traditional banking, Mobile banking, Diffusion of Innovation Theory (DIT)

1. Introduction

Global manufacturing has transformation and development throughout the period. Centuries ago, the production of food, clothing, houses, and weaponry were processed by labor force of human and animals. By the onset of the 17th century, manufacturing started drastic changes, initially presenting the birth of Industry 1.0 (Crandall, 2017). Factories' success in production was aided by water and stream machine as well as heavy workforce during the first industrial revolution. The following industrial stage allowed the complex operation through machines powered by electrical generation assisted by large scale production and labor separation. During the industry 3.0, production process equipped with electronics and information technology became more complex and automated (Umachandran et al., 2019).

Industry 4.0, publicly announced in 2011 by a representative group from different fields, is an initiative to enhance the German competitiveness in the manufacturing industry. This innovative idea has been adopted in its High-Tech Strategy since 2020 (Luenendonk, 2017). The concept of the fourth industrial revolution is influenced by five factors, namely Big Data, Smart Factory, Cyber Physical Systems, Internet of Things (IoT), and Interoperability (ARCWEB, 2016). The fourth industrial revolution impacts every industry in any scale that comes in its way, and the financial industry gets the crucial impacts, specifically on the financial functions of industries, business, and individuals. It assists the accessibility and sharing of real-time financial data through devices (Cholewinski, 2019). This has driven the birth of Financial Technology, short for FINTECH, having changed the financial industry by tackling traditional banking to better transformation and upgrading (Chen et al., 2017).

The first version of mobile banking is Short Messaging Service (SMS) banking. Upon the invention of smartphone, this service was transformed into another version known as mobile banking which can be either used on the web or installed on the compatible smartphone device (Pandey, 2019). According to the Asian Development Bank (ADB) Report in 2017, Cambodia possessed the highest mobile connectivity equivalent to 173% of its populations, which means that one person owns more than own mobile phone, yet only 13% of the population accessed mobile banking (Lago, 2019). Importantly, industry 4.0 is promoted in the Cambodian financial sector to make banking system more confident, efficient, strong, and competitive (Hin, 2019). The concept of creating mobile banking is counted as one of the innovations leading to the next level of life.

Founded in 1996, Advanced Bank of Asia (ABA) has become one of the Cambodia's leading private financial institution, subsidized by National Bank of Canada holding 90% of bank's shares (ABA Bank, 2019). Since 2015, ABA Bank has introduced its mobile bank, which is the first mobile banking application, compatible with both IOS and Android (Breen, 2020). This mobile banking involves account check, transfer, bill payments without commission, virtual card issuance, deposit/saving account opening and other free services (ABA Bank, 2019).

1.1 Problem Statement

The deployment of mobile banking through "always-on-bank" technology should be recognized for quality service, comprehensive functions, and assistance for customer's banking transaction without complication, insecurity, and frequent visit to branches. It better helps the consumers manage their financial performance and control with warning, spending trends, saving programs, and calculators of various kinds (McClintock, 2018). There have been research papers, discovering the inspiring factors leading to the adoption of mobile banking by many researchers such as Al-Jabri and Sohail (2012), Yunus (2014), and Lin (2010), which were, however, undertaken in different contexts and technology acceptance theories.

In Cambodia, the factors behind consumers' attitude and intention of mobile banking adoption remain vague and questionable as there is scarcity in papers to specifically observe and claim the factors taking place behind financial users' attitudes. Therefore, it is high time that researcher examined the key factors that affect consumers' attitude resulting in acceptance of the mobile banking, using ABA Mobile Bank as the case for this study based on the ground of diffusion of innovation theory developed by Roger (1983).

1.2 Research Objective

This study aims to identify the five factors, namely relative advantage, compatibility, complexity, trialability, observability that inspire consumers' attitudes toward the intention of mobile banking adoption in Cambodia.

1.3 Research Questions

To accomplish this objective, the researcher has addressed the following questions.

- What are the DIT factors that inspire customers' attitudes toward the intention to adopt ABA Mobile bank in Cambodia?
- What is the relationship between the DIT factors and consumer's attitudes toward the intention of mobile banking adoption after using ABA Mobile Bank?

2 Literature Review

2.1 Mobile Banking

Mobile Banking is the emerging digital delivery of channel offered by banks as the provision of information and services to its customers (Mari and Minna, 2002). It is a service of full access to the details and transaction of personal bank account, through the bank website or mobile application (Al-Jabri & Sohail, 2012). It is applicable for both non-financial transaction (cheque book request, mini statement or balance inquiry) and financial transaction (bill payment, fund transfer, mobile recharge, merchant payment, etc. (Dash et al., 2014). Such an application provides flexibility and practicality, and ease of transaction Yunus (2014).

2.2 Diffusion of Innovation and Theory of Planned Behavior

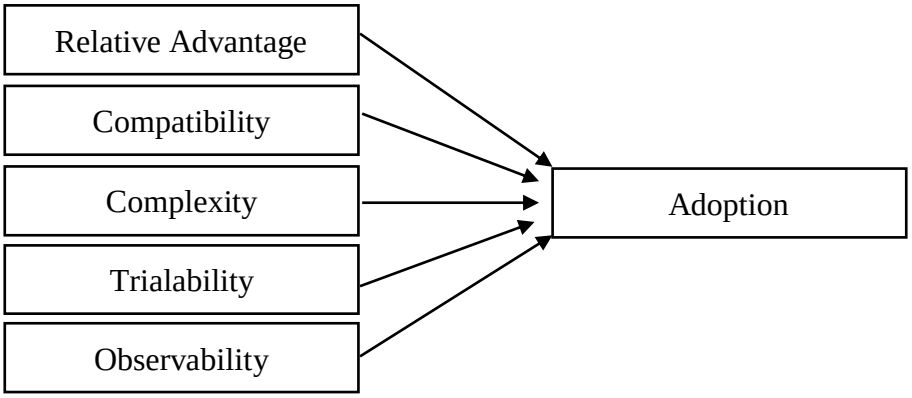

Figure 1: Diffusion of Innovation Theory (Roger, 1983)

In order to alleviate individuals' uncertainty regarding the innovation or technology, diffusion of innovation theories developed by Roger (1983) is applicable to shed light on what factors driving consumers' attitudes toward the intention to adopt mobile banking. Relative advantage is explained by to what extend the adopters perceived an innovation as better than ideas it has replaced while compatibility refer to how consistent the innovation is perceived to be with the existing value, experiences, and needs of the users. Complexity indicates how difficult the innovation is to comprehend and use as believed by its adopters, and trialability refers to how experimental an innovation is during the trial period. Observability can be indicative of how apparent the result of an innovation is to its users (Roger, 1983).

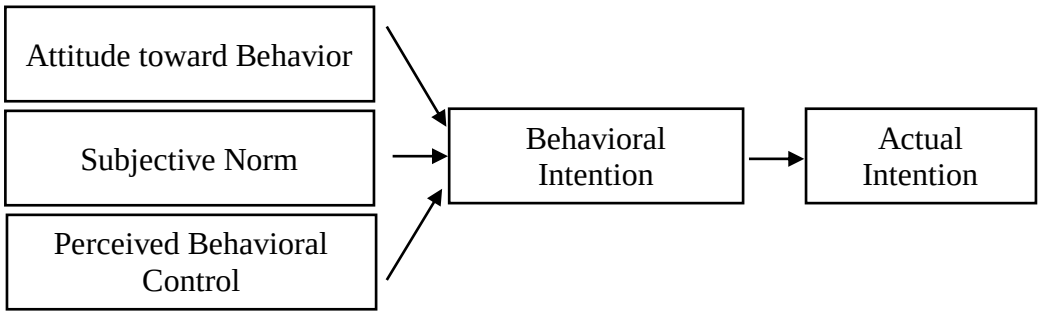

Figure 2: Theory of Planned Behavior (Ajzen, 1991)

For a profound grasp of the term "attitude", the theory of planned behavior is introduced to explain complexities of human behavior and deal with antecedents of attitudes, which determines the intentions and actions toward something (Ajzen, 1991). In addition, attitude is related to behavioral intention of individuals for the fact that they form their intentions to do a specific behavior in the direction of which they have a positive result. Behavioral intention is an important function of three independent antecedents, such as consumers' attitude, subjective norm, and perceived behavioral control (Mamman et al., 2016).

2.3 Previous Literature

The work of Al-Jabri and Sohail (2012) illustrates that the adoption of mobile banking in Saudi Arabia is positively impacted by relative advantage, compatibility, and observability. Despite this, complexity and trialability have an insignificant effect on mobile banking adoption. However, in India, the study has argued that the customers' attitudes in using mobile banking were significantly impacted by only trialability and compatibility (Dash et al., 2014).

In Indonesia, customers' attitudes are directly and positively influenced by relative advantage, compatibility and trialability, whereas Nevertheless, relative advantage and partial trialability have a direct effect on customers' intention to use whereas compatibility has no significance (Yunus, 2014). In Taiwan context, Lin (2010) has asserted that perceived relative advantage and ease of use are observed to have significant effects of consumers' attitudes, and customer's perception about the compatibility of mobile banking also appears to be the indicator.

In Thailand, Chaipoopirutana et al. (2009) have proved that compatibility, relative advantages, and trialability are the only factors, which have a positive relationship with customers' intentions of using internet banking, and compatibility is perceived to have the highest correlation while the rest are moderate. Once again in India, compatibility, relative advantage, and trialability are on a moderate level of relating to consumers' adoption of internet banking. However, only complexity negatively connects to internet banking use in both Indian and Thailand (Chaipoopirutana et al., 2009).

Discovered in Kuwait by Hosseini et al. (2015), both perceived usefulness and compatibility are discovered to be the most effective factors influencing attitude and intention to the use of mobile banking. Moreover, Nor et al. (2010), Malaysian researchers, found that relative advantage, compatibility, and trialability create positive attitudes toward internet banking. Complexity is substituted by the ease of use inasmuch as the construct of complexity has a contradiction to the ease of use. Consistently, other Malaysian researchers, Mutahar et al. (2017), have claimed that compatibility and trialability have a positive association in improving consumers' perceptions of the ease of use and usefulness of mobile banking.

2.4 Conceptual framework

Theory by Roger (1983) followed by the partial presence of Theory of Planned Behavior (Ajzen, 1991) is the modification for application in this study. As the nature of mobile banking is recognized as an innovation in Cambodia the theory is used to test the dimension of the antecedent of attitudinal belief toward an innovation that response to intentional adoption of the mobile banking application. The research model is proposed in this study as shown in Figure 3.

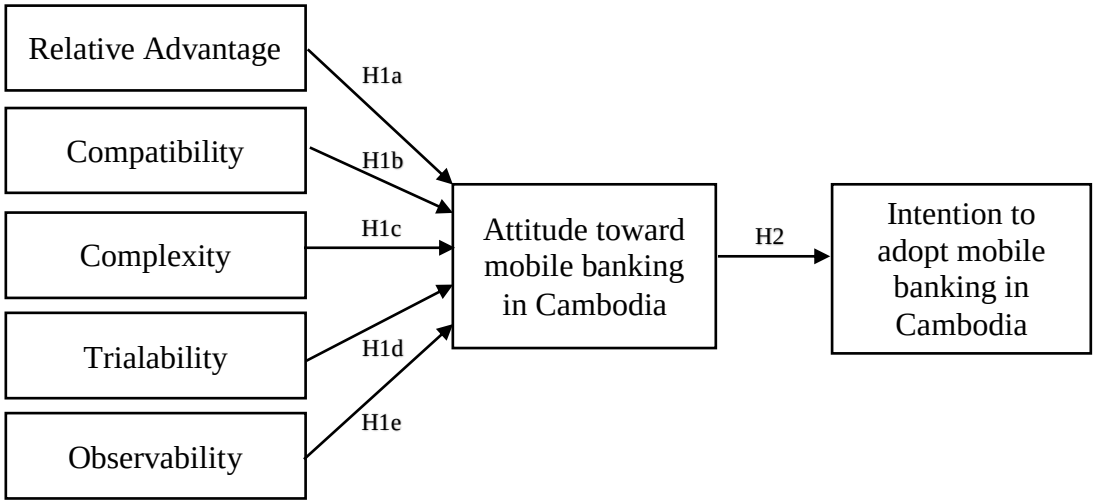

Figure 3: The Adoption of Diffusion of Innovation Theory on ABA Mobile Bank

Based on the proposed model, there are six hypotheses as following.

H1a: Relative Advantage has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption.

H1b: Compatibility has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption.

H1c: Complexity has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption.

H1d: Trialability has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption.

H1e: Observability has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption.

H2: Consumer's attitudes have a positive impact on the intention to adopt mobile banking.

3 Methods

3.1 Research Design

This research employed quantitative approach with the correlational design as this paper aims to examine the five factors derived from innovation attributes by Roger (1983), and their connection and influence on attitudes and adopting intention would be studied. This paper also involved the development of hypotheses. The nature of correlational research explains the association between or among variables and the change in one variable that affect the change in other variables (Creswell, 2012). It initially started with an exploration of previous related literature to identify the issues and obtain in-depth understanding relevant to mobile banking from various contexts, then contextualizing them into Cambodia, based on the empirical data collected from the research participants in Cambodia.

3.2 Research Site

The research was conducted in Cambodia as a whole. Since the instrument was designed on online platform, it was made available and promoted through social networking site in which all Cambodia nationals could have access, but selected judgmentally by the researcher.

3.3 Population and Sample

ABA Mobile Bank serves mobile banking to approximately 551,200 users according to ABA Corporate Profile for the year-end 2019 (ABA Bank, 2019). A simplified formula $n = \frac{N}{1+N(e^2)}$ is supplied by Yamane (1967) to calculate sample size (Israel, 1992). The calculation of sample size, with a confidence level of around 92% (e=0.077) determined 168 users as sample units for this study.

3.4 Respondent profile

The demographic information of 168 respondents is illustrated in gender, age, education, and income as following.

Table 1: Demographic Information of Respondents

Item	Category (N=168)	Frequency	Percentage
Gender	Male	57	33.9
	Female	111	66.1
Age	18-25	145	86.3
	26-30	17	10.1
	31-35	3	1.8
	36-40	3	1.8
	More than 40	0	0
Monthly Income	Under $200	22	13.1
	$200-$400	50	29.8
	$400-$600	25	14.9
	$600-$800	11	6.5
	More than $800	6	3.6
	Prefer not to say	54	32.1
Occupation	Student	94	56
	Self-employed	14	8.3
	Employed	57	33.9
	Other	3	1.8

3.5 Research Instrument

The online questionnaire designated in English version was administered through Google Form as amid COVID-19 pandemic, the researcher had to practice social distancing for prevention. The five innovation attributes were used as the inspiring factors to measure consumers' attitudes toward adopting intention of mobile banking. Embedded with Likert Scale, the measurement questions were adopted and adjusted from the work of Al-Jabri and Sohail (2012), Lin (2010), Shi (2009), Awwad and Ghadi (2009), Salahuddin et al., (2017) and Akturan and Tezcan (2012). Below table reported the content validity of the measurement item picked from a validated scale in prior research from a different context.

Table 2: Measurement Constructs

Construct	Operational Definition	Reported Alpha	Sources
RA	How Mobile Banking appears in increased efficiency, economic benefit, and enhanced status	0.908	Al-Jabri and Sohail, (2012)
CP	How consistent Mobile Banking is with users' existing value, belief, knowledge and past experiences	0.883	Al-Jabri and Sohail, (2012)
CX	How hard Mobile Banking appears to the consumers in understanding the usage	0.843	Al-Jabri and Sohail, (2012) (Salahuddin et al., 2017)
TR	How beneficial Mobile Banking is during the trial period.	0.925	Al-Jabri and Sohail, (2012)
OS	How visible the Mobile Banking is to the consumers	0.783	Al-Jabri and Sohail, (2012) Salahuddin et al., (2017)
ATT	How consumers' responses of likes and dislike are corresponded by the attitude objects	0.764	Dash et al., (2014) Yunus, (2014)
INT	How consumers tend to consider the adoption of mobile banking	0.782	Salahuddin et al., (2017) Yunus, (2014)

3.6 Data Collection

The respondents could access the questionnaires simply with just one-click link sent and shared to them. The simple random method was used by posting the link on the site of social networking which required their purpose and willingness to complete. However, the researcher would employ judgmental sampling by selecting who is believed to be credible in answering such as researcher's closers known to be regular users, and experienced in using mobile banking for a long time. Upon the collection completion, the Google Form would automatically record every single data collected from the respondents' answers, and the raw data would be saved in excel files to be imported into Statistical Package for the Social Sciences (SPSS) for further computation and analysis.

3.7 Data Analysis

The SPSS is the software product of the IBM SPSS Statistics 21. Practically, the data set stored in the Google Form was exported as an excel file (*.xlsx) and imported into the

SPSS for running the descriptive statistics and regression analysis. The analysis began with producing the demographic information of the respondents, then investigating the five inspiring factors and their connection with the attitudes and intention by analyzing the correlation analysis and also regression analysis in order respond to the research question and hypothesis as well as fulfilling the research objective.

3.8 Ethical Consideration

Voluntary participation and informed consent are obtained prior to the study (Saunders et al., 2012). The researcher is in no position to force or pressure the participants to answer the questions. Furthermore, there must be confidentiality of the data from participants having to be ensured (Bryman & Bell, 2007). The research did not leak the information as it can deteriorate their secrecy. Moreover, the researcher is ready to justifys management decisions when the outcome is not supportive (Kumar, 2014). Lastly, the researcher also cited previous researcher's work to give credit to the previous researchers.

3.9 Reliability Test

The researcher piloted this study among 20 out of the targeted 168 respondents. The acceptable alpha range between 0.7 and 0.9 and above this is the best (Nunnally & Bernstein, 1994). The agreement level based on the mid-point scale is determined on criteria by Armstrong, (1987).

Table 3: Reliability Test

Variable	No. of Item	Mean	SD	Alpha	Agreement Level
RA	3	3.90	0.795	0.810	Agree
CP	3	4.23	0.758	0.771	Strongly Agree
CX	3	3.95	0.826	0.852	Agree
TR	3	3.48	0.806	0.881	Agree
OS	3	3.82	0.607	0.772	Agree
ATT	3	4.00	0.725	0.872	Agree
INT	3	3.85	0.820	0.830	Agree

4 Results and Discussions

4.1 Analysis of the Results

4.1.1 Level of Agreement

The result showed that all variables are agreed, and this has fulfilled the objective and responded to the research question, concerning the identification of the DIT factors that inspire consumers' attitudes toward the intention to adopt ABA Mobile Bank.

Table 4: Level of Agreement

Variable	Min	Max	Mean	SD	Level of Agreement
RA	1	5	3.82	0.825	Agree
CP	1	5	3.86	0.860	Agree
CX	1	5	3.77	0.853	Agree
TR	1	5	3.44	0.763	Agree
OS	1	5	3.71	0.779	Agree
Total	1	5	3.72	0.816	Agree
ATT	1	5	3.82	0.851	Agree
INT	1	5	3.65	0.853	Agree

4.1.2 Correlation Analysis

According to Pearson (1926), the closer r value is to +1, the more positive relationship between two variables is. Conversely, the closeness to -1 indicates the negative relationship while zero means no relationship. Thus, there were correlations between all variable listed in the above table as the scores were superscripted with the two-star label which indicated a high correlation of all the variables.

Table 5: Pearson Correlation Matrix

	RA	CP	CX	TR	OS	ATT	INT
RA	1						
CP	0.757**	1					
CX	0.779**	0.744**	1				
TR	0.673**	0.637**	0.739**	1			
OS	0.737**	0.692**	0.806**	0.701**	1		
ATT	0.761**	0.763**	0.795**	0.726**	0.770**	1	
INT	0.730**	0.745**	0.784**	0.733**	0.713**	0.803**	1

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

4.1.3 Multiple Linear Regression Analysis

This statistic indicated that the overall correlation of all DIT attributes inspiring consumers' attitudes were determined by R = 0.864, and the combination of these five inspiring factors made 73.9% of consumers' attitude as witnessed by adjusted R square of 0.739. and Sig. value below 0.05 which indicated the significance of each DIT variable to impact consumers' attitudes.

Table 6: Result of First Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
	B	Std. Error	Beta		
(Constant)	0.031	0.180		0.174	0.862
RA	0.153	0.074	0.148	2.057	0.041
CP	0.247	0.065	0.249	3.771	0.000
CX	0.199	0.081	0.199	2.445	0.016
TR	0.200	0.069	0.179	2.891	0.004
OS	0.220	0.079	0.202	2.802	0.006

Dependent variable: Attitude
R = 0.864, R square = 0.746, Adjusted R square = 0.739

The result has found a correlation between consumers' attitudes and intention to adopt mobile banking based on Sig. value of 0.000, and adjusted R square of 0.642 suggested that intention to adopt is 64.2% made by consumers' attitudes Therefore, consumers' attitudes positively impact the intention to adopt mobile banking in Cambodia.

Table 7: Result of Second Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
	B	Std. Error	Beta		
(Constant)	0.576	0.181		3.173	0.002
ATT	0.805	0.046	0.803	17.347	0.000

Dependent variable: Intention
R = 0.803, R square = 0.644, Adjusted R square = 0.642

4.2 Discussion

Table 8: Result of Hypothesis

Hypothesis			Sig.	Result
The DIT Factors toward Consumers' Attitudes				
RA	H1a	Relative Advantage has a positive impact on Cambodia consumers' intention toward mobile banking adoption.	0.041	Supported
CP	H1b	Compatibility has a positive impact on Cambodia consumers' intention toward mobile banking adoption.	0.000	Supported
CX	H1c	Complexity has a positive impact on Cambodia consumers' intention toward mobile banking adoption.	0.016	Supported
TR	H1d	Trialability has a positive impact on Cambodia consumers' intention toward mobile banking adoption.	0.004	Supported
OS	H1e	Observability has a positive impact on Cambodia consumers' intention toward mobile banking adoption.	0.006	Supported
Consumers' Attitudes toward Intention to ABA Mobile Bank				
INT	H2	Consumer's attitudes has a positive impact on intention to adopt mobile banking.	0.000	Supported

Hypothesis H1a, relative advantage has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption, is found supportable of H1a ($\alpha \leq 0.05$). This outcome is contradicting to supporting literature of Dash et al., (2014) and Mutahar et al., (2017). Nevertheless, this result is consistent to the research of Al-Jabri and Sohail (2012), Yunus (2014), Lin (2010), Chaipoopirutana et al. (2009), Hosseini et al. (2015), and Nor et al., (2010), claiming relative advantage positively impacts mobile banking adoption and it is more like perceived usefulness in TAM that people find it useful and convenient to manage their finance efficiently and effectively. Therefore, it can be implied that the consumers do perceive the convenience, less time-consuming, efficiency and effectiveness of conducting transaction via mobile banking.

Compatibility is discovered to be most significant factor inspiring consumers' attitudes to the adoption of mobile banking ($\alpha \leq 0.05$), and support H1b which is compatibility has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption. This support matches with past papers such as Al-Jabri and Sohail (2012), Dash et al. (2014), Yunus (2014), Lin (2010), Chaipoopirutana et al. (2009), Hosseini et al. (2015), Nor et al., (2010), and Mutahar et al. (2017). This result implies that the use of mobile banking application is well-compatible with their daily lifestyle, working, and preference in monitoring their finance.

Complexity is proven to the least effective factor that inspires the attitude of financial users toward mobile banking ($\alpha \leq 0.05$), therefore supporting H2c. This finding has demonstrated that complexity has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption, and it is opposite to prior literature of Al-Jabri and Sohail (2012), Dash et al. (2014), Yunus (2014), Chaipoopirutana et al. (2009), Hosseini et al., (2015) in which complexity is found insignificant to the adoption of mobile banking. However, in Cambodia context, users seem to react to the level of difficulty in using mobile banking, which requires certain technology literacy to take a grasp of its various functions, so it, with the result, can be inferred that Cambodia mobile banking adopters feel effortless in conducting banking transaction.

Trialability is evident to significantly impact consumers' attitudes toward mobile banking application ($\alpha \leq 0.05$), and it supports H1d hypothesizing that trialability has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption. This DIT attribute is also found as impacting by Dash et al. (2014), Yunus (2014), Chaipoopirutana et al. (2009), Nor et al., (2010), and Mutahar et al. (2017). The inference is that consumers have benefited from mobile banking application during the trial period and have recognized it as the opportunity to try out and learn the function before the regular use.

Last of all, observability, having a positive impact on consumers' attitudes toward mobile banking, is found supportive of H1e. Observability has a positive impact on Cambodian consumers' attitudes toward mobile banking adoption, proven by the result of $\alpha \leq 0.05$. It is also consistent with Al-Jabri and Sohail (2012) raising that it is the ability that mobile banking consumers spot the benefit as the transaction is accessible around the clock, accurate, and immediate.

This is an essential support for the significance of consumers' attitudes on an intention to adopt mobile banking, and it is proven by Table 13 resulting in ($\alpha \leq 0.05$) and supporting H2 voicing out that consumer's attitudes have a positive impact on intention to adopt mobile banking. This outcome explains that Cambodia users, after experiencing a mobile banking application, found it interesting, beneficial, modern, and personally desirable. In reference to Yunus (2014), consumers' attitudes are also revealed to this significance to intention to adopt mobile banking.

In accordance with the prior paper by Ajzen (1991), behavioral intention is users' tendency or decision to adopt or not right after the responses as desirable or undesirable, which is consistent with the attitude which is the result of evaluating object or innovation. As displayed in Table 4, it is agreed that the consumer has the intention and plan to adopt mobile banking as actual (mean = 3.65). On top of that, the user will recommend mobile banking to everyone.

5. Conclusion and Recommendations

5.1 Conclusion

Mobile banking in Cambodia is perceived to be useful for adopters to do branchless banking transaction on their smartphones with ease, effectiveness, and efficiency. Cambodian people have acknowledged the functions of mobile banking as applicable in their way of managing finance which is found suitable in their daily activities. Moreover, technology literacy seems to fit in comprehending the functions being used, so they can discover almost none of the difficulty absorbing the services. Users admitted that before actual use, they used mobile banking on the trial because they were offered the opportunity to learn the unfamiliar function and seek the possible benefit. On top of that, mobile banking is ubiquitous. Accuracy and immediacy are found in its transaction personally by the adopters. This has driven consumers' attitudes to recognize that banking transaction on an electronic device is interesting and beneficial and that use is modern and desirable. Due to these reactions, it spearheads the consumers to the behavioral intention of making use of mobile banking.

5.2 Implication of the Study

The practical implication can be also seen in this paper in relation to the mobile banking gateway in Cambodia. First of all, the benefits add more values to mobile banking product of the banks that are the developers of the application. The service provider ought to improve the functions for easing the daily banking activities of financial consumers. It is effective to address the attitudes of users and develop mobile banking service that can accomplish the needs fitted with their preference and lifestyle. In addition, the function of mobile banking should be comprehensive to users. The preparation session of understanding the usage of mobile banking should be offered when necessary to lessen the difficulty in using such modern mobile banking application. Furthermore, the bank should ascertain the

speed and accuracy of the transaction after being conducted. In addition to this, the promotion of mobile banking should be more apparent to attract more adopting population.

The present study has limitation. The main scope of this study focuses on the investigation of the factors inspiring consumers' attitudes toward the intention to adopt mobile banking only in the Cambodia context, but the model was adopted from the prior literature which was already studied in other contexts. It does not guarantee the accuracy of the model application in Cambodia. Moreover, this paper studied only ABA users, and it concerns the generalization of the study. Plus, the questionnaires were reached out mostly to students who are in friendship with the researcher, and a few respondents participated in the survey link through social networking sites. Consequently, the research participants are mostly the young users rather than the whole diverse population. Due to the time and financial resource limitation, the researcher found it struggling to approach larger sample than can applicably represent the whole population.

5.3 Limitations, and Further Research

Future researchers are suggested to widen the context, diverse types of respondents and figure out the factors besides the DIT attributes. Simply speaking, different technology acceptance theory should be proposed for the future investigation for better understanding the phenomenon leading consistently to the adoption stage of the technology. Besides, the next researchers may adopt qualitative approach or mixed method to acquire more in-depth understanding and perspective of users regarding mobile banking adoption.

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Financial Statement Analysis of ACLEDA Bank Plc.

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ABSTRACT

This study deals with financial statement analysis of ACLEDA Bank Plc., which has been licensed by the National Bank of Cambodia to officially operate as a commercial bank since 01 December 2003. Remarkably, the bank has now expanded its 263 branches with 12,129 staff members in all provinces and towns in Cambodia, which provides a various banking products and services, including E-Banking, Credit, Deposits, Local and International Funds Transfers, Trade Finance, Cash Management, Money Exchange, and a lot of other banking services. The study aims to figure out financial position and interpret the finding of the bank during the years of 2016-2019 to what extent the bank has financial soundness, measure the trend changes from year to year, to determine which component of financial items is used more in relation to the base item, and to find out the key driven behind the return on equity ratio. This study employed quantitative research design using Ratio Analysis, Horizontal Analysis, Vertical Analysis and Du Pont Model Analysis. In addition, the data of financial statement was extracted from many credible and reliable sources, namely the bank's annual reports from 2016 to 2019, National Bank of Cambodia reports, and existing research studies. Overall, the study has shown that in 2016, the bank had a very outstanding performance among the three other subsequent years thanks to the high operation-self-sufficiency, high return on asset, high return on equity and high profit margin. Although the bank did not demonstrate a good financial progress from 2017 to 2019, compared to that in 2016, there were no outliers or significant loss changes within the three years, which implied that with addressing some areas of improvements and creating a good strategic business plan, the bank still had the financial viable to generate profit and cover operational cost in the future.

Keywords: Financial statement, Financial Performance, Du Pont model, ratio analysis, horizontal analysis, vertical Analysis

1. Introduction

1.1 Background of the study

Over the last two decades, Cambodia has undergone significant economic transformation and development. The manifestation of average growth was 8 percent between 1998 and 2018 illustrated the robust and sustainable Cambodian economic performance resulting mainly from garments export and tourism; besides these two driven economic sectors, financial sector is considered as the backbone of the economy which stimulates economic growth (World Bank, 2019).

1.2 Problem statement

Notably, due to the growth of financial sectors, the need to investigate financial situation in an entity is profoundly beneficial for many relevant parties, namely potential investors, creditors, shareholders, regulatory bodies, and public as it can measure and estimate the success of financial sustainability. Therefore, the researcher is motivated to conduct research study on a foremost leading local commercial bank, ACLEDA Bank Plc., licensed by the National Bank of Cambodia and announced officially as a commercial bank since December 01, 2003. It is one of the leading retail banks, which provides various advanced banking services across 263 branches with 12,129 staff members in Cambodia (Annual Report, 2019). This sheds light to the research topic of financial analysis of ACLEDA Bank Plc.

1.3 Research objective

The objectives of this study is to evaluate financial performance of ACLEDA Bank Plc. from the year of 2016 to 2019.

1.4 Research question

How is the financial performance of ACLEDA Bank Plc., from the year of 2016 to 2019?"

1.5 Significance of the study

The findings of this study serve as an invaluable asset for many relevant parties. Firstly, investors are able to evaluate the performance of ACLEDA Bank Plc. and make the right decisions on whether to retain, buy more or sell the existing proportion of ACLEDA Bank Plc.'s shares. Secondly, the top managers of ACLEDA Bank Plc. will make use of the findings to master their potential aspects and shrink the negative aspects in order to prepare a blueprint strategic business plan. Thirdly, the next generation of students can learn extensively from this research, which enables them to broaden their knowledge of tools to evaluate financial conditions of bank and have a better understanding of essential financial ratios and formulas. Fourthly, this research will contribute as a secondary source of information to the next researchers who are interested in exploring more about the topic area of financial statement analysis in banking sector. Finally, they can study the financial

situation of ACLEDA Bank Plc. and better prepare themselves to compete in the Cambodian free market economy.

2. Literature Review

2.1 Defining key concept

- Statement of Financial Position or Balance Sheet refers to a list of all the assets ownership and all the liabilities owed by a business as at a particular period of time. (ACCA, 2016).
- Statement of Profit or Loss is a record of income generated and expenditure incurred over a given period; it was also known as Income Statement (Bruett et al., 2005).
- Statement of Cash Flow refers to the statement which expresses the cash outflow and cash inflow during a specific period of time (Bruett et al., 2005).
- Statement of Changes in Equity refers to the statement that portrays the changes in capital for a business entity during a period of time (Nobles, Mattison, & Matsumura, 2015).

2.2 Theoretical framework

Vertical Analysis displays financial data in relation to an item or a base of financial statement which are frequently considered as total asset or revenue (Henry, Robinson, & Van Greuning, 2012). It constructs a ratio that connect between the elements in financial statement and the base element which is expressed as percentage in the same accounting period. The equation of Income Statement Vertical Analysis and Balance Sheet Vertical Analysis are as follows (Brigham & Ehrhardt, 2002):

$$Income\ Statement\ Vertical\ Analysis\ \% = \frac{Income\ Statement\ Item}{Net\ Sales}$$

$$Balance\ Sheet\ Vertical\ Analysis\ \% = \frac{Balance\ Sheet\ Vertical\ Analysis}{Total\ Asset}$$

Horizontal Analysis makes it easier for analysts to analyze historical performance and growth with an accurate seasonal information (Bruett et al., 2005). Data using horizontal analysis can be presented by comparing financial statement line item by line item with a base year in order to determine the significant trend (Bruett et al., 2005). The basic formula in trend analysis is

$$P^{trend} = \frac{P^1 - P^0}{P^0}$$

Du Pont Model Analysis is defined as an analytical tool that measures managerial accounting performance by interconnecting net profit margin to total asset turnover (Sandip, 2016). It can also explore the extent of return on investment ratio which measure the profitability and operational efficiency of firm. It also states that return on investment is determined as a result of net profit margin ratio and investment turnover ratio. The formula is as follows:

$$\text{ROE} = \frac{Net\ income}{Average\ shareholders'\ equity}$$
$$= \frac{Net\ income}{Revenue} \times \frac{Revenue}{Average\ total\ assets} \times \frac{Average\ total\ assets}{Average\ shareholders'\ equity}$$

Ratio Analysis refers to the analysis of the relationship between two elements or more in financial statement for evaluating performance in many aspects of activities including liquidity, asset utilization, debt management, and profitability (Kae & Ert, 2013).

Table 1: Ratio Analysis (Bruett et al., 2005)

Ref.	Term	Formula	Explanation
R1.	Operational Self-Sufficiency	Financial revenue/Total Financial expenses	Measure how well financial institutions can cover its cost through operating revenues
R2.	Return on Asset	Net profit after tax/Average asset	Measure how well financial institutions use its asset to generate returns.
R3.	Return on Equity	Net profit after tax/Average equity	Measure financial institutions' earnings on the capital injected by shareholders
R4.	Operating Efficiency Ratio	Total operating expense/Operating revenue	Measure how efficient the financial institution management comparing the expense to the revenue
R5.	Profit Margin	Net profit after taxes/Operating revenue	Measure the degree in which financial institution generate profit by comparing net profit to revenue
R6.	Cost of Deposit Ratio	Interest expense on deposit/Average deposit	Measure the institution in expense on deposit of customer to the average deposit amount
R7.	Loan Loss Expense	Loan loss expense/Average gross loan	Measure financial institutions' provision on loan loss comparing to loan disbursement
R8.	Net Interest Margin	((Interest income – Interest expense)/ Average earning asset)	Measure financial how well financial institutions' net interest income in relation to earning asset
R9.	Net Profit Margin	Net profit after taxes/Average earning asset	Measure how well financial institution use earning asset to generate net profit
R10.	Equity Multiplier	Average asset/Average equity	Measure the amount of asset in relation to equity
R11.	Total Asset Turnover	Operating revenue/Average asset	Measure how efficient the financial institution can use the asset to generate revenue

2.3 Previous studies

A local research study of Financial Statement Analysis of Apple Inc Company examines financial performance and financial performance of the company, using analytical tool on financial statement and to understand the overview and the nature of company (Thet & Kim, 2019). The study used secondary data from annual reports of the years between the periods of 2015 to 2018 and analytical tool regarding horizontal analysis, vertical analysis and ratio analysis. The study concluded that the company had a good financial performance in terms of operating efficiency, asset, liability and equity management. In addition, according to Tahiri (2018), financial analysis of Afghanistan International Bank (AIB)'s financial performance had the specific objective of analyzing component of financial trend in the financial statements, to analyze risk solvency and liquidity position from 2003 to 2006. The researcher used secondary data collected from sources namely AIB official website and research publications. To achieve the research objective, the researcher chose data analysis technique, namely liquidity ratio, solvency ratio and profitability ratio. The finding showed that in terms of profitability, risk and solvency ratios, AIB had efficiency use regarding income expense ratio and operating efficiency and had a good asset utilization.

3. Research Methodology

3.1 Research Design

This study employed a quantitative research approach, using descriptive research design to figure out the financial position of ACLEDA Bank Plc. in four consecutive years from 2016 to 2019. According to Anatas (1999), descriptive design aims to gather information focusing on the current status or phenomena or events and to describe what exists in accordance to variables or conditions in a situation. This design helps provide answers to the questions of what, who when, where, and how in association with a particular research problem, but not ascertain answers to why.

The researcher purposively selected the four-year financial information from 2016 to 2019 as sample size. The most recent documents enable the researcher to track any new significant trend and development of the ACLEDA Bank Plc.'s financial condition. Moreover, the four-year length of time allows the researcher to assess financial statements more accurately and extensively to contribute to the existing research which only the old-time financial data from annual reports were used. In addition, the financial information from the year of 2015 was subtly used in support of the ratio analysis section for calculating some average financial items.

3.2 Research Instrument and Data Analysis

In order to obtain sufficient data, the researcher extracted secondary data sources including ACLEDA Bank Plc. annual reports from 2016 to 2019 and reports from NBC, which are available on the official websites. Moreover, the researcher has obtained

understanding related to the topic area by reading through many research papers and well-known published books.

In response to the objective of the study, the researcher used horizontal analysis, vertical analysis, ratio analysis and Du Pont model as means to analyze financial statement. First, the researcher read through annual reports and keyed in financial statement data of the year into an excel file. Then, the researcher consolidated every year's financial statement data into one set. After that, the researcher created tables using various formula in accordance to different types of analysis in order to find out the figure result. For vertical analysis of statement of financial position, the researcher used total asset as the base item which is 100%; hence, the other financial statement line item is used to compare to the total asset. For vertical analysis of profit or loss statement, the researcher used interest income as the base item which is considered as 100%, and then other financial statement items are divided by the interest income. For horizontal analysis of statement of financial position and statement of profit or loss, the researcher used all the financial items in 2016 as the base year, which meant the years of 2017-2019 are used to compare to 2016. The result from 2016-2019 can be seen in amount change and percentage change using 2016 as a benchmark. In addition, for ratio analysis, the researcher computed the numbers by line items in a financial statement that fell into a specific category in order to calculate particular ratio based on its formula. In order to get the numbers, the researcher read through financial statements and notes on financial statements in order to trace the specific sub-account and calculate it accurately. Moreover, for Du Pont Model, the researcher used the ratios such as profit margin, total asset turnover, and equity multiplier to study the decomposition of ROE.

3.3 Ethical consideration

The researcher maintained high professional and personal ethics at all cost. The researcher faithfully declared that this study is an original work which presents a rigorous and accurate finding. No personal bias or fabrication occurred in any section of the research no matter what circumstance is. Moreover, to avoid academic crime or plagiarism, the researcher gave credit by giving in-text citations and references to invaluable sources which were extracted for this study.

4. Results and Discussion

4.1 Horizontal Analysis of Statement of Financial Position

Selected Asset Items:

Cash on hand: Cash on hand in the bank consists of many currency types including US Dollars, Khmer Riels, Thai Bath, Euro and other currencies. Within 2016 and 2017, cash on hand grew gradually with the increase amount of $34,446,963 as 12 percent. Within 2016 and 2018, the account increased tremendously to $121,583,417 with 44 percent. The account continued to increase to $134,527,100 as 49 percent within 2016 and 2019. The increase in

cash on hand account mainly caused by the large amount of US dollar currency which was reserved for customer's withdrawal and loan disbursement and other usage purposes.

Deposits and Placement with other Banks: this account serves two essential purposes which are to comply the law requirements from National Bank of Cambodia and to earn interest income from the deposit with other banks. Comparing 2016 to the other three years, deposit and placements with other bank rose to $297,658,645 with 23 percent in 2017 mainly driven by the increase in account for deposit balance with oversea banks, reserves requirements, and negotiable certificates of deposit, which is used for earning interest purpose, have the maturity of less than or equal to three months. In 2018, there was a sharp drop in this account to $978,706,484 as 75 percent decrease, but the account got recovered to the decrease of $748,986,873 as 57 percent decrease. The period of 2018 and 2019's decrease was because of the new creation of statutory deposit account in statement of financial position structure which previously played role as reserve requirement and capital guarantee under deposit with central bank in 2017 and 2016's balance sheet structure.

Loan and Advances, Net: Loan and advances to customer has various loan classifications namely small loan, staff-housing loan, public housing loan, staff loan, overdraft loan, home improvement loan, personal & others loan, credit card loan, trade loan, revolving loan, and medium loan. Using the period of 2016 as base year, this account slightly increased with the amount of $226,238,417 as 8 percent in 2017. In 2018, it speedily increased to $745,931,042 as 27 percent and remained increasing substantially with the amount of $972,943,604 as 36 percent in 2019. This favorable growth mainly resulted from the large disbursement of small loan and medium loan.

Deposit and Placements of other Banks and Financial Institutions: This account is made up of three sub accounts which are current account, saving deposits and fixed deposit. Within 2016 and 2017, this account noticeably dropped $147,412,044 with 42 percent decrease; within 2016 and 2018, the account lessens the decrease to $68,518,956 as 19 percent, and it dropped again within 2016 and 2019 with the amount of $78,602,599 as 22 percent decrease owing to the decline in deposit amount of other banks in fixed deposits and saving deposits account.

Deposit from Customer: Deposit form customer is comprised of current accounts, savings deposits, margin deposits, and fixed deposits. Comparing to 2016, the account comparatively increased $345,688, 821 as 13 percent in 2017, and it rapidly grew up to $797,121,481 with the percentage of 30 percent in 2018. In 2019, it had significant increase of $1,283,351,202 as 48 percent thanks to the huge increment customer's deposit amount in fixed deposits and savings deposits account.

Borrowings and Subordinate Debt: Compared to 2016, borrowings rocketed with the amount of $284,094,369 equivalent to 49 percent in 2017. It also grew up to $171,543,971 with the percentage of 29 percent in 2018. However, it relatively decreased to $63,980,363 as 11 percent in 2019; meanwhile, in 2017, subordinate debts slightly decreased to $715,910 as one percent, and it kept on decreasing more to $31,931,087 as 29 percent in 2018, yet it grew up to $29,902,580 with 27 percent in 2019. From these two accounts, we can see the interconnected relation of both accounts since when the subordinate account increased while

the borrowing increased and vice versa. All in all, total liabilities increased up to $486,893,773, $813,999,457, and 1,154,374,777 by 13 percent, 21 percent, and 30 percent in 2017, 2018, and 2019 respectively comparing to 2016.

Table 2: Result of Horizontal Analysis of Statement of Financial Position
Horizontal Analysis of Separate Statement of Financial Position
As at 31 December 2016, 2017, 2018 and 2019

	Year 2019	Year 2018	Year 2017	Year 2016
ASSET				
Cash on hand	410955867	398012184	310875730	276428767
Deposits and placements with other banks	558612340	328892729	1605257858	1307599213
Financial investments	527474976	619899551	153529	153529
Loan and advances, net	3686578943	3459566381	2939873756	2713635339
Other assets	15667540	20141149	46436190	48773927
Statutory deposits	583195741	537953272	-	-
Investment in subsidiaries	91135571	83170281	74961960	74961960
Property and equipment	92911344	99040122	108271588	108534489
Intangible assets	7915362	9986536	10737495	10952018
Right-of-use assets	28847850	-	-	-
Deffered tax assets, net	14007743	10933258	25156363	19984529
TOTAL ASSETS	6017303277	5567595463	5121724469	4561023771
LIABLITIES AND EQUITY				
LIABILITIES				
Deposits and placements of other banks and financial institutions	274277721	284361364	205468276	352880320
Deposits from customers	3982146559	3495916838	3044484178	2698795357
Other liabilities	56597551	61095689	81284422	76632685
Borrowings	518068128	753592462	866142860	582048491
Subordinated debts	139302580	77468913	108684090	109400000
Current income tax liabilities	29175560	12901983	22710117	35349262
Lease liabilities	27789168	-	-	-
Provision for off balance sheet commitments	-	-	1814203	-
Employee benefits	17667477	19312175	46955594	35543852
TOTAL LIABILITIES	5045024744	4704649424	4377543740	3890649967
EQUITY				
Share capital	428818154	395224105	358544956	307763911
Reserves	425709612	389730923	299148975	240304425
Retained earnings	117750767	77991011	86486798	122305468
TOTAL EQUITY	972278533	862946039	744180729	670373804
TOTAL LIABILITIES AND EQUITY	6017303277	5567595463	5121724469	4561023771

(Continued)

Table 2: Result of Horizontal Analysis of Statement of Financial Position
Horizontal Analysis of Separate Statement of Financial Position
As at 31 December 2016, 2017, 2018 and 2019

	Amount Change 2016 & 2017	Percentage 2016 & 2017	Amount Change 2016 & 2018	Percentage 2016 & 2018	Amount Change 2016 & 2019	Percentage 2016 & 2019
ASSET						
Cash on hand	34446963	0.12	121583417	0.44	134527100	0.49
Deposits and placements with other banks	297658645	0.23	-978706484	-0.75	-748986873	-0.57
Financial investments	-	0	619746022	4036.67	527321447	3434.67
Loan and advances, net	226238417	0.08	745931042	0.27	972943604	0.36
Other assets	-2337737	-0.05	-28632778	-0.59	-33106387	-0.68
Statutory deposits	-	-	537953272	-	583195741	-
Investment in subsidiaries	-	0	8208321	0.11	16173611	0.22
Property and equipment	-262901	0	-9494367	-0.09	-15623145	-0.14
Intangible assets	-214523	-0.02	-965482	-0.09	-3036656	-0.28
Right-of-use assets	-	-	-	-	28847850	-
Deffered tax assets, net	5171834	0.26	-9051271	-0.45	-5976786	-0.3
TOTAL ASSETS	560700698	0.12	1006571692	0.22	1456279506	0.32
LIABLITIES AND EQUITY						
LIABILITIES						
Deposits and placements of other banks						
and financial institutions	-147412044	-0.42	-68518956	-0.19	-78602599	-0.22
Deposits from customers	345688821	0.13	797121481	0.3	1283351202	0.48
Other liabilities	4651737	0.06	-15536996	-0.2	-20035134	-0.26
Borrowings	284094369	0.49	171543971	0.29	-63980363	-0.11
Subordinated debts	-715910	-0.01	-31931087	-0.29	29902580	0.27
Current income tax liabilities	-12639145	-0.36	-22447279	-0.64	-6173702	-0.17
Lease liabilities	-	-	-	-	27789168	-
Provision for off balance sheet commitments	1814203	-	-	-	-	-
Employee benefits	11411742	0.32	-16231677	-0.46	-17876375	-0.5
TOTAL LIABILITIES	486893773	0.13	813999457	0.21	1154374777	0.3
EQUITY						
Share capital	50781045	0.16	87460194	0.28	121054243	0.39
Reserves	58844550	0.24	149426498	0.62	185405187	0.77
Retained earnings	-35818670	-0.29	-44314457	-0.36	-4554701	-0.04
TOTAL EQUITY	73806925	0.11	192572235	0.29	301904729	0.45
TOTAL LIABILITIES AND EQUITY	560700698	0.12	1006571692	0.22	1456279506	0.32

Selected Equity Items:

Share capital: Many shareholders have authorized shares ownership at ACLEDA banks such as ACLEDA Financial Trust, ASA Plc., SMBC, COFIBRED S.A, ORIX Corporation, Triodos Microfinance Fund, Triodos Fair Share Fund, and Triodos Sustainable Finance Foundation. The share capital rose 16 percent, 28 percent, and 39 percent in 2017, 2018, and 2019 respectively, mainly caused by the gain in capital from ACLEDA Financial Trust and ASA Plc. Reserves grew significantly to 24 percent in 2017, 62 percent in 2018 and 77 percent in 2019 because of the increase of general reserves and regulatory reserves account. Overall, Total Equity increased with the amount of $73,806,925, $192,572,235, and $301,904,729 by 11 percent, 29 percent and 45 percent in 2017, 2018, and 2019 respectively.

Table 3: Horizontal Analysis of Separate Statement of Profit or Loss

ACLEDA BANK PLC.
For the Year Ended December 31 2016, 2017, 2018, and 2019

	Year 2019	**Year 2018**	**Year 2017**	**Year 2016**
Interest income	452,651,289	428,414,450	402,816,095	392,698,584
Interest expense	-146,483,987	-145,425,264	-142,081,613	-117,620,014
Net interest income	**306,167,302**	**282,989,186**	**260,734,482**	**275,078,570**
Fee and commission income	46,048,224	40,570,410	51,032,850	45,781,779
Fee and commission expense	-667,992	146,272	-2,464,712	-4,200,985
Net fee and commission income	**45,380,232**	**40,716,682**	**48,568,138**	**41,580,794**
Allowances for impairment losses on loans and advances, deposits and placements with other banks and other receivables	-21,780,632	-961,499	-33,215,649	-12,516,941
Allowances for impairment losses on off-balance sheet commitments	-360,354	-187,967	-1,814,203	-
Net impairment losses	-22,140,986	-1,149,466	-35,029,852	-12,516,941
Net income after allowance for impairment	329,406,548	322,556,402	274,272,768	304,142,423
Other incomes	16,233,764	13,332,542	9,140,680	7,259,978
General and administrative expense	-197,413,910	-189,324,078	-175,267,378	-158,581,155
Profit before income tax	148,226,402	146,564,866	108,146,070	152,821,246
Income tax expense	-30,339,623	-29,574,164	-21,659,272	-30,515,778
Profit for the year	117,886,779	116,990,702	86,486,798	122,305,468
Other comprehensive income:				
Items that will not be reclassified to profit or loss:				
Remeasurement of employee benefit obligations	-136,012	3,085,218	-	-
Current translation differences	-	-	-	-
Other comprehensive income for the year	-136,012	3,085,218	-	-
Total comprehensive income for the year	117,750,767	120,075,920	86,486,798	122,305,468
Profit attributable to:				
Equity holders of the Bank	117,886,779	116,990,702	86,486,798	122,305,468
Total comprehensive income attributable to:				
Equity holders of the Bank	**117,750,767**	**120,075,920**	**86,486,798**	**122,305,468**

(Continued)

Table 3: Horizontal Analysis of Separate Statement of Profit or Loss

ACLEDA BANK PLC.
For the Year Ended December 31 2016, 2017, 2018, and 2019

	Amount Change 2016 & 2017	Percentage 2016 & 2017	Amount Change 2016 & 2018	Percentage 2016 & 2018	Amount Change 2016 & 2019	Percentage 2016 & 2019
Interest income	10,117,511	2.58%	35,715,866	9%	59,952,705	15%
Interest expense	-24,461,599	20.80%	-27,805,250	24%	-28,863,973	25%
Net interest income	**-14,344,088**	**-5.21%**	**7,910,616**	**3%**	**31,088,732**	**11%**
Fee and commission income	5,251,071	11.47%	-5,211,369	-11%	266,445	1%
Fee and commission expense	1,736,273	-41.33%	4,347,257	-103%	3,532,993	-84%
Net fee and commission income	**6,987,344**	**16.80%**	**-864,112**	**-2%**	**3,799,438**	**9%**
Allowances for impairment losses on loans and advances, deposits and placements with other banks and other receivables	-20,698,708	165.37%	11,555,442	-92%	-9,263,691	74%
Allowances for impairment losses on off-balance sheet commitments	-1,814,203	-	-187,967	-	-360,354	-
Net impairment losses	-22,512,911	179.86%	11,367,475	-91%	-9,624,045	77%
Net income after allowance for impairment	-29,869,655	-9.82%	18,413,979	6%	25,264,125	8%
Other incomes	1,880,702	25.91%	6,072,564	84%	8,973,786	124%
General and administrative expense	-16,686,223	10.52%	-30,742,923	19%	-38,832,755	24%
Profit before income tax	-44,675,176	-29.23%	-6,256,380	-4%	-4,594,844	-3%
Income tax expense	8,856,506	-29.02%	941,614	-3%	176,155	-1%
Profit for the year	-35,818,670	-29.29%	-5,314,766	-4%	-4,418,689	-4%
Other comprehensive income:						
Items that will not be reclassified to profit or loss:						
Remeasurement of employee benefit obligations	-	-	3,085,218	-	-136,012	-
Current translation differences	-	-	0	-	-	-
Other comprehensive income for the year	-	-	3,085,218	-	-136,012	-
Total comprehensive income for the year	-35,818,670	-29.29%	-2,229,548	-2%	-4,554,701	-4%
Profit attributable to:	-	-	0	-	-	-
Equity holders of the Bank	-35,818,670	-29.29%	-5,314,766	-4%	-4,418,689	-4%
Total comprehensive income attributable to:	-	-	0	-	-	-
Equity holders of the Bank	**-35,818,670**	**-29.29%**	**-2,229,548**	**-2%**	**-4,554,701**	**-4%**

4.2 Horizontal Analysis of Statement of Profit or Loss

The finding illustrates several important notes for the selected items in profit or loss statement as follows: Profit of the year: Within 2016 and 2017, the bank annual profit declined to 29.29 percent, yet within the period of 2017 to 2018, there was a rise to 35. 27 percent and dropped to 0.77 percent in between 2018 and 2019. In terms of horizontal analysis using 2016 as base year, it can be seen that net interest income decreased to five percent in 2017 because of the large amount of interest expense on the bank's borrowings account, yet it slightly increased to three percent in 2018 and 11 percent in 2019 mainly due to the increase in interest income from loan and advances to customers and the bank's financial investment. General and Administrative expense grew to 11 percent, 19 percent and 24 percent in 2017, 2018, and 2019 respectively mostly driven by the increase in Salaries and wages, and Bonuses and incentives account. Whereas, profit before income taxes decreased moderately to 29 percent in 2017, three percent in 2018, and one percent in 2019 due to the increase in Net impairment losses, and General and administrative expense. Income tax expense decreased to 29 percent, three percent and one percent in 2017, 2018, and 2019 respectively because of the gradual decrease in profit before income tax account.

4.3 Vertical Analysis of Statement of Financial Position

Based on vertical analysis of profit or loss statement, the finding highlighted the increase or decrease change in some main items in percentage for the four consecutive years. In 2016, 2017, 2018 and 2019, cash on hand almost remains the same for 6.06 percent, 6.07 percent, 7.15 percent, and 6.83 percent, respectively. Meanwhile, deposit and placement with other banks increased from 28.67 percent in 2016 to 31.34 percent in 2017; however, it drastically dropped to 5.91 percent in 2018 and slightly recovered to 9.28 percent in 2019. For financial investment in 2016 and 2017, the volume of items was so less compared to the amount of total asset; hence, it appeared to be 0.00 percent, but in 2018 and 2019, financial investments grew to 11.13 percent and 8.77 percent, respectively. Whereas, Loan and advances to customer slightly decreased from 59.50 percent in 2016 to 57.40 percent in 2017, yet it accelerated to 62.14 percent in 2018 and slightly dropped to 61.27 percent in 2019. As for Deposit from customer, there was 59.17, 59.44, 62.79 and 66.18 percentage of substantial growth in the four consecutive years. Meanwhile, borrowing rose from 12.76 percent in 2016 to 16.91 percent in 2017 and decreased to 13.54 percent in 2018, 8.61 percent in 2019.

Table 4: Result of Vertical Analysis of Statement of Financial Position

ACLEDA BANK PLC.

Vertical analysis

For the Year Ended December 31 2016, 2017, 2018, and 2019

(Continued)

Table 4: Result of Vertical Analysis of Statement of Financial Position

	2019	2018	2017	2016
ASSET				
Cash on hand	6.83%	7.15%	6.07%	6.06%
Deposits and placements with other banks	9.28%	5.91%	31.34%	28.67%
Financial investments	8.77%	11.13%	0.00%	0.00%
Loan and advances, net	61.27%	62.14%	57.40%	59.50%
Other assets	0.26%	0.36%	0.91%	1.07%
Statutory deposits	9.69%	9.66%	0.00%	0.00%
Investment in subsidiaries	1.51%	1.49%	1.46%	1.64%
Property and equipment	1.54%	1.78%	2.11%	2.38%
Intangible assets	0.13%	0.18%	0.21%	0.24%
Right-of-use assets	0.48%	0.00%	0.00%	0.00%
Deferred tax assets, net	0.23%	0.20%	0.49%	0.44%
TOTAL ASSETS	100.00%	100.00%	100.00%	100.00%
LIABLITIES AND EQUITY				
LIABILITIES				
Deposits and placements of other banks				
and financial institutions	4.56%	5.11%	4.01%	7.74%
Deposits from customers	66.18%	62.79%	59.44%	59.17%
Other liabilities	0.94%	1.10%	1.59%	1.68%
Borrowings	8.61%	13.54%	16.91%	12.76%
Subordinated debts	2.32%	1.39%	2.12%	2.40%
Current income tax liabilities	0.48%	0.23%	0.44%	0.78%
Lease liabilities	0.46%	0.00%	0.00%	0.00%
Provision for off balance sheet commitments	0.00%	0.00%	0.04%	0.00%
Employee benefits	0.29%	0.35%	0.92%	0.78%
TOTAL LIABILITIES	83.84%	84.50%	85.47%	85.30%
EQUITY				
Share capital	7.13%	7.10%	7.00%	6.75%
Reserves	7.07%	7.00%	5.84%	5.27%
Retained earnings	1.96%	1.40%	1.69%	2.68%
TOTAL EQUITY	16.16%	15.50%	14.53%	14.70%
TOTAL LIABILITIES AND EQUITY	100.00%	100.00%	100.00%	100.00%

4.4 Vertical analysis of statement of profit or loss

From the analysis above, the researcher has found that 2016 was the most profitable year among others as net interest income had 70.05 percent causing from the low interest expense of 29.95 percent, which could imply that the bank has effectively credit policy and manage to increase loan disbursement to customers. Moreover, in 2016, the bank also had the least percentage of General and Administrative expense with 40.38 percent which showed that the bank maintained operational cost under control efficiently, in other word, the bank obtained a good economic scale in 2016 compared to the other three years. As a result, due to the tremendous percentage of interest gain and the low operational expense, the bank achieved 38.92 percent of net profit after tax which was a very satisfactory business accomplishment.

Table 5: Result of Vertical Analysis of Statement of Profit or Loss

ACLEDA Bank PLC

Separate Statement of Profit or Loss

For the Year Ended December 31 2016, 2017, 2018, and 2019

	2019	2018	2017	2016
Interest income calculated using the effective interest rate method	100.00%	100.00%	100.00%	100.00%
Interest expense	-32.36%	-33.94%	-35.27%	-29.95%
Net interest income	67.64%	66.06%	64.73%	70.05%
Fee and commission income	10.17%	9.47%	12.67%	11.66%
Fee and commission expense	-0.15%	0.03%	-0.61%	-1.07%
Net fee and commission income	10.03%	9.50%	12.06%	10.59%
Allowances for impairment losses on loans and advances,		0.00%	0.00%	0.00%
deposits and placements with other banks and other receivables	-4.81%	-0.22%	-8.25%	-3.19%
Allowances for impairment losses on off-balance sheet commitments	-0.08%	-0.04%	-0.45%	0.00%
Net impairment losses	-4.89%	-0.27%	-8.70%	-3.19%
Net income after allowance for impairment	72.77%	75.29%	68.09%	77.45%
Other incomes	3.59%	3.11%	2.27%	1.85%
General and administrative expense	-43.61%	-44.19%	-43.51%	-40.38%
Profit before income tax	32.75%	34.21%	26.85%	38.92%
Income tax expense	-6.70%	-6.90%	-5.38%	-7.77%
Profit for the year	26.04%	27.31%	21.47%	31.14%

(Continued)

Table 5: Result of Vertical Analysis of Statement of Profit or Loss

ACLEDA Bank PLC

Separate Statement of Profit or Loss

For the Year Ended December 31 2016, 2017, 2018, and 2019

	2019	2018	2017	2016
Other comprehensive income:				
Items that will not be reclassified to profit or loss:				
Remeasurement of employee benefit obligations	-0.03%	0.72%	-	-
Current translation differences	0.00%	0.00%	-	-
Other comprehensive income for the year	-0.03%	0.72%	-	-
Total comprehensive income for the year	26.01%	28.03%	21.47%	31.14%
Profit attributable to:		0.00%	0.00%	0.00%
Equity holders of the Bank	26.04%	27.31%	21.47%	31.14%
Total comprehensive income attributable to:				
Equity holders of the Bank	26.01%	28.03%	21.47%	31.14%

4.5 Ratio analysis

R1: Operational Self-Sufficiency: The result showed that ACLEDA Bank Plc. had sufficient financial revenue to cover the operating expense in order to sustain the business for OSS ratio in the four years is above the breakeven of 100 percent. In 2016, the OSS ratio was 152.17 percent which means with the expense of 1$, the bank could earn 1.52$. In 2017, the OSS ratio was 130.48 percent which means with the expense of 1$, the bank could earn 1.30$ in return. In 2018, the OSS ratio was 143.65 percent which means with the expense of 1$, the bank could earn 1.43$ in return. In 2019, the OSS ratio was 140.42 percent which means with the expense of 1$, the bank could earn 1.40$ back.

Table 6: Operational Self-Sufficiency (OSS)

Description	**2019**	**2018**	**2017**	**2016**
A. Financial Revenue	514,933,277	482,317,402	462,989,625	445,740,341
B. All Financial Expenses	366,706,875	335,752,536	354,843,555	292,919,095
OSS (A/B)	140.42%	143.65%	130.48%	152.17%

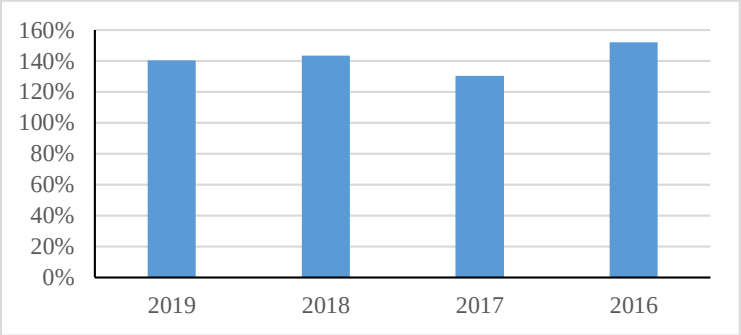

Figure 1: Chart of Operational Self-Sufficiency (OSS)

R2. Return on Asset: ROA illustrates the ability of how well the bank can make use the asset to enhance profitability. It indicates the bank rate of return made by the bank's asset. In 2017, 2018 and 2019, ROA was 1.79 percent, 2.19 percent, 2.04 percent which meant the bank has amount of return $1.79, $2.19, and $2.04 from every asset investment of 1$.

Table 7: Return on Asset (ROA)

Description	2019	2018	2017	2016
A. Net profit after taxes	117,886,779	116,990,702	86,486,798	122,305,468
B. Average assets	5,792,449,370	5,344,659,966	4,841,374,120	4,181,743,332
ROA(A/B)	2.04%	2.19%	1.79%	2.92%

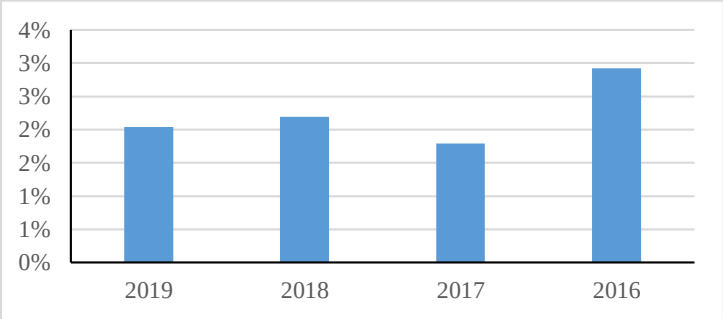

Figure 2: Chart of Return on Asset (ROA)

R3. Return on Equity: ROE indicates the bank profit performance in return shareholders' investment. In 2017, 2018, and 2019, ROE was 12.23 percent, 14.56 percent, and 12.85 percent which implies the business return growth condition was very favorable.

Table 8: Return on Equity (ROE)

Description	2019	2018	2017	2016
A. Net profit after taxes	117,886,779	116,990,702	86,486,798	122,305,468
B. Average equity	917,612,286	803,563,384	707,277,267	614,469,160
ROE(A/B)	12.85%	14.56%	12.23%	19.90%

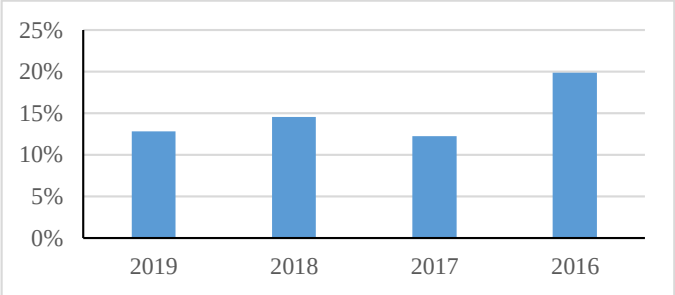

Figure 3: Chart of Return on Equity (ROE)

R4. Operating Efficiency Ratio: Operation Efficiency Ratio reveals the efficient of the bank in terms of keeping the operating cost low while earning revenue. In 2016, 2017, 2018 and 2019 the ratio was 35.58 percent, 37.86 percent, 39.25 percent, and 38.34 percent respectively, meaning that the bank has higher operating revenue to cover its cost.

Table 9: Operating Efficiency Ratio (OER)

Description	2019	2018	2017	2016
A. Total operating expenses	197,413,910	189,324,078	175,267,378	158,581,155
B. Operating revenues	514,933,277	482,317,402	462,989,625	445,740,341
OER (A/B)	38.34%	39.25%	37.86%	35.58%

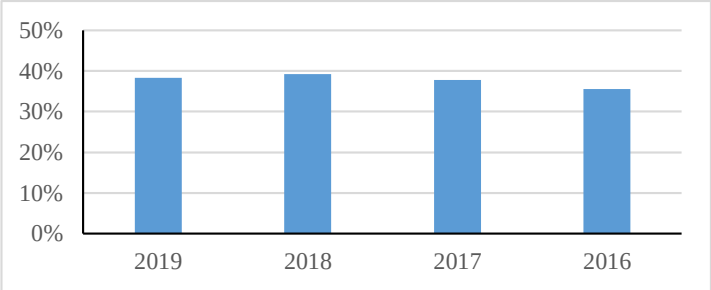

Figure 4: Chart of Operating Efficiency Ratio (OER)

R5. Profit Margin: Profit margin indicates the amount of revenue remained after deducting all the financial expense. Table 18 illustrates that the ratio in 2016, 2017, 2018, and 2019 was 27.44 percent, 18.68 percent, 24.26 percent, and 22.89 percent respectively, meaning that out of $ 100 of revenue, the company generated a profit of $27.44, $18.68, $24.26, and $22.89.

Table 10: Profit Margin (PM)

Description	2019	2018	2017	2016
A. Net profit after taxes	117,886,779	116,990,702	86,486,798	122,305,468
B. Operating revenues	514,933,277	482,317,402	462,989,625	445740341
PM(A/B)	22.89%	24.26%	18.68%	27.44%

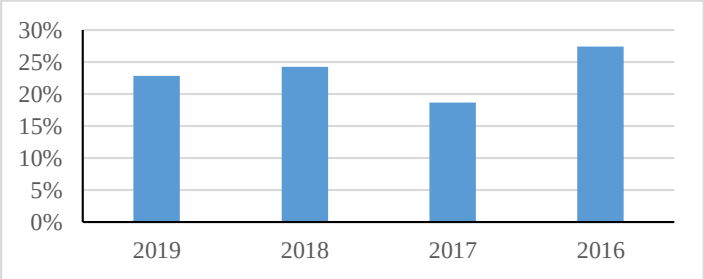

Figure 5: Chart of Profit Margin (PM)

R6. Cost of Deposit Ratio: Tis ratio indicates the bank profitability by comparing the bank interest expense on deposit and the average deposit amount from customer in 2016, 2017, 2018, 2019 the ratio was 2.74 percent, 2.75 percent. 2.31 percent and 2.25 percent respectively.

Table 11: Cost of Deposit Ratio (CDR)

Description	2019	2018	2017	2016
A. Interest expenses on deposit	90,341,115	81,101,045	86,628,510	77,642,717
B. Average Deposit	4,018,351,241	3,515,115,328	3,150,814,066	2,834,018,346
CDR (A/B)	2.25%	2.31%	2.75%	2.74%

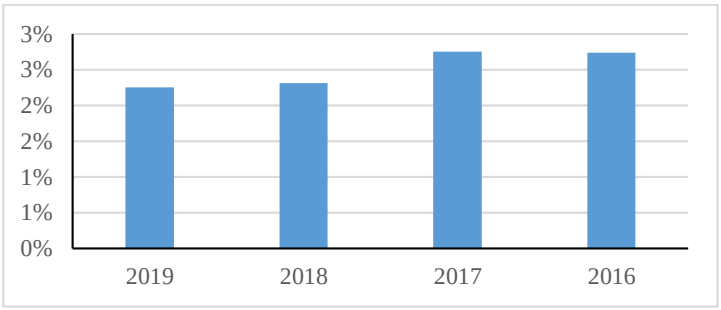

Figure 6: Chart of Cost of Deposit Ratio (CDR)

R7. Loan Loss Expense: This ratio measures financial institutions' provision on loan loss comparing to loan disbursement. In 2016, 2017, 2018, and 2019, the ratio was 0.48 percent, 1.21 percent, 0.04 percent and 0.061 percent respectively, meaning that every 100$ the bank faced the risk of loan loss 0.48$, 1.21$, 0.04$, and 0.61$.

Table 12: Loan Loss Expense (LLE)

Description	2019	2018	2017	2016
A. Loan loss expense	22,140,986	1,149,466	35,029,852	12,516,941
B. Average gross loan	3,605,918,200	3,257,485,280	2,896,827,210	2,612,507,750
LLE(A/B)	0.61%	0.04%	1.21%	0.48%

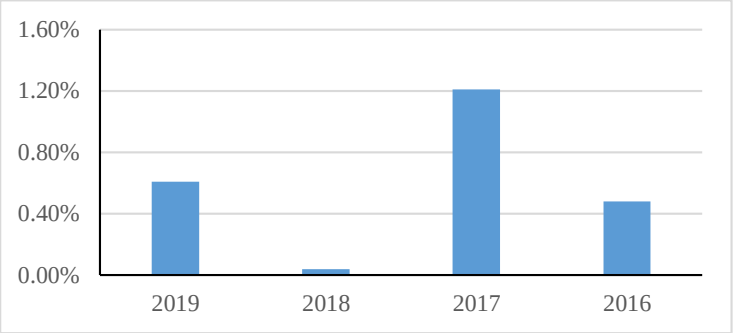

Figure 7: Chart of Loan Loss Expense (LLE)

R8. Net Interest Margin: Net interest margin ratio indicates the bank ability to earn interest income (with the calculation of interest expense), compared to the amount of earning asset. In 2017, 2018, and 2019, the ratio was 7.08 percent, 7.47 percent and 7.58 percent respectively, which implies that with every $1 of average earning asset, the bank gained $7.08, $7.47, and $7.58.

Table 13: Net Interest Margin (NIM)

Description	2019	2018	2017	2016
A. Interest income	445,071,958	421,365,365	395,122,253	389,887,622
B. Interest expenses	90,341,115	81,101,045	86,628,510	77,642,717
C. Average Earning Asset	4,677,665,386	4,555,888,023	4,358,298,572	3,752,142,387
NIM((A-B)/C))	7.58%	7.47%	7.08%	8.32%

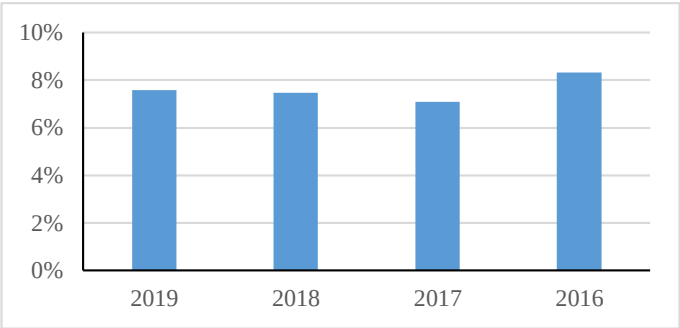

Figure 8: Chart of Net Interest Margin (NIM)

R9. Net Profit Margin: Net profit margin indicates the amount of profit remained after deducting all the financial expense comparing to operating revenue. In 2016, 2017, 2018 and 2019, the profit margin ratio was 27.44 percent, 18.68 percent, 24.26 percent, and 22.89 percent which shows a very high profitable earning trend of the bank.

Table 14: Net Profit Margin (NPM)

Description	2019	2018	2017	2016
A. Net profit after taxes	117,886,779	116,990,702	86,486,798	122,305,468
B. Average earning assets	4,677,665,386	4,555,888,023	4,358,298,572	3,752,142,387
NPM(A/B)	2.52%	2.57%	1.98%	3.26%

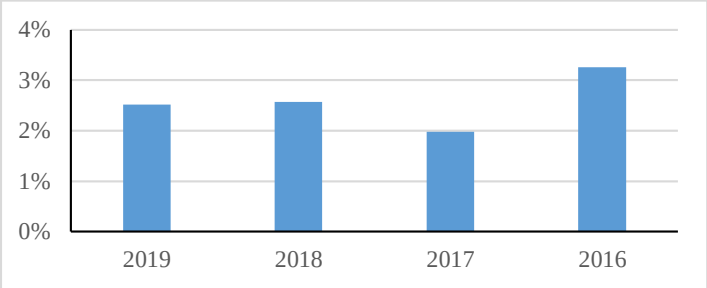

Figure 9: Chart of Net Profit Margin (NPM)

R10. Equity Multiplier: In 2016, 2017, 2018, 2019 the ratio was 6.81, 6.85, 6.65, and 6.31repsectively, meaning that the total assets were 6.81 time, 6.85 times, 6.65 times, and 6.31 times to the total capital. This indicates that the total asset including current and noncurrent asset has tremendous amount compared to total equity.

Table 15: Equity Multiplier (EM)

Description	2019	2018	2017	2016
A. Average Asset	5,792,449,370	5,344,659,966	4,841,374,120	4,181,743,332
B. Average Equity	917,612,286	803,563,384	707,277,267	614,469,160
EM(A/B)	6.31	6.65	6.85	6.81

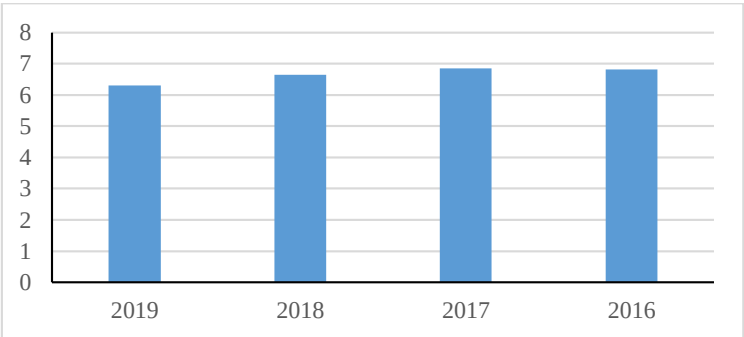

Figure 10: Chart of Equity Multiplier (EM)

R11. Total Asset Turnover is used to indicate how much of a dollar a company's asset can generate revenue. According to the chart above, the ratio of total asset turnover of the bank in 2016, 2017, 2018, and 2019 was 10.66 percent, 9.56 percent, 9.02 percent, and 8.89

percent respectively, meaning that with every $100 investment in total assets, the company can make money of $10.66, $9.56, $9.02, and $8.89.

Table 16: Total Asset Turnover (TAT)

Description	2019	2018	2017	2016
A. Operating Revenue	514,933,277	482,317,402	462,989,625	445,740,341
B. Average Asset	5,792,449,370	5,344,659,966	4,841,374,120	4,181,743,332
TAT(A/B)	8.89%	9.02%	9.56%	10.66%

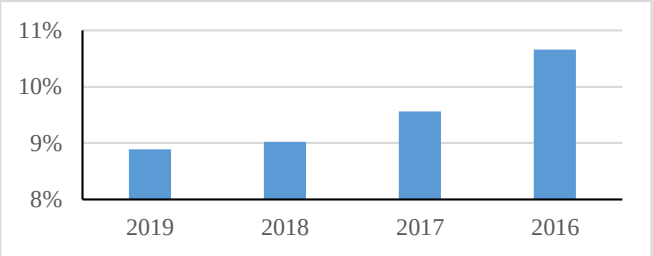

Figure 11: Chart of Total Asset Turnover (TAT)

4.6 Du Pont analysis

Du Pont analysis is expressed by three driven factors from three sources, namely operating efficiency which indicates by profit margin, asset use efficiency which indicates by total asset turnover, and financial leverage which indicates by equity multiplier. The table above displays that in 2016, the return on equity was 19.90 percent, due to the profit margin of 27.44 percent with the total asset turnover of 10.66 percent and the high capital coefficient of 6.81 times. In 2017, the return on equity was 12.23 percent driven from the profit margin of 18.68 percent with the total asset turnover of 9.56 percent and the high capital coefficient of 6.85 times. In 2018, the return on equity was 14.56 percent, due to the profit margin of 24.26 percent, the total asset turnover of 9.02 percent and the capital coefficient of 6.65 times. In 2019, the return on equity was 12.85 percent, caused by the profit margin of 22.89 percent, the total asset turnover of 8.89 percent and the capital coefficient of 6.31. From the analysis above, it can be seen that 2016 has the highest profit margin and total asset turnover, which implies that the business has effectively leveraged the fund and employ the asset to the fullest.

Table 17: Du Pont Analysis

Du Pont Analysis	2019	2018	2017	2016
A. Profit Margin	22.89%	24.26%	18.68%	27.44%
B. Total Assets Turnover	8.89%	9.02%	9.56%	10.66%
C. Equity Multiplier	6.31	6.65	6.85	6.81
ROE (AxBxC)	12.85%	14.56%	12.23%	19.90%

5 Conclusion

5.1 Summary of Key Findings

The overall aim of this study is to investigate the financial position of ACLEDA Bank Plc., during the years of 2016 to 2019 in order to understand the ACLEDA Bank nature of business, revealing, and interpreting the findings indicated by four financial statement analysis technique namely horizontal analysis, vertical analysis, ratio analysis and Du Pont analysis.

According to the assessment of many financial techniques, ACLEDA Bank Plc. has a strong financial health due to the favorable result of almost every financial indicator. Remarkably, ACLEDA Bank Plc. has an uptrend growth in deposit from customers, which implies that the bank has effective marketing strategies and enhance customer product and service satisfaction, which boosts the customer truth and confidence to deposit their money in the bank. Moreover, in terms of loan and advances to customer, the bank manages to demonstrate a substantial increase, which implies that the bank has practiced and developed good credit marketing strategies. Even though the bank has many overall good points, there are some drawbacks that need to be addressed. In other words, the bank still spends much budget on operational cost, namely general and administrative expense which decrease much of the profit before income tax. Though the bank managed to retain customer loyalty of money deposit, the bank had substantial decrease in the amount of deposit and placement of other banks, which could imply that the lower popularity in investment decision from other institutions, resulting from the low interest rate provided on the deposit.

Overall, out of the four consecutive years, 2016 was the most profitable one for the bank with the amount of $122, 305, 468 net profit after tax with the asset of only $4,561,023,771 driving the peak return on equity of 19.90 percent, thanks to the efficient use of asset to the fullest earning capacity and the achievement of a good economic of scale. In addition, in 2016 the bank also had a high ROA, high OSS, high net interest income and low general and administrative expense.

5.2 Implication of the Study

The findings of this study will be of benefit to the development of Finance and Banking in that it helps in understanding ACLEDA Bank Plc.'s financial conditions over a period of time. In addition, the finding contributes to ACLEDA Bank Plc. to the extent that it allows the bank to get a grasp of finding interpretation from the researcher's understanding and to make better informed decisions. For the top management of the bank, they can identify their loopholes and take actions accordingly in order to better their areas of improvements: developing an effective credit policy, utilizing cash on hand, and minimizing operating costs. From the investment aspect, potential investors can make use of the research finding as a useful source of information before deciding whether to purchase ACLEDA Bank Plc.'s stock, namely ABC which is listed in Cambodia Security Exchange. Moreover, the bank customers can be aware of the bank performance and choose whether to continue to trust their money with the bank. Last but not least, the future research can leverage this research study as a useful reference when conducting a new research study on the same field.

5.3 Limitations and Future research

It is worth noting that the findings of this study have to be seen in light of some limitations which include the limited access to data, extraction from only annual reports due to the time constraint, and ACLEDA Institute of Business's policies. Moreover, the research findings are only interpreted in accordance to the application of four analysis techniques, namely horizontal analysis, vertical analysis, ratio analysis, and DuPont analysis.

The future research should thus compare the above ratios with industrial average or with a competitive bank within the similar industry. The future research study should also use other research tools such as regression analysis to study the impact of one financial item on the others in order to respond to new research problem and add on this research knowledge. However, the researcher believes that this study has highlighted the application of financial statement analysis and presents the need for further development in the research area of study; therefore, some avenues that could be addressed in future should be extended access to obtain the information from the headquarter.

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The Analysis of Technology Acceptance Model on the Study of Consumer Attitudes toward the Intention to Adopt Mobile Banking App in Cambodia

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ABSTRACT

This study explores the consumer attitude toward adopting mobile banking. This study uses survey questionnaires which were distributed to 204 Mobile Banking App users through online-and paper-based form; and a regression analysis is applied to identify the influential factors on the intention to adopt mobile banking. This study shows that most respondents are female and aged between 18 to 28 years, who use Toanchet. The paper provides an understanding of the three variables of TAM, namely perceived usefulness, perceived ease of use, and trust, impact positively on customer's attitude towards mobile banking app, which leads to the influence on intention to adopt mobile banking app. Consequently, this study complements the decisions of individuals and institutions. Individuals who are scholars and future researchers gain knowledge of the TAM model that it is suitable for studying and analyzing customer attitude on new technologies adaption. Institutions get points that should be supplemented to increase customer satisfaction, such as developing mobile banking applications that are easier to use, have more functions for completing transactions and accuracy in the system. This study suggests future research that extends the sample size may provide more useful information for designing a marketing plan and promoting banking service sector.

Keywords: TAM, Attitude, behavioral intention, mobile banking

1. Introduction

1.1 Background of the Study

In industry 4.0, information technology has improved hastily, and it has influenced the banking region as a globe. The affection for information technology in banking industry lead to the launch of mobile banking. Mobile banking is one of the many useful services that offers and helps the customers' financial transaction. Mobile banking service is part of Internet Banking, which changed the way bank consumers do in their daily activities.~~,~~ Banks not only use it to comfy the purchaser but also use it for the pattern of approach to decrease prices and expand profitability (Liao & Cheung, 2002). Customers use digital charge services because they assume that it is a beneficial way of making payments that push them to receive the new technology. Based on their analyses through the TAM model, attitude closer to technology acceptance has been the best to impact the intention to use digital payment (Cheng, Phou, & Phuong, 2018).

There is much research about mobile banking in developing and developed countries by the TAM model to investigate customers' attitude toward using mobile banking. The effect of mobile banking using might be different by countries because of users' attitudes toward intention to use mobile banking. Furthermore, from the previous studies in Cambodia, the researchers suggest that the future researcher undertake their study on the Technology Acceptance Model and Brand Knowledge toward Attitude on Technology Acceptance in order to find out more about the evaluation of TAM and Brand Knowledge (Cheng et al., 2018). To address this gap, the paper aims to figure out the adaption of Mobile Banking App by integrating only Technology Acceptance Model in the Cambodia context.

The study explores the consumers' attitudes to adopt of mobile banking based on the Technology Acceptance Model (TAM) by proposing three main factors (such as perceived usefulness, perceived ease of use, and trust), which influence consumers' intention to adopt mobile banking. To specify the research objective, the researcher has a main research question: How do the factors of TAM such as perceived usefulness, perceived ease of use, and trust, influence consumers' intention to adopt Mobile Banking in Cambodia? The researcher believes it will fill in the knowledge gap concerning mobile banking adoption by using TAM in Cambodia, contributing to bank organization, and next future researchers. This research aims to finds out the attention of consumers to adapt the Mobile Banking App with the focus on the respondents aged between 18 to 45 years with the experience of using Mobile Banking App.

2. Literature Review

2.1 Mobile Banking App

The term "mobile banking" refers to the use of cell as a channel of providing and handing over banking offerings which consist of ordinary offerings such as funds transfer, bill payment as well as new offerings such as on-line and digital payments (Abadi et al., 2012). Suoranta and Mattila (2004), showed that mobile banking is the newest update of the

today's financial channel. Several authors indicate time saving, flexibility, interactivity, and higher accessibility in using mobile banking compared with traditional banking channels such as Automated Teller Machine (ATM) and non-mobile banking (Cheah et al., 2011). Mobile banking (commonly referred to as M-banking), an extension of Internet banking, presents time independence, convenience, instant response to customers, and value savings (Govender & Sihlali, 2014). It can also be called "pocket banking "for customers. Tiwari and Buse (2007) defined mobile banking as the backs' service in providing and making available banking and other financial services to their customers through mobile phones and other similar pieces of advice.

Based on the mobile banking concepts from the previous studies, the researcher concludes that mobile banking is the smart mobile banking that can facilitate customers' financial transactions outside the bank and cost-saving.

2.2 Theoretical Background

2.2.1 Technology Acceptance Model (TAM)

Davises proposed the Technology Acceptance Model (TAM) in 1986 (Lule et al., 2012). TAM is an adaptation of the Theory of Reasoned Action (TRA) developed by Fishbein et al. (1980) and Cavus and Chingoka, (2015). An adjustment of Theory of Reasonable Active (TRA), TAM is a custom for modeling users of information systems or technologies (Lai, 2017). Based on TAM, behavioral intention is influenced by a user's attitudes towards a product, which in turn is affected by the perceived usefulness of the product and its perceived ease of use (Davis et al., 1989). Perceived usefulness refers to the degree to which using a specific product will increase a user's ability to achieve desired goals, whereas perceived ease of use refers to the extent to which the system use is free of effort (Davis et al., 1989).

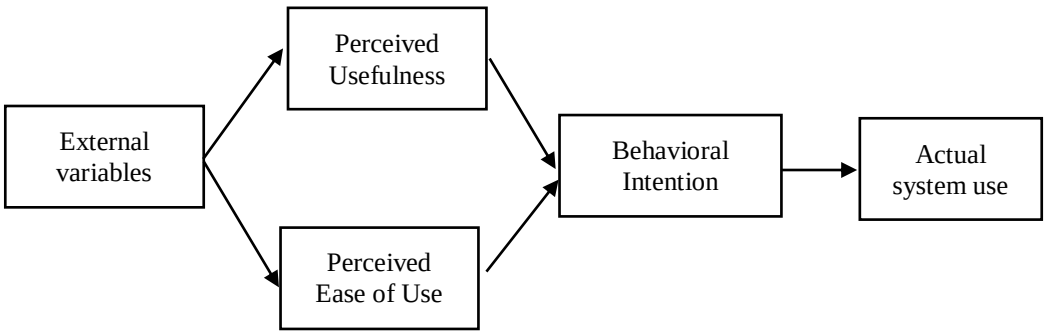

Figure 1: Technology Acceptance Model (Davis et al., 1989)

According to Mathieson et al. (2001), one of the key reasons for TAM being generally accepted is due to its specific approach to address the factors that influence the use of information systems. TAM has a strong emphasis on computer users' acceptance behavior (Abadi et al., 2012). In particular, TAM has been shown to be valid for examining online and mobile technologies in previous studies (Davis, 1989; Doll et al., 1998; Luarn & Lin, 2005); thus, the model is essential to study the adoption of Mobile Banking. Technology

Acceptance Model is significant for studying information system as new technology, digital payment, electronic banking, and mobile banking. As a result, the researcher proposed to employ the TAM model in this study about the mobile baking app in Cambodia.

2.3 Conceptual Framework

Perceived ease of use and perceived usefulness are the constructs of the Technology Acceptance Model. In the model, both the perceived usefulness and perceived ease of use predict attitude, described as the user's assessment of the program's desirability (Akturan & Tezcan, 2012). Also, Venkatesh and Davis (1996), argued that it is important from a theoretical point of view to understand the roots of perceived ease of use because it is the key role in deciding acceptance and usage. According to Mathieson (1991), the perceived ease of use is the consumer's understanding that banking on the web will involve a minimum effort. Similarly, Jahangir and Begum (2008) affirmed that the drivers of growth in electronic banking are determined by the perceived ease of use, which is a combination of convenience supplied to these with effortless web access, the availability of secure, excessive popular digital banking functionality, and the necessity of banking services. Perceived ease of use has a positive impact on mobile banking; it is convenient, flexible, and available; it is not difficult to go to the banks or branch and avoid long queues (Govender & Sihlali, 2014).

Perceived usefulness is a hypothesis of TAM. According to the TAM of Davis et al. (1989), perceived usefulness is the degree to which a character believes that using a specific device would decorate his or her job performance. Davis (1993) described perceived usefulness as the individual's understanding that using the new technology will improve his or her performance. Pikkarainen et al. (2004) utilized TAM in Finland. They discovered the perceived usefulness as a determinant of actual behavior, which motivated the twenty-first-century banking consumers to use more advanced and consumer-friendly self-service applied sciences that give them greater autonomy in performing banking transactions and acquiring records on financial advice, and in purchasing other financial products. According to Jeong et al. (2013), perceived usefulness was found to be the most critical factor influencing the intention to use Mobile Banking. This finding suggests that if Mobile Banking is to be understood by users, it should be perceived as a more useful and rapid way of doing so than the traditional banking transaction system. Perceived usefulness also has an essential impact on the development of consumers' initial willingness to use mobile banking (Luarn & Lin, 2005).

Yan and Pan (2014) state that trust reflects the individual's agreement to obtain vulnerability based on positive thinking toward another party's future behavior. Trust is very significant to study to adapt to new technologies (Kim & Prabhakar, 2004). Trust (T) in mobile services refers to the system's perceived reliability and the service provider. Based on Chung and Kwon (2009) study, the trust of customers who want to use mobile banking services is an essential factor that impacts their attitude towards mobile banking services and their intention for repeated use in the future. Song (2015) has shown that trust perception impact customers' intention to use mobile banking. He also states that bank managers and the third-party mobile provider should try to make customers trust the honesty, generosity,

and mobile banking serviceability, which is crucial for them to attract new customers and extend its market.

Attitude is developed from Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975). Attitude is normally used to analyze human belief, positive or negative feeling, norms and intention leading to specific results (Madden et al., 1992). Yang and Yoo (2004) have found that greater understanding the key role of attitude has improved the predictability of the TAM model (Yang & Yoo, 2004). Intention is constructed in TRA, too. Intention is very important to understand consumer acceptance of technology because usage behavior is decided by the intention to use a particular object. In field of information and technology, attitude was an indicator of behavior and had a positive effect on mobile payment system intention (Dacstan & Gürler, 2016). The relationship between attitude and intention is examined in order to understand adaptation of consumers based on TRA (Fishbein et al., 1980); Ajzen & Fishbein, 1975).

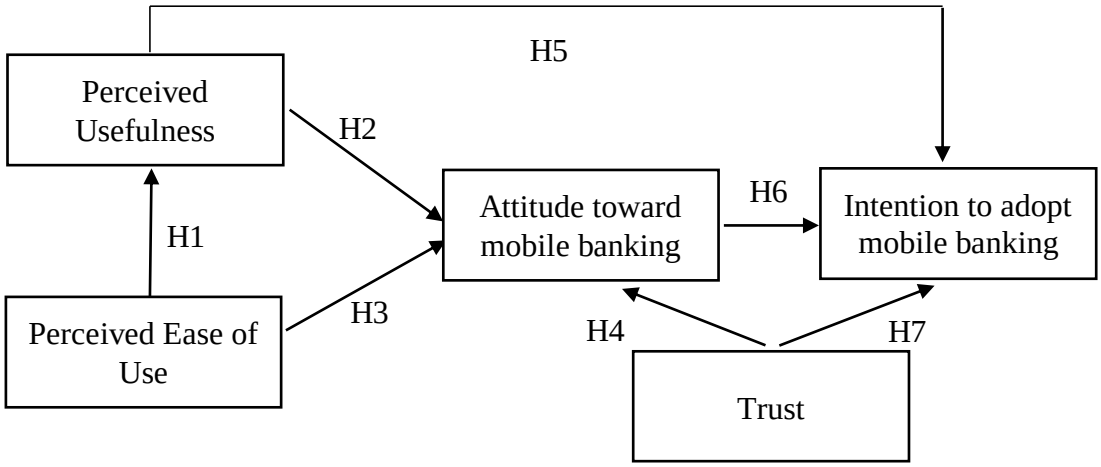

Figure 2: The research model (TAM Based)

2.4 Research Hypotheses

Based on the conceptual framework and TAM model proposed by the researcher, in this study there are seven hypotheses to be tested. The proposed hypotheses are as follows:

- H_1: Perceived ease of use has a positive impact on the perceived usefulness.
- H_2: Perceived usefulness has a positive impact on the attitude towards the Mobile Banking App.
- H_3: Perceived ease of use has a positive impact on the attitude towards the Mobile Banking App.
- H_4: Trust has a positive impact on the attitude toward using the Mobile Banking App.
- H_5: Perceived usefulness has a positive impact on the intention to use the Mobile Banking App.
- H_6: Attitude toward Mobile Banking has a positive impact on the intention to adapt Mobile Bank App.
- H_7: Trust has a positive impact on the intention to adapt the Mobile Banking App.

3. Methods

3.1 Research Design

This research applied quantitative methods (Cooper & Schindler, 2007) and explanatory research (Cheng et al., 2018). First of all, the researcher focused on the empirical data about consumer's adaption on mobile banking in order to test the hypotheses formed underneath the technology acceptance model. This research employed descriptive statistics with the data from questionnaires on mobile banking user's adoption by using TAM.

3.2 Research Site

The study was conducted in Phnom Penh City as the people are familiar with the use of a mobile phone, especially mobile banking.

3.3 Target Population and Sample

This research consisted of the customers aged between 18 and 45 years, using Mobile Banking App. They are university students, the staff of ACLEDA Institute of Business. The study was conducted using non-probability, convenience sampling and purposive sampling due to its convenience and time efficiency (Govender & Sihlali, 2014). In this research, a survey was performed based on the previous questionnaires. The questionnaire is composed of two main sections: the first section is to explore the respondents' data, and the second section is to explore the respondents' response about TAM application. According to Yamane (1967), the calculated sample size with precision Level is +/-7%, where the confidence level is 95%, P=.5, and the population is more than 100,000. Therefore, the sample size (n) is equivalent to 204.

Table 1: Construct Measurements

Variable	Measurements	References
Perceived Ease of Use	- Learning to use Mobile Banking App is easy. - Operating my banking transaction via Mobile Banking App is easy to use. - The contents in mobile banking is clear and understandable.	Aboelmaged & Gebba (2013) and (Govender & Sihlali, 2014)
Perceived Usefulness	- Using Mobile Banking App is enabling me to fulfill my task more quickly. - Using Mobile Banking App saves my time. - Overall, using Mobile Banking App is advantageous.	Davis (1993); Jeong et al. (2013) and Jahangir & Begum (2008)
Perceived Trust	- I believe that my personal data will be properly - protected when I process transaction via Mobile Banking App. - It is secured to use Mobile Banking App in making payment. - Overall, I believe that using Mobile Banking App is trustworthy.	Lee et al. (2007); Gefen & Straub (2000) and Cyr et al. (2007)
Attitude	- I feel it is a good idea to use Mobile Banking App. - I feel it is beneficial to use Mobile Banking App. - I think it is interesting to use Mobile Banking App.	Da\cstan & Gürler (2016) and Schierz et al. (2010)
Intention to adapt mobile banking	- I intend to use mobile banking in any transactions. - I will strongly recommend mobile banking to others. - Overall, I will use mobile banking in the future.	Da\cstan & Gürler (2016) and Schierz et al. (2010)

3.4 Data Analysis

Data obtained from questionnaires were analyzed using descriptive statistics such as frequency, percentages, mean, and standard deviation and multiple regression analyses to find the relationship between independents and dependent variables in Statistic Package for Social Science (SPSS). First of all, the independent variables were grouped to test the intention to use mobile banking. The linear regression was used to determine the significance between independent variables. ANOVA (Analysis of Variance) was applied to test the Adjusted R Square to check the fitness of the multiple regression models. The F test was used to determine the significance of the TAM Model, and t-test was also used to analyze the significant effect of each independent variable on the dependent variable (Black, 2010).

3.5 Reliability Test

Reliability Test emphasizes the pilot test Cronbarch's Alpha. Cronbarch's Alpha is a measure of internal consistency between items in scale (Blagoeva & Mijoska, 2017). Table 2 shows that the pilot test Cronbach's of each variable ranges from 0.749 to 0.848 for 30 sample and from 0.841 to 0.874 for 204 sample. All the constructed variables and elements are reliable for the research when the number of pilot Cronbach's Alpha is above the accepted level 0.7 based on (Nunnally, 1994).

Table 2: Reliability Test

No.	Variable	Cronbarch's Alpha (n=30)	Cronbarch's Alpha (n=204)
1.	Perceived ease of use	0.848	0.872
2.	Perceived usefulness	0.789	0.861
3.	Trust on the Use of Mobile Banking App	0.811	0.874
4.	Attitudes toward the Use of Mobile Banking App	0.749	0.841
5.	Intention to use Mobile Banking App	0.808	0.859

4. Results and Discussions

4.1 Results

4.1.1 Demographic Factors

Based on the structure of the questionnaire, demographic characteristics presented in part one – personal information. The analysis began with the respondents' demographics. The demographic distribution shows that 41.7 percent of the respondents are male and the remaining 58.3 percent are female. Concerning age, most of the respondents are between 18 to 24 years, accounting for 67.6. With regard to educational achievement, 36.8 percent are undergraduates; 44.1 percent are Bachelor's degree holders, 18.1 percent are Master's degree holders, and 1 percent are other – PhD degree (PhD holder). In addition, most of the respondents are company employees, accounting for 52.9 percent. In terms of mobile banking types, most consumers use ToanChet (49 percent), followed by ABA Mobile App (38.7 percent).

4.1.2 Analysis of Level of Agreement

The analysis of the level of agreement shows that the three variables which indicate the strong level of agreement include perceived usefulness, attitude, and intention while only two variables such as perceived ease of use and trust indicate only an agreement. Therefore, each variable in the model had the great level of agreement.

Table 3. Level of Agreement

Variables	Min	Max	Mean	SD	Level of Agreement
Perceived Eased of use	2.67	5.00	4.1667	0.54617	Agree
Perceived usefulness	2.33	5.00	4.3252	0.56966	Strongly agree
Trust	2.67	5.00	4.1242	0.60453	Agree
Attitude	2.33	5.00	4.2190	0.54966	Strongly agree
Intention	2.67	5.00	4.2067	0.59454	Strongly agree

Note: 2.60-3.39 as neutral, 3.40-4.19 as an agree, and 4.20-5.00 as strongly agree

4.1.3 Correlation Analysis

A correlation analysis was determined based on the particular construct identified in the research model. A study of the correlation has been used to assess the degree of association between two or more variables. The range of values for the correlation was from -1 and +1 (Pearson, 1926) . That implies stronger positive correlations when the values were close to +1.

Table 4: Pearson Correlation Matrix

	1	2	3	4	5
1.Perceived Eased of use	1				
2.Perceived usefulness	0.634**	1			
3.Trust	0.499**	0.540**	1		
4.Attitude	0.602**	0.686**	0.677**	1	
5.Intention	0.577**	0.594**	0.578**	0.725**	1

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

As a result, there is a significant relationship between each construct. Most of those coefficients were proved significant to the model in which the higher correlation coefficient was detected in the attitude and perceived usefulness (0.686**).

4.1.4 Regression Analysis

Linear regression analysis used to check hypothesis because model containing one independent variable and dependent variable. Regression analysis was the method of creating a statistical model that could be used by another variable or other variables to predict or evaluate one variable.

4.1.4.1 Analysis of the Variance

Table 5: ANOVA

Model	Sum of Square	df	Mean Square	*F*	Sig.
Regression	40.852	4	10.213	65.764	0.000**
Residual	30.904	199	0.155		
Total	71.756	203			

***. Correlation is significant at the 0.01 level (2–tailed)*

According to the Table 5, all of the relationships expected have been proven important. The regression analysis shows that the variables were statistically significance at p-value=0.000<0.05. We can conclude that the research model based on TAM model is an accurate representation of real factors influencing consumers' intention to adapt mobile banking app in Cambodia.

4.2 Discussions

TAM model was statistically significant in the study of Mobile Banking in Cambodia. Moreover, the result of this study is consistent with the previous studies that employed TAM in their studies of Mobile Banking (Lule et al., 2012; Akturan & Tezcan, 2012; Govender & Sihlali, 2014).

Table 6: Hypothesis testing results from regression analysis

Hypotheses				Beta	Sig.	Result
H_1	Perceived ease of use	➡	Perceived usefulness	0.634	0.000**	Supported
H_2	Perceived usefulness	➡	Attitude towards mobile banking	0.509	0.000**	Supported
H_3	Perceived ease of use	➡	Attitude towards mobile banking	0.279	0.000**	Supported
H_4	Trust	➡	Attitude towards mobile banking	0.677	0.000**	Supported
H_5	Perceived usefulness	➡	Intention to use Mobile Banking	0.163	0.014*	Supported
H_6	attitude	➡	Intention to use Mobile Banking	0.519	0.000**	Supported
H_7	Trust	➡	Intention to use Mobile Banking	0.139	0.034*	Supported

Frist of all, the study has found that the perceived ease of use had a positive impact on perceived usefulness. It was consistent with the previous studies (Akturan, Tezcan et al., 2012; Venkatesh and Davis, 1996; Davis et al., 1989; Mathieson, 1991; Gefen & Straub, 2000; Al-Gahtani, 2001; Govender & Wsihlali, 2014; Cheng et al., 2006) . They stated that that perceived Ease of use had influence on perceived usefulness as consumers know it was easy to use and learn, convenient, and available, which leads to an increase in the perceived usefulness. Second, the study has also shown that TAM model in which the perceived usefulness had a positive impact on attitude toward mobile banking and intention to adapt mobile banking. For perceived usefulness, it is matched with the research conducted by Davis, 1993; Jeong, Yoon et al.,2013; Pikkarainen et al., 2004; Linck et al., 2006; Luarn and

Lin, 2005). It was the degree that consumers believe to use a specific device as mobile banking, which would enhance his or her job performance, improve financial performance, save time, and develop their willingness. Third, trust had the positive impact on attitude toward an intention to adapt the mobile banking which is consistent with previous research by (Dirks & Ferrin, 2001; Jarvenpaa et al., 2004; Schierz, Schilke & Wirtz, 2010; Chung & Kwon, 2013; Song, 2015; Da\cstan & Gürler, 2016). The study shows that the relation between trust attitude and intention was positive because when the consumers trust the mobile baking app, they will make a one-time or repeat purchase and act on information provided by the mobile provider. Meanwhile, they strongly recommend others to use it and secure their personal data. Fourth, consumer adaptation of mobile banking was attitude towards technology acceptance that had a greater positive influence on intention to use mobile banking, which is comparable with the previous research conducted by (Ajzen & Fishbien, 1975; Fishbein et al., 1980; Da\cstan & Gürler, 2016; Cheng et al., 2018; Yang & Yoo, 2004). They stated that attitude towards technology acceptance had the most influence on the intention to use digital payment; consumers were willing to use mobile banking when their feeling was positive about the performance of the app, which is considered easy, interesting and beneficial.

5. Conclusion and Recommendations

5.1 Conclusion

This study has filled in the knowledge gap from the previous researcher, suggesting conducting the specific model as TAM to analyze the end-user attitudes and intention, and it also reached the objective of this study. The mean of each variable (range from 4.1242 to 4.3252) that has the level of agreement from "agree" to "strongly agree". Moreover, the correlation of constructs shown that each variable in the proposed model strongly correlated, ranging from 0.499** to 0.686** closed to +1, which implied a more substantial positive relation. Furthermore, the result of Liner regression presented all the hypotheses which are all statistically significant at the p- value=0.000 less than 0.05, which showed that all independent variables such as perceived ease of use, perceived usefulness, and trust had an impact on the dependent variables such as attitude and intention to adopt mobile banking. ANOVA showed the p-value of F distributive was small than 0.005, which meant the TAM Model was statistically significant to study the factors that impact consumer intentions to adopt mobile banking app in Cambodia context by TAM model.

5.2 Implications of the Study

The results of this study have shown some significant consequences which are unique to the context of Cambodia. It contributes to the management in the bank to set strategies to find the target customers. The bank will know that customers prefer the method in mobile banking app that has the transactions, which are easily performed and multi-functional. Most of the customers prefer to use mobile banking based on their trust on the bank and on the convenience of using the mobile banking app service, provided by the bank. Banks should

create flow, assurance, website satisfaction, and extent of future use. Banks also have consumers who need more functions and secure integrity of mobile banking to maintain their customers.

5.3 Limitations and Future Research

Within the research limitations, the study suggests that future researchers enlarge the sample size by covering all aspects of the participants and apply a qualitative approach in order to shed light on the issue of users' attitude towards the intention to adopt mobile banking app in Cambodia. Furthermore, the analysis of the effective tools to promote mobile banking usage can be the focus of the future study as well.

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The Impact of Digital Transformation on the Use of Banking Services at Banking Halls of ACLEDA Bank Plc.

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ABSTRACT

The existence of digital transformation enables banks to perform innovation of financial products and to provide quality service for customers. Digital transformation in banking not only helps the development of the latest financial products but also enhances the efficiency of a bank. This paper aims to investigate customers' satisfaction toward the impact of digital transformation on the service quality at the banking halls of ACLEDA Bank Plc. by applying the Service Quality Gap (SERVQUAL) model. The model is an assessment of level that shows how service is delivered to customers. The SERVQUAL model instruments are divided into five factors: tangibles, reliability, responsiveness, assurance, and empathy. This research study utilized a quantitative research approach and based on a survey in one commercial bank in Cambodia. A developed and validated questionnaire of 34 questions was used to gather data from the sample of 204 participants chosen from ACLEDA Bank customers living in Cambodia. Satisfaction is measured in respect of the level of staff and customer satisfaction toward the service quality at the banking hall of ACLEDA Bank Plc. The data were statistically analyzed using the Statistical Package for the Social Sciences (SPSS) software in order to determine service quality influenced on customer satisfaction. The results from the study imply that customers are satisfied with digital transformation on the quality of the services at the banking halls in terms of the four dimensions: tangibility, reliability, responsiveness, and assurance. Therefore, it is recommended that banks and financial institutions in Cambodia consider the adoption of the digital transformation for their service quality to enhance customers' satisfaction and improve their service performance.

Keywords: Digital transformation, banking services, customer satisfaction, banking halls

1. Introduction

One of the global issues that many organizations might still be in denial about how Industry Revolution 4.0 could impact businesses (Marr, 2018). With such a revolution, computers are connected and communicate with one another to finally make decisions without human involvement (Marr, 2018). Moreover, digital transformation is the profound change in organizational and business activities and processes, which has provided huge opportunities for digital technologies towards the changes of society in Cambodia (I-SCOOP, 2015). Likewise, the digital transformation in financial and banking sectors is of no exception. It has also emerged due to the changes in consumers' habits as they demand new ways to use financial services, and the competition between each firm (Cuesta, Ruesta, Tuesta, & Urbiola, 2015). To add to the increased demand from customers, companies are facing even tougher competition due to globalization and pressure to go digital before others do, seeking to survive and attain competitive advantages. Hence, the digital transformation plays an important role to meet the customers' satisfaction in terms of the service quality.

Therefore, Cambodia have started to adopt the digital transformation since the 2000s, based on the biggest commercial bank in Cambodia, ACLEDA Bank Plc. According to Dr. In Channy, the Present & Group Managing Director of ACLEDA Bank Plc., the adaption to Industry Revolution 4.0 is important to provide customers with convenience and security of using banking services (Channy, 2019).

However, there are controversial ideas about customer satisfaction and dissatisfaction toward the change of digital transformation in the banking sector. In this sense, banks need to understand customers' satisfaction as it is the main factor which helps banks to take competitive advantages. The growth and advancement of technologies could help the banks provide better services for their customers (Ling, Fern, Boon & Huat, 2016). Knowing customers is the key to successful customer service as the idea is to create, deliver, and communicate superior value. That is, understanding customers is necessary because of not only their effect on marketing decisions but also the influence of customers' activities on the entire organization (Yusof, Hassan, Rahman & Ghouri, 2012). Eshghi (2008) has pointed out that, by defining service quality, companies will be able to deliver services with higher quality level, presumably resulting in increased customer satisfaction.

1.1 Research Objective and Research Question

The objective of this research is to find out customers' satisfaction toward the impact of digital transformation on the service quality at banking halls of ACLEDA Bank Plc. In this regard, the study aims to answer one research question: What is customers' satisfaction toward digital transformation on the service quality at banking halls of ACLEDA Bank Plc.?

1.2 Significance of the study

The study will help inform stakeholders such as students, banking staff, banks, customers and researchers in the field as follows. For students, they will expand their knowledge about the banking sector in Cambodia and consider the issue for future research.

For banking staff, they could leverage automation and advanced technologies analytics to provide up-to-date services for customers. For banks, the findings can help contribute to the creation of a more cohesive and personal digital customer journey. For other researchers, the study will enable them to identify the knowledge gap in the field in order to contribute to the existing body of knowledge in their future research. Last but not least, customers will be well aware of new technologies and contexts in order to keep themselves updated about the new trend of banking development.

2. Literature Review

2.1 Digital Transformation

Digital transformation is the new technology in the business's area through the change of how to manipulate and provide better value for customers. It is also a change in culture that requires organizations to challenge themselves with the experiments of new technologies to improving after failure from the past (Hamilton, 2019). Similarly, Saleforce (2019) defines digital transformation as the process of using digital technologies to generate and adjust existing business activities, culture, and customer experiences to meet the change in business and the requirements of the market. Besides, digital transformation expounds as a new consideration of how an organization uses technology, people, and processes to fundamentally adjust business performance (Ziyadin et al., 2019). Plus, digital transformation is the strategic adoption of digital technologies; it is used to develop processes of productivity, deliver better customer and employee experiences, manage endanger of business, and control costs (Citrix, 2019).

2.2 Banking Services

Banking Services can be defined as the numerous ways in which a bank can help customers, such as operating accounts, making transfers, paying standing orders, or selling foreign currency (Investor Words, 2020). It refers to any of the following bank services provided for any individual or company such as commercial credit cards, stored value cards and Treasury Management Arrangements that include controlled disbursement, automated clearinghouse transactions, and interstate depository services (Laukkanen & Lauronen, 2005). Notably, all the banking services in Cambodia need to be approved and controlled by the National Bank of Cambodia (NBC).

2.3 Service Quality

The most common definition used to define service quality is the extent to which a service meets customers' needs or expectations (Lewis & Mitchell, 1990). In today's world, the intensive competition happens without further doubt; once a business wants to survive, they have to improve the service quality that helps them to achieve a different advantage over their rivals. Service quality, therefore, has become one of the critical factors in satisfying and retaining valued customers in every industry as well as banking. The Service Quality Gap Model is used as an instrument to find out the customer satisfaction of

industries, companies, or institutions worldwide. This model was originally evolved by Parasuraman et al. (1985), and was refined in 1988 and 1991. The Service Quality GAP model depends on the customers' assessment of service quality, which is known as the customers' expectation, and the process of service provided gaps (Lee et al. 2016). Additionally, the GAP Model of Service Quality helps to understand the deviations of process delivery service to customers. It helps service companies to deliver efficiently and effectively to their customers (Lapaas, 2020). There are five gaps that service quality of customers' evaluation would impact on different industries such as retail banking, credit card, securities brokerage, product repair and maintenance. Firstly, it is the gap between customer expectation and management perceptions of customer expectation. Secondly, it is the gap between management perceptions and service quality specifications. Thirdly, it is the gap between service quality specifications and the delivered services to customers. Fourthly, it is the gap between the delivery service and external communication. Lastly, it is the gap between customer expectation and customer perception of service performance (Daniel & Berinyuy, 2010). The service quality has five dimensions such as tangibles, reliability, responsiveness, assurance, and empathy. Tangibles contain equipment, material, physical facilities, and appearance of personnel, while reliability includes the ability to dependably and accurately perform. Responsiveness consists of the willingness to help customers and give faster services to them, whereas assurance is comprised of trust and confidential information to customers (Shahin, 2006).

2.4 Conceptual Framework

Hadid et al. (2020) have found that service quality of commercial bank, reliability, tangibility, empathy, and assurance have positive influence on customer satisfaction. The service quality of responsiveness has a negative relationship with customer satisfaction in the banking sector. Miklos et al. (2019) have examined service quality dimensions by using the modified SERVQUAL model to measure customer satisfaction in the bank. In addition, three dimensions have been added, namely the access, financial aspects, and employee abilities with the SERVQUAL model for customer satisfaction analysis. The results have revealed that the first subscale such as assurance, reliability, access, and employee abilities have strong effects on customer satisfaction. The second subscale including the responsiveness and empathy also affects customer satisfaction. Muthoni and Otieno (2014) have used the five service quality dimensions among commercial banks with the different results in the satisfaction of customers. They have found out that all the five dimensions of service quality have different importance in explaining variance in overall service quality. The result has showed that reliability and responsiveness are more important dimensions, whereas empathy, tangible, and assurance are less important. Lastly, they have concluded that SERVQUAL is a great tool for service quality in the banking industry. Furthermore, Anthonysamy et al. (2010) have shown customers' perspective with the dimension of service quality. Empathy and accessibility have been figured out to be the result of high customer expectation; nevertheless, reliability and assurance have influenced the service quality that was arranged by the bank positively. Moreover, Molaee et al. (2013), analyzing the impact

of service quality dimensions on customer satisfaction and loyalty of banks in Iran, have shown that responsiveness, tangibility, reliability, and compliance have a positive and significant effect on customer satisfaction. On the other hand, assurance and empathy do not have any significant impact on customer satisfaction at all (Almomani, 2018; Molaee, et al. 2013; Priyanath & Anjalika, 2018).

- Digital transformation is the incorporation of new technology in the business's area through the change of how to manipulate and provide better value to customers.
- Customer satisfaction is the customer response before and after they consume the products or services.
- Tangibility is the equipment that customers can touch and feel; it mainly consists of modern materials, visually appealing facilities, employees who have a professional appearance.
- Reliability is that bankers have to perform service follow the promise dependably and accurately, which includes the ability to handle customer service problems and perform services right with promised time.
- Responsiveness is the willingness to help customers and give fast attentiveness, which includes the provision of quick service to customers, willingness to assist customers, and being ready to reply to customers' requests.
- Assurance contains trust and confidential information to customers, including the activities of making customers feel unharmed in their transactions, and consistently courteous.
- Empathy is associated with the care to customers, which indicates good understanding of the customers' needs and wants.

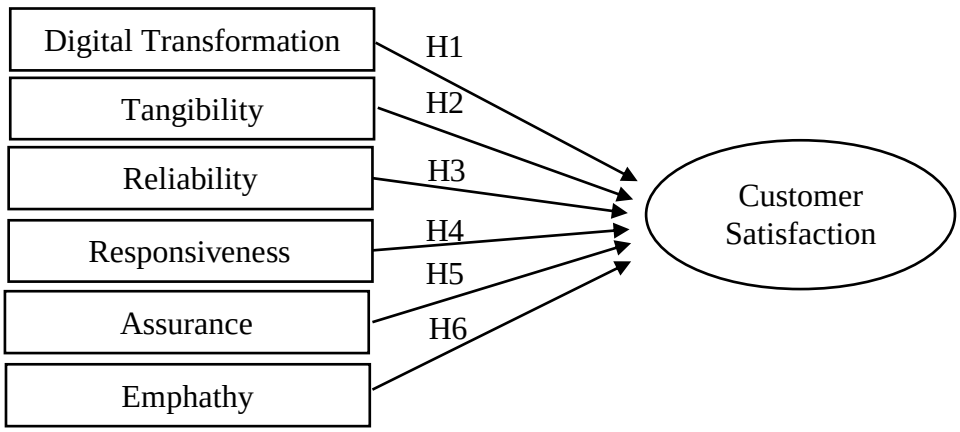

Figure 1: The service quality dimensions of customer satisfaction

2.5 Research Hypotheses

The hypotheses designed for this research are based on the following assumptions to find out customers' satisfaction toward the impact of digital transformation on the service quality:

H_1: Customers are satisfied with digital transformation on the service quality at banking halls of ACLEDA Bank Plc.

H_2: Tangibility has a positive impact on the service quality of digital transformation in banking halls of ACLEDA Bank Plc.

H_3: Reliability has a positive impact on the service quality of digital transformation in banking halls of ACLEDA Bank Plc.

H_4: Responsiveness has a positive impact on the service quality of digital transformation in banking halls of ACLEDA Bank Plc.

H_5: Assurance has a positive impact on the service quality of digital transformation in banking halls of ACLEDA Bank Plc.

H_6: Empathy has a positive impact on the service quality of digital transformation in banking halls of ACLEDA Bank Plc.

3. Methods

This section is comprised of research design, sampling design, research tool, and data collection and analysis. This study used a quantitative approach to collect and analyze data. Quantitative research utilizes deductive logic, in which researchers start with hypotheses and then collect data to test the hypotheses (Cooper & Schindler, 2012).

3.1 Target Population and Sample

In this study, the target population was all the customers of ACLEDA Bank Plc. Cambodia. The researcher adopted cluster and convenience sampling technique where the researcher divided the population into multiple groups for research. ACLEDA Bank Plc. has millions of customers; hence, collecting data from all of them is impossible. For this reason, the researcher collected data from customers by dividing them into internal customers and external customers. For the cluster of external customers, researcher used convenience sampling method due to time constraint and the pandemic outbreak. The researcher selected only those who could be easily reached and have involved in using digital transformation. Internal customers are the staff of ACLEDA Bank Plc. who use the services of the bank. In this research, internal customers include the staff of ACLEDA Bank Plc., lecturers, and staff of ACLEDA Institute Business, whereas external customers are students or the public who use the bank's services at ACLEDA Bank Plc. with the digital transformation. Based on Yamane (1967), with the precision level of +/-7%, Confidence Level of 95%, P=5%, and size of population of more than 100,000, the sample size (n) for this study is 204.

3.2 Research Tool

The research tools for collecting customers' satisfaction toward digital transformation on the use of banking services at the banking hall was developed with a set of questionnaires. Questionnaire was divided into 3 components as following table:

Table 1: Measurement of construct

No.	Items	References
1.	The background is comprised of gender, age, qualification, work, and experience of staff and customers of ACLEDA Bank Plc.	(Dr. Pandey, 2015)
2.	Satisfaction 1 evaluates on the level of staff and customer satisfaction toward the service quality at the banking hall of ACLEDA Bank Plc. by following SERQUAL model.	(Temba, M. L., 2013)
3.	Satisfaction 2 evaluates on the level of staff, and customer satisfaction levels toward the Impact of digital transformation on the use of banking services at the banking hall of ACLEDA Bank Plc.	(Farnsworth, 2019)

3.3 Data Collection and Analysis

Data were collected from internal customers who work for ACLEDA Bank Plc., and those who work at AIB from June 2020 to July 2020, using questionnaires. The researcher also used self-administered questionnaire using Google form to send to the selected respondents via email, chat in messenger, and telegram, from June 2020 to July 2020. The Google form was used due to the outbreak of the COVID-19 pandemic.

The data were analyzed using both descriptive and inferential statistics. The results from the analysis was compared with those from the previous studies and theories in relation to the customer's satisfaction toward the impact of digital transformation on the service quality at the bank. The first hypothesis was tested by describing demographic response. The other five hypotheses were tested by transforming all of them into codes and entering into spreadsheet packages.

3.4 Reliability Test

Researcher did the pilot test by sending a set of questionnaires of 35 questions to the respondents who are using ACLEDA Bank Plc. services. Moreover, those questionnaires were tested three times for the reliability in Statistical Package for the Social Sciences (SPSS) software. With a total of 20 participants in the pilot test, reliability was shown to be comparable among all the five variables. The table of reliability test shows that in the pilot test, the Cronbach's Alpha of each variable is above 0.7. All the constructed variables and factors are reliable for the research when the number of pilot Cronbach's Alpha is above 0.7 (Nunnally, 1994).

4. Results and Discussions

4.1 Demographic Factors

The majority of respondents (34.8%) have 1 to 5 years' experiences using the services of ACELEDA Bank Plc, while 21.6% use bank services between 11 to 15 years. 19.6% of the customers use bank services less than a year; 17.2% use bank services between 6 to 10 years; and only 6.9% use bank services above 15 years. In terms of the frequent use of the digital transformation with the bank services, in a month, the customers use it over 12 times, accounting for 33.8%, while only 3.9 % of customers never use it.

Regarding the customers' satisfaction with the digital transformation in the banking services, the majority of customers think that digital transformation is slightly reliable, accounting for 59.8%, while 22.5% think that digital transformation is very reliable. 16.7% think that digital transformation is neutral, whereas only 1% think that digital transformation is not very reliable. Regarding how digital transformation meets customers' needs, 47.5% think that it very much meets their needs; 14.7% think that digital transformation slightly meets their needs; however, 1% think that it does not meet their needs. Moreover, many customers are satisfied with the digital transformation in banking services because of faster transactions within 24 hours. Customers are satisfied with the change of technology in bank service (58.3%); 27% are extremely satisfied with the transformation of digital banking services; 14.2% is neutral with digital transformation and bank services; and 0.5% is not satisfied with the digital transformation in bank services. Besides, some customers think that digital transformation in the bank is hard to use; 42.6% is neutral toward the idea of difficulty in using digital transformation. 41.7% think that digital transformation in banks is easy to use; while 9.8% think that it is very easy to use the digital of bank service. However, 5.4% think it is hard to use digital transformation with bank; and 0.5% of all the participants think it is very hard to use the digital transformation with bank services.

Concerning technical issues, there are a number of customers who face technical issues while using technology in the bank. Most respondents rarely face problems (65.7%); 19.1% often face problems; 5.9% encounters technical issues very often; and 5.4% always face problems. There is only 3.9% of the whole sample who never meet any technical issues between digital transformation and bank. Lastly, there are some factors which make customers decide to use banking services at the banking hall of ACLEDA Bank Plc. instead of the new technology. More than half of customers (65.7%) think that some transactions require customers directly to come to the banking hall; 14.7% of the customers want to come to the banking hall because of the new technology there; 6.9% of customers think there is a lack of instruction about the usage of digital banking; and 6.4% of customers feel unsecured about digital transformation, and digital technology is complicated to use.

Table 2: Demographic of respondents related to customer satisfaction

Items	Category (n=204)	Frequency	Percentage
Usage experiences	Less than 1 years	40	19.6
	1 to 5 years	71	34.8
	6 to 10 years	35	17.2
	11-15 years	44	21.6
	Above 15 years	14	6.9
Frequency of usage per month	Never	8	3.9
	1 to 3 times	63	30.9
	4 to 8 times	45	22.1
	9 to 12 times	19	9.3
	Over 12 times	69	33.8

(Continued)

Table 2: Demographic of respondents related to customer satisfaction

Items	Category (n=204)	Frequency	Percentage
Reliable between digital and bank services	Very reliable	46	22.5
	Slightly reliable	122	59.8
	Neutral	34	16.7
	Not very reliable	2	1
	Not at all reliable	0	0
Digital meet your needs	Very much meets my needs	97	47.5
	Slightly meets my needs	30	14.7
	Neither	75	36.8
	Doesn't meet my needs	2	1
	Doesn't meet my needs at all	0	0
Satisfied with 24 hours' service	Extremely satisfied	55	27
	Satisfied	119	58.3
	Neutral	29	14.2
	Dissatisfied	1	0.5
	Extremely dissatisfied	0	0
Digital in bank is hard to use	Very hard	1	0.5
	Hard	11	5.4
	Neutral	87	42.6
	Easy	85	41.7
	Very easy	20	9.8
Frequency of facing problems	Always	11	5.4
	Very often	12	5.9
	Often	39	19.1
	Rarely	134	65.7
	Never	8	3.9
Factors come to banking hall	Due to new technology	30	14.7
	Feel unsecured	13	6.4
	Digital technology is complicated to use	13	6.4
	Lack of instruction about using	14	6.9
	Any transactions require customer to directly come to banking hall	134	65.7

4.2 Analysis of Level of Agreement

The table below shows the minimum, maximum, mean, standard deviation, and the level of agreement. The Five-point scales were used to measure the following variables: tangibility, reliability, responsiveness, assurance, and empathy with the mean between 3.9277 and 4.0846 classified as Agree.

Table 3: Level of Customer Satisfaction

Variables	Min	Max	Mean	SD	Level of Agreement
Tangibility	1.00	5.00	4.0846	0.61978	Agree
Reliability	1.75	5.00	3.9277	0.65275	Agree
Responsiveness	1.00	5.00	3.9534	0.70556	Agree
Assurance	2.00	5.00	4.0993	0.65813	Agree
Empathy	2.50	5.00	4.0674	0.65704	Agree

***Note**: 2.60-3.39 as neutral, 3.40-4.19 as an agree, and 4.20-5.00 as strongly agree*

4.3 Correlation Analysis

The level of correlation was tested by using the form of Item-Objective Congruence (IOC) index, which ranges from -1 to +1. The -1 means that the statement does not measure the operational definition, 0 means it is not sure if the statement measures the operational definition or not, and +1 means the statement measures the operational definition.

Table 4: Pearson Correlation Matrix

	Tangibility	Reliability	Responsiveness	Assurance	Empathy	CSTD
Tangibility	1					
Reliability	0.753**	1				
Responsiveness	0.744**	0.850**	1			
Assurance	0.757**	0.820**	0.859**	1		
Empathy	0.725**	0.808**	0.792**	0.855**	1	
CSTD	0.582**	0.656**	0.643**	0.655**	0.598**	1

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

There are six significant variables at the 0.01 level with the lowest value 0.582**, and the highest value 0.859**.

4.4 Regression Analysis

Linear regression analysis was used to test hypotheses related to the research model between both independent variables and dependent variables. There are five regression analyses, each of which runs for a hypothesis. Tangibility, Reliability, Responsiveness, Assurance, and Empathy are independent variables, while customers' satisfaction toward digital transformation is the dependent variable. The overall significance of the model can be accessed by the F statistic. The proposed hypothesis will be accepted when the p-value is less than 0.05. The null hypothesis is rejected if the p-value is smaller than 0.05. It also means that at least one of the independent variables impacts the dependent variable (Mackinnon, Krall & Lockwood, 2000). Following the regression analysis, the correlation between CSTD and Tangibles was assessed to further test the relationship between the two variables. Tangibles was the most important dimension which is statistically significant

(Beta= 0.582). The result showed a high correlation between the two variables (R-square= 0.339, P< 0.01). The correlation between CSTD and Reliability was assessed to test the relationship between the two variables. Reliability was also statistically significant (Beta= 0.504). The result showed a high correlation between the two variables (R-square= 0.448, P< 0.01). The correlation between CSTD and responsiveness was assessed to test the relationship between the two variables; and it was found out that responsiveness was statistically significant (Beta= 0.254). The result showed a correlation between the two variables (R-square= 0.465, P< 0.05). The regression analysis, the correlation between CSTD and assurance was assessed to test the relationship between the two variables. Assurance was the least important dimension that was statistically significant (Beta= 0.257). The result shows a correlation between the two variables (R-square= 0.479, P< 0.05). The correlation between CSTD and empathy was also assessed to test the relationship between the two variables and empathy was not found statistically significant (Beta= -0.022) with R-square= 0.479, P>0.05.

Table 5: Regression Analysis

Independent Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		
	Beta	Std. Error	Beta	*t*	Sig.
Tangibility	0.574	0.056	0.582	10.170	0.000**
Reliability	0.472	0.075	0.504	6.321	0.000**
Responsiveness	0.220	0.089	0.254	2.461	0.015*
Assurance	0.239	0.102	0.257	2.342	0.020*
Empathy	-0.020	0.099	-0.022	-0.203	0.839

***p<0.01; *p<0.005*

The result displayed that five hypotheses among six hypotheses were supported, while the last hypothesis was unsupported.

Table 6: Hypothesis testing results

	Hypotheses	**Sig.**	**Result**
H_1	Customers are satisfied with digital transformation on the service quality at the banking hall of ACLEDA Bank Plc.	0.000**	Support
H_2	Tangibility has a positive impact on service quality at the banking hall of ACLEDA Bank Plc.	0.000**	Support
H_3	Reliability has a positive impact on service quality at the banking hall of ACLEDA Bank Plc.	0.000**	Support
H_4	Responsiveness has a positive impact on service quality at the banking hall of ACLEDA Bank Plc.	0.000**	Support
H_5	Assurance has a positive impact on service quality at the banking hall of ACLEDA Bank Plc.	0.000**	Support
H_6	Empathy has a positive impact on service quality at the banking hall of ACLEDA Bank Plc.	0.839	Unsupported

4.2 Discussion

The result has shown that customers' demand for new technologies keeps increasing from day to day, with the frequent use of digital technology with bank services of over 12 times and at least 1 to 3 times per month (64.7%) of the total responses from all the respondents. This study is consistent with the study of Tolboom (2016), showing the necessary aspect of digital transformation as the change in customer demand since new technologies keep increasing and developing in daily life. This study has also shown that digital transformation worked well with banking services. More than half of the total respondents thought that digital transformation meets customers' need. This finding is compatible with two related studies from Anton (2014) and Cziesla (2014), which revealed that customers have positive behavior after the adoption of digital technologies in banks. This is known as a good signal because customers become more and more familiar with digital transformation in the bank services. The majority of customers' answers (65.7%) indicated that they need to come to the banking hall because some transactions require them to come. This study is aligned with a related study from Muluka (2015), who signified that there were no specialized services provided to customers with digital banking. Moreover, many customers (85.3%) were satisfied with the digital transformation in banking services because of faster transactions within 24 hours. This study is in line with a related study from Amir, and Sheykh (2017) who found that customers were satisfied with the use of digital transformation for their transactions. They also changed their tools to attract customers by developing their digital technologies.

Another important finding was that digital transformation provided good overall service quality at the banking hall of ACLEDA Bank Plc. The study has indicated that digital transformation has a positive impact on service quality at the banking hall in terms of the tangibility and reliability dimensions, which have been proved statistically significant. Yousuf (2017) has found that tangibility is significant among the other four dimensions of customer satisfaction in the bank industry. Subsequently, banks need to strongly depend on the tangible aspects for satisfying customers because tangibility is significant for creating differentiation and sustainable growth. Furthermore, it does not only improve customers' satisfaction, but also helps foster a long-term relationship between banks and clients (Yousuf, 2017).

Reliability is also a strong significant dimension because promise-keeping is really important for service firms. It can be interpreted as the on-time delivery of services to customers. If banks adopt digital transformation on their services, then it will help provide reliable services. Consequently, this will make the customers highly satisfied with banks (Muthoni & Otieno, 2014). This study related with many other related studies such as Hadid et al. (2020), Miklos et al. (2019), Muthoni, and Otieno (2014), found out that the service quality of tangibility and reliability have a positive relationship with customers' satisfaction in the commercial banking sector. Customers are satisfied with the new digital provided by banks at the banking halls such as the modern equipment and professional performance of the staff.

Digital transformation has a positive impact on service quality at the banking hall noted in the remaining dimensions such as responsiveness, assurance with a less significant level and empathy has no significant level. The service quality of responsiveness has less relationship with customers' satisfaction because digital transformation does not involve much with how staff at the banking hall help their customers, whereas customers tend to have more trust in the bank, and they come to the bank because banking halls make them feel safe in their transactions (Mcintyre, 2019). Furthermore, it seems that the customers of the bank rate responsive services as the third most important determinant of service quality because bankers at the banking hall deliver the same level of service quality; therefore, customers tend to pay more attention to the aspects related to staff's behaviors in order to differentiate the excellent provider from the poor one. This finding is in line with Lesin, and Vance (2001); Olatokun, and Ojo (2016); Parasuraman et al. (1988) who discovered that responsiveness was in the third place in dimensions' relative importance. Besides, assurance has been recognized as a less significant dimension of service quality. Assurance also enhances customers' satisfaction if the employees of banks display trustworthy behavior; and this may also positively influence the repurchase intension of clients (Khan & Fasih, 2014). The result of this study is similar with that of Anthonysamy et al. (2010), who considered assurance as positive influence on service quality with less significant level, based on the Multi regression analysis. Among the five dimensions, only empathy has no significant level. The results of the research suggest that there is no significant positive relationship between the empathy and service quality. Although most of the customers would like to use the new facilities in the bank, there are still groups of people prefer a face-to-face service by the banks. Priyanath and Anjalika (2018) have found that there is no significant positive relationship between empathy and service quality when there is an involvement of digital transformation in bank services. Molaee et al. (2013) have shown that the empathy did not have a positive and significant impact on customers' satisfaction.

5. Conclusion and Recommendation

5.1 Conclusion

Digital transformation is a beneficial change in the bank industry, which provides many great opportunities for innovation in the society of Cambodia in the future. Banks need to comprehend customers' satisfaction because it is the fundamental factor that causes banks to continue upper hands. The development and improvement of advancements could change the way that banks provide services for customers.

The present study examined customers' satisfaction toward the impact of digital transformation on the service quality at banking halls of ACLEDA Bank Plc. by using the SERVQUAL. Additionally, the service quality at banking halls were influenced by Tangibility, Reliability, Responsiveness, Assurance, and Empathy. The result of this study discovered that tangibility and reliability dimensions of the service quality model have a strong positive significant impact on the service quality at banking halls. Nonetheless, responsiveness and assurance had a less significant impact on service quality. Lastly,

empathy was one of the lowest significant impacts on service quality among the five dimensions compared with the theory of SERVQUAL Model and the real practice in ACLEDA Bank Plc. It is recommended that bank policy decision-makers in Cambodia use the findings of this study to analyze customers' satisfaction on digital transformation towards the adoption of the SERVQUAL dimension. The digital revolution has disrupted and brought benefits to the financial and banking industries at the same time; thus, digital transformation in banking should include relevant technologies that can bring the most value for both banks and their customers.

5.2 Implication for Finance and Banking

The findings of this research study have highlighted some valuable implications that are specific to the financial and banking context. Bank policy decision-makers can use the findings of this study to analyze customers' satisfaction on digital transformation towards the adoption of the SERVQUAL dimension. The digital revolution has disrupted and brought benefits to the financial and banking industries at the same time; thus, digital transformation banking strategy should include relevant technologies that can bring the most value for both banks and their customers.

5.3 Limitations and Future Research

The researcher suggests future researchers to consider implementing similar studies in other commercial banks and in other major cities of Cambodia to guarantee the efficiency of digital quality services among customers in the country. Larger samples of participants doing surveys should be involved in future studies to obtain more reliable, accurate, and dependable outcomes that can be generalizable to all banks and customers in Cambodia. The study should be based on the qualitative method or mixed methods to collect and interpret the data. Other researchers, moreover, could choose to study in other financial sectors such as insurance companies, specialized banks, and Micro Finance Institutions and make an effort to compare the application of digital quality services, customer satisfaction, and loyalty in different institutions and levels. Lastly, future studies should consider the utilization of more of the SERVQUAL model and other related models.

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Corporate Customers' Perceptions on Online Tax Payment: A Case Study of ACLEDA Bank Plc.

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ABSTRACT

Tax payment, having been conducted by many researchers from different countries, plays a vital role for the government, and it contributes to the national budget in public services. Furthermore, with the lack of the existing literature of E-Tax payment system in Cambodia, this study aims to find out the corporate customers' perceptions on online tax payment by adapting measurement scale of user satisfaction from IS success model. This research study uses a quantitative design in order to collect data from 53 corporate customers at the head office of the ACLEDA Bank Plc. By applying multiple regression analysis, the study assigns system quality, information quality and service quality as independent variables and user satisfaction as a dependent variable. From the analysis, the result reveals that System Quality positively impacts the User Satisfaction while Information Quality nearly has a positive impact on User Satisfaction at the p-value = 0.057. However, Service Quality does not have an effect on User Satisfaction at all. Taxpayers have suggested that GDT provide up-to-date guideline and create the double-check function in E-tax system.

Key Words : Online Tax (E-tax), IS Success Model, GDT, System Quality, Information Quality, Service Quality, User Satisfaction

1. Introduction

1.1 Background of the Study

In 1953, the tax department in Cambodia was established, but the tax system disappeared between 1975 and 1979 during the Khmer Rouge Regime. After that, it appeared again as tax organization from 1980 to 1993. Since 2008, it has been formed again as the general department of taxation (GDT) under the Ministry of Economy and Finance. According to Yusup, Hardiyana, & Sidharta (2015), the government has created tax in order to carry out the duties of assisting the whole society, decreasing the national budget deficit, and enhancing state finance. Tax payment is created to support the government expenditure and improve infrastructure of the country under various aspects such as schools, hospitals, roads and bridges, etc. E-tax or online tax was originally formed as a part of E-government which was launched in 1998 (Liang & Lu, 2013). According to Wang Xuyang (2012), E-tax is the essential system allowing citizens to process tax via electronic system. For instance, the electronic tax payment or E-tax was established in the United States of America (USA) in order to get the customer satisfaction for tax paying process. This technology-based method has also been applied to other countries such as Australia, Canada, England, Germany, and Singapore (Turner & Apelt, 2004). This service goes along with the banking system and internet availability. Therefore, GDT in Cambodia has cooperated with some banks, namely ACLEDA Bank Plc., Vattanac Bank and Canadian Bank for processing of tax collection since it is convenient, time-saving, and safe for the customers to carry cash to the bank General Department of Taxation Cambodia (2020, April 04).

1.2 Research Problem

The status of tax payment in Cambodia has been updated from time to time. In the past, all tax payers were required to pay tax at the counter of general department of taxation or branches of taxation. However, these days, the tax payers do not need to visit the tax department anymore. They just pay tax via the bank such as ACLEDA Bank Plc., Canadian Bank and so on. Additionally, the method of tax payment has been modernized in electronic payment system. Even though the concept of technology-based method is being popular, the online tax payment is still not a common use. Based on my practical experience, customers who have the accounts in the head office of ACLEDA Bank Plc. also face the problems when they process online tax payment.

1.3 Research Objective

This research is conducted to find out the corporate customers' perception on online tax payment by adapting IS Success model.

1.4 Research Question

The research question of this thesis has been stated as follows:
What are the perceptions of corporate customers in the head office of ACLEDA Bank Plc. on using online tax payment?

1.5 Significance of the study

The outcome would contribute enormously to the institutions and individuals as follows:

- GDT: This research can contribute as a useful input to improve the performance of the tax system.
- Customers: Any concerns from customers will be resolved so that the customers using this service will be satisfied. Meanwhile, the others who have yet to use this service will consider using it as well.
- ACLEDA Bank Plc.: The relationship managers can persuade the customers easily to use online tax system; therefore, the amount of corporate accounts and transaction fee will be increased.
- Next researchers: It will be beneficial for next researchers who are interested in the similar study since it can provide the fundamental concept of E-tax payment system.

1.6 Scope of the Study

This study focuses on the corporate customers' perceptions on online tax payment as to whether or not they are satisfied. Those corporate customers were selected from the head office of ACLEDA Bank Plc. The data collection was done only among corporate customers using the online tax payment. Even though the number of companies seems to be small, the sample size still needs to be calculated due to unreachable companies.

2. Literature Review

2.1 Overview of the Key Concepts on E-Tax Payment

In the European Union (EU), the challenging economic zones have modernized themselves by performing E-Government (EU, 2003). In current year, the government officers have been able to cut down the time spent and earn much money on E-Tax system (Carter & Bélanger, 2005; Fu et al., 2006). The researchers have asserted that E-Tax systems are really helpful to developing countries. The government officers have done the direct access to the citizens (Hu, Brown, Thong, Chan, & Tam, 2009) and tax payers did not need to appear physically to communicate with tax authorities because of replacement by online file completion and tax payment (Delucia, 2000; Fu et al., 2004; Fu et al., 2006; NSDL, 2007; Petersen & Washington, 1993; Turner & Apelt, 2004; Wang, 2002). By doing this, it was more convenient, fast, costless and time saving. To reorganize this tax administration, the Directorate General of Taxation applies online methods including E-registration, E-filling and E-billing. Indeed, E-billing performs as the electronic tax payment through bank operation and support. Thus, the bank is also a place where the users apply tax online registration and process payment.

2.2 Theoretical Framework

E-tax payment system has been studied in many countries around the world. Many researchers have applied different kinds of theories and models on E-tax System as mentioned in Table 1.

Table 1: Summary of Literature Review

Author	Country	Theory	Description	Result
Fu et al., 2006	Taiwan	SEM Approach (TPB & TAM)	Studied about Compatibility, Perceived Ease of Use, Perceived Usefulness, Behavior Intention, other variables on 3 payment methods (Manual, 2D barcode & Internet)	- Taxpayers prefer manual payment rather than electronic one due to the Perceived Usefulness since they are less adaptable to the advance technology because of Perceived Ease of Use and Social Pressure - E-tax is higher Risk
Soneka & Phiri, 2019	Zambia	TAM	Studied about Perceived Ease of Use, Perceived Usefulness, Perceived Risk	- E-tax is not useful and easy to use since the E-tax system was not secure enough
Bhuasiri, Zo, Lee, & Ciganek, 2016	Thailand	SEM Approach (UTAUT & PLS)	Studied the complexity of relationship between Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions, Perceived Credibility, Perceived Risk and Intention to Use	- Performance Expectancy, Facilitating Conditions, Social Influence, and Perceived Credibility significantly influence users' Intention to Use while Effort Expectancy and Perceived Risk are less significant to influence Intention to Use
Tran et al., 2020)	Vietnam	IS Success Model	Studied the Service Quality, Information Quality, System Quality and Company Expectation and Complaint towards the User Satisfaction	- Information Quality, System Quality and Organization Expectation lead to Satisfaction and Complaint while the Service Quality has no effect on Satisfaction and Complaint
B & Orlandi, 2016	Australia	IS Success Model	Studied the measurement scale such as Appearance, Ease of Use, Accessibility, Content Quality, Usefulness, Accuracy, Timeliness, Reliability, Privacy, Security, Transaction Capability, Convenience, Responsiveness and Empathy in order to measure the taxpayers' satisfaction	- All dimensions are relevant and important to satisfaction except empathy.
Ali, 2010	Sweden	IS Success Model	Studied System Quality, Information Quality, Service Quality, Intention to Use, Satisfaction and Net Benefits of taxpayers to identify the success of online tax system	- All variables are supported except the Privacy and Security in Service Quality

2.3 Conceptual Framework

Even though the theoretical framework was studied by previous researchers using TAM, TPB, or IS success model, this study adapts IS success model for the research design and data collection (B & Orlandi, 2016). The study has applied three independent variables, such as System, Information, Service Quality, one dependent variable is Taxpayer or Users' Satisfaction.

2.3.1 Model Development

Many variables have been studied in IS success model from Delone, W. H., & McLean, E. R. (2003). However, this study examined four variables, such as system quality, information quality, service quality and user satisfaction. The rest of them were ignored since the purpose of this research is to find out the users' perceptions. Three hypotheses have been formulated. First hypothesis is to find out the system quality which affirmatively affects taxpayers' satisfaction with four components while second hypothesis is to find out information quality on users' satisfaction with four components. Lastly, third hypothesis was studied on service quality which contains two components: privacy & security and availability. Therefore, the study proposed the Conceptual Model and Hypotheses as below:

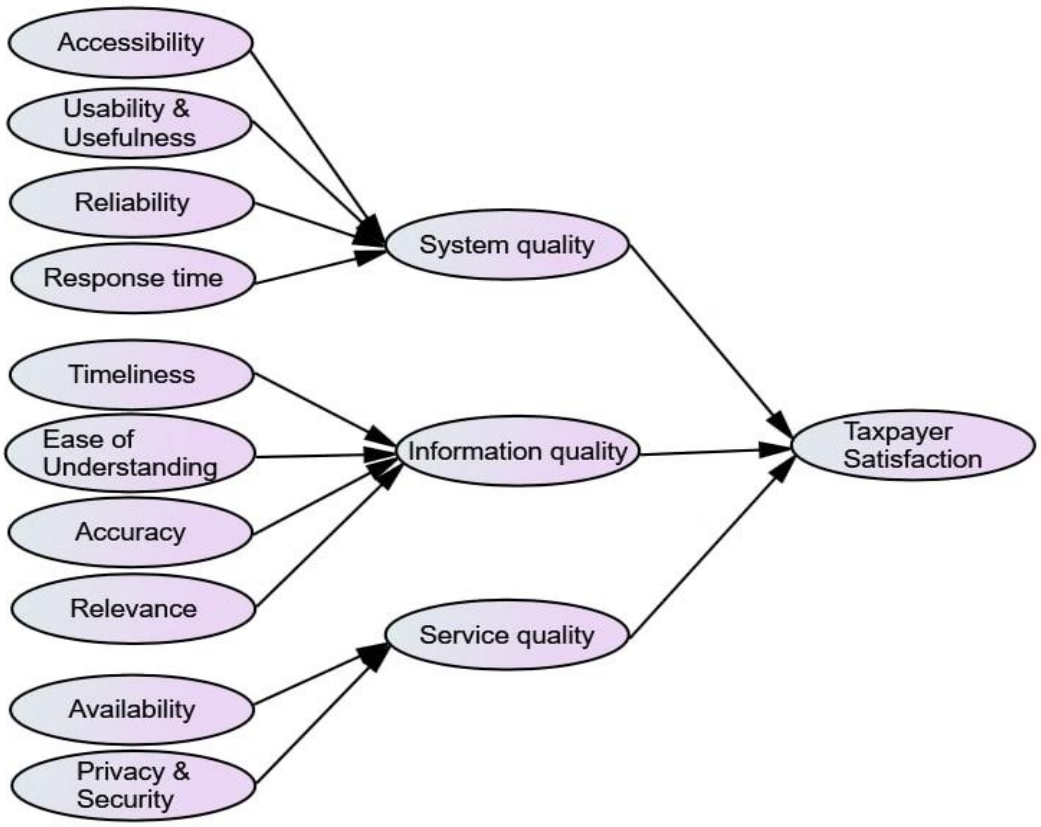

Figure 1: Conceptual Model of IS Success Model by Delone & McLean (2003)

H1: System quality positively impacts on taxpayers' satisfaction while they use the online taxation system.
H2: Information quality positively impacts on taxpayers' satisfaction while they use the online taxation system.
H3: Service quality positively impacts on taxpayers' satisfaction while they use the online taxation system.

3. Research Methodology

3.1 Research Design

This research employed quantitative research approach, using descriptive statistics. The online questionnaire was used, and the customers who have had the accounts at ACLEDA Bank Plc.'s head office and used online tax system were selected to participate in this survey. The purpose of this survey is just to make sure whether or not they are satisfied with E-Tax system nowadays, especially for system quality, information quality and service quality.

3.2 Sampling and Sample Frame

By the end of May 2020, there were around 1000 corporate companies in total which have opened the accounts at the head office of ACLEDA Bank Plc. However, the population contains only around 95 corporate customers who are using online tax service (E-Tax). However, some of them are overseas companies and some are from the provinces. The sample size calculated by Yamane formula (Mora & Kloet, 2010) is 77 companies.

3.2.1 Sampling Techniques and Procedure

The study employed two methods of sampling: probability and non-probability samplings. As expected, the study would be based on non-probability sampling, whereby the sampling units were selected from the workplace and those with access to customers who use an online tax service.

3.3 Research Tools/Instruments

With regards to this survey, online survey called "Google Form" was used for data collection since accessibility to Google Form was free to use and convenient to create questionnaire. With this questionnaire, there was a combination of the concept from previous searchers (Ali, 2010; B & Orlandi, 2016; Connolly & Bannister, 2008; Doll & Torkzadeh, 1988; Salomi et al., 2002; Šmýkala, 2018; V, K, & F, 2002) and the real context in the bank.

3.4 Data Collection

The questionnaire consists of three sections including facts, behaviors, and preferences. The types of question were open-ended and close-ended questions. The survey process began with planning and designing while the second step involves piloting the tool as it is considered necessary to make sure that this online questionnaire really works when it was

sent to the respondents. Next, it is followed by conducting the survey with the sample of 77 companies. This data collection was conducted at the beginning of June after the submission of consent letter and request for permission from the head office of ACLEDA Bank Plc. received the acceptance from Headquarter of ACLEDA Bank Plc. It planned to finish at the end of June. After the survey ended, the data outputs were automatically generated from the survey system in order to input them in SPSS.

3.5 Data Analysis

As briefly explained in data collection, gathering data from online survey was started. These data were exported into excel file and then it was tested by SPSS in order to input them into the research study. Data analysis is expected to help accept or reject the three hypotheses stated above. In order to provide the ease of data analysis, Likert scale from Rensis Likert (1932) has been applied since it is a common use for many researchers (Ali, 2010; Šmýkala, 2018). The 5-pointscales of evaluations, namely strongly agree, agree, neutral, disagree, and strongly disagree were applied with the number from 5 to 1 respectively.

3.6 Ethical Consideration

Since the targeted respondents are the customers of ACLEDA Bank Plc., letter of consent to the institution was used an official permission to ask for the right of data collection. Permission, along with the explanation of the study purpose and ethical issues regarding any sensitive information, was obtained. Customer responses in the questionnaires were mainly used for the purpose of the study only. With regard to the sources used in this research, there were cited properly both within the text and at the end of the text.

4. Results and Discussions

4.1 Findings on Respondents' General Information

Among 53 respondents, there were 10 male and 43 female respondents, accounting for 19 percent and 81 percent, respectively. Regarding to the age, there were 23 and 36 respondents aged below 29 and between 30 and 39, accounting for 43 percent and 36 percent respectively. There were also 8 respondents (15 percent), 2 respondents (4 percent), 1 respondent (2 percent) whose ages are from 40-49, 50-59, and 60 or above respectively.

The most popular position of users was Accounting, accounting for 25 positions or 47 percent of total figure, followed by 12 positions or 23 percent of finance and 9 positions or 17 percent of general manager. Besides that, there were 4 positions (8 percent) of manager assistant and 3 positions (6 percent) of director.

4.1.1 Analysis of Level of Agreement

The following data analysis shows about respondents' behaviors on the user satisfaction while using online tax payment. The Table 2 shows minimum, maximum, mean,

and SD and then analyzes the level of agreement. The means of respondents' opinions for each factor indicate the effecting level of those factors. Since the research using 5-point rating scale, the means from 3.40-4.19 and 4.20-5.00 were considered as agree level and strongly agree level; respectively (Armstrong, 1987).

Table 2: Level of Agreement

No	Construct/ Variables	Min	Max	Mean	SD	Level of Agreement
1	Service Quality	3.75	4.50	4.32	0.22669	Strongly Agree
2	Information Quality	3.67	4.75	4.29	0.31515	Strongly Agree
3	System Quality	3.42	4.50	4.13	0.32576	Agree
4	User Satisfaction	2.33	4.33	3.68	0.59183	Agree

4.1.2 Correlation Analysis

Correlation analysis was used to test the level of correlation between two or more variables. The range of correlation coefficient was between -1 to +1 (Pearson, 1926). That is, when its value is close to +1, it indicates a strong positive correlation. The following correlation coefficients showed the relationship between usability and usefulness, reliability, ease of understanding and user satisfaction. The correlation results are showed as follows:

Table 3: Pearson Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11
1. ACT	1										
2. UU	0.296*	1									
3. RLT	0.214	0.042	1								
4. RST	0.420**	-.271*	.338*	1							
5. TLN	.452**	0.164	0.135	0.059	1						
6. EU	0.042	.626**	0.152	0.003	0.021	1					
7. ACC	0.051	-0.019	-0.020	0.244	0.205	-0.052	1				
8. RLV	0.028	0.253	0.229	-0.132	0.041	.314*	.608**	1			
9. AVT	-0.199	-0.239	0.164	0.266	0.096	-0.216	-0.036	-0.225	1		
10. PS	-0.175	-.310*	.308*	0.000	-0.257	-.305*	-0.099	-0.021	-.271*	1	
11. US	0.214	.710**	.341*	0.083	-0.175	.640**	-0.185	0.138	0.180	-0.232	1

**. Correlation is significant at the 0.05 level (2-tailed),*

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

4.1.3 Linear Regression Analysis

The overall significance of the model will be calculated by using F statistics. When the p-value is less than 0.05, the null hypothesis is rejected. In this case, it means that at least one of the independent variables effected on the dependent variable (Jeon & De Boeck, 2017).

Table 4: Overall Model Significance

ANOVA

Model		Sum of Squares	df	Mean Square	*F*	Sig.
1	Regression	17.369	10	1.737	86.298	.000**
	Residual	.845	42	.020		
	Total	18.214	52			

4.1.4 Hypotheses Testing

Table 5 showed the summary result from all hypotheses tested to identify the influence of system, information and service quality on user satisfaction. The result indicated that two hypotheses namely H1 and H2 were supported and nearly supported, respectively while H3 was not supported. According to H1 and H2, system quality has a positive impact on user satisfaction with Beta=0.434 at 0.001 level of significance, and information quality partially impacts user satisfaction at 0.057 level of significance; However, H3 stated that service quality does not have a positive impact on user satisfaction at 0.577 level of significance.

Table 5: Hypotheses Testing Result

Hypothesis	Sig.	Result
H1: System quality positively impacts on taxpayers' satisfaction while using the online taxation system.	0.001**	Supported
H2: Information quality positively impacts on taxpayers' satisfaction while using the online taxation system.	0.057	Not Supported
H3: Service quality positively impacts on taxpayers' satisfaction while using the online taxation system.	0.577	Not Supported

4.2 Discussions

Regarding the level of agreement that has been computed, the result showed that most respondents strongly agree with the service quality and information quality while they have just agreed with system quality and user satisfaction. However, the result of hypothesis testing has indicated that it is supported for Hypothesis, 1 which means that the good tendency of system quality will lead to the good tendency of user satisfaction. Besides that, the hypothesis testing has shown the nearly supported and unsupported result for hypothesis 2 and hypothesis 3. It means that even though there is a good signal for information quality and service quality, it does not mean that it has a good signal for user satisfaction. In comparison with other research studies from Ali, (2010) and Šmýkala (2018) which were conducted with the same model and similar contents, the system quality in this study is supported and service quality is unsupported, which is consistent with the research studies above. However, the information quality of this study is unsupported while others found that it is supported.

5. Conclusion

5.1 Summary of the Key Findings

As the result showed above, the hypothesis H1 testing result for system quality is supported with the p-value of 0.001, which means that the system quality positively affects the user satisfaction. It is also consistent with the users' opinion. Most of them stated that the system quality has been good so far. Customers said that there were only few people who had some problems with OTP alert, but it does not matter because they are starters who first start to process that transaction and do not know where they can get that OTP code. With regards to information quality, the hypothesis H2 testing result is nearly supported because p-value is 0.057. After reviewing the users' suggestions, the possible reason is because of no guideline updated on time and insufficient time availability. Last but not least, the result of service quality has no relation with user satisfaction since the p-value is 0.577. Most of users prefer to have a double-check function to strengthen the security and to reduce the human errors. Additionally, it also complies with the company policy since most companies require to have a person for verification to control any transactions.

5.2 Implications of the Study

The research study will provide some contributions to GDT, ACLEDA Bank Plc., customers and next researchers. The GDT which is the main party can take this finding into consideration to seek the best tax service's provision and fulfill the user's needs. By providing a good service, tax income to the tax department will be increased and complaint at GDT will be reduced. At the same time, the users will enjoy using the E-tax system.

5.3 Limitations and Future Research

This study can be deemed as the first research to identify the perceptions of online tax payment users at the head office of ACLEDA Bank Plc. The scope of the study is deemed small since this research only focused on one part of ACLEDA Bank Plc due to the time constraint, which resulted in applying only some variables of IS Success model by ignorance of intention to use or use and net benefits. Moreover, this study cannot reach the targeted sampling frame due to the COVID-19 pandemic. Therefore, the next researchers can use this study as the fundamental concepts and broaden the scope.

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Factors Inspiring Customers to Use Mobile Banking App: The Adoption of Decomposed Theory of Planned Behavior (DTPB) Model on the Study of ACLEDA Unity ToanChet App

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ABSTRACT

This article aims to investigate the factors that inspire customers to adopt mobile banking app – ACLEDA Unity ToanChet app – and to elaborate on the rapid evolution, fast growth, and significance of mobile banking in Cambodia. This study focused only on the ACELDA Bank Plc.'s customers that are using this bank's mobile banking's product so-called ACLEDA Unity ToanChet App. To achieve the objective of the research, this study proposes a modified Decomposed Theory of Planned Behavior model (DTPB) in order to figure out if they really affect the adoption of mobile banking app in Cambodia, especially ACLEDA Unity ToanChet App. The DTPB theory was conducted, using two driver variables including attitude (perceived usefulness and compatibility) and perceived behavioral control (facilitating conditions). This study uses correlation design of a quantitative approach; and 204 respondents who are both internal and external customers of ACLEDA Bank Plc. are requested to fill in paper-based questionnaires and online googles form. Using regression analysis, the result of this study shows all that the proposed Model is significance. All of the hypotheses regrading to the factors inspiring customers to use mobile banking ACLEDA UNITY ToanChet App are supported; that is, customer's attitude is impacted by perceived usefulness and compatibility; and perceived behavioral control is impacted by facilitating conditions. Therefore, attitude and perceived behavioral control towards mobile banking have a significant influence on customers' behavioral intention to adopt such mobile banking services.

Keywords: Mobile Banking, Traditional banking, DTPB, ACLEDA Unity ToanChet App

1. Introduction

1.1 Background of the Study

The 2000s marks the beginning of the fourth industrial revolution after the successful invention of three Industrial Revolutions. In today's world, the presence of the Fourth Industrial Revolution or (4IR) has altered the way people live, work, especially the way of performing business. Therefore, banking industry needs to develop innovative banking services and products in order to catch up with technology revolution (Islam et al, 2018).

In response to Industry 4.0, which differs across countries, all countries recognize the Industry 4.0 as a great opportunity for socio-economic development. The phenomenon has made most of the countries in Southeast Asia region including Vietnam, Malaysia, Thailand, Singapore, and Indonesia take their own approaches to embrace a digital future and adopt a cohesive digital policy in moving to and applying for 4.0 technologies to develop financial services (Razak, 2018). According to the announcement of the Ministry of Posts and Telecommunications in March 2018, the Royal Government of Cambodia has a long-term vision to become an upper-middle-income country by 2030 and a high-income country by 2050 and aim to "complete the transition into a digital economy" by 2023 by ensuring the country can adapt and transform itself in line with changes in technological trends while minimizing the social and economic costs of transitioning into a more technologically advanced economy (Sok, 2018).

1.2 Statement of the Problem

With the emerging technology, mobile banking has significantly revolutionized the banking activities by making the functions applicable on smartphone devices. Mobile banking is introduced to replace traditional banking for time saving, less transaction cost, security and convenience. Due to the advent of mobile banking, there are many banks in Cambodia, competitively developing their own mobile banking product in order to capture the interest of financial consumers and compete to conquer the market. Among the leading banks in Cambodia, ACLEDA Bank Plc. has developed its mobile app named ACLEDA Unity ToanChet App, which is on the trend in mobile banking industry. This phenomenon has raised some issues, concerning the factors that really inspire people to choose ACLEDA Unity ToanChet App as a means of mobile banking.

1.3 Research objective

This paper aims to find out factors which inspire customers to use a mobile banking app, ACLEDA Unity ToanChet app by adopting the Decomposed Theory of Planned Behavior. In other words, the study attempts to ascertain the customers' attitude and their perceived behavioral control toward the adoption ACLEDA Unity ToanChet App.

1.4 Research Question

The study raises one research question: What is the customers' attitude and perceived behavioral control toward the adoption of ACLEDA Unity ToanChet app?

1.5 Limitation of the study

This finding emphasizes only ACLEDA Bank Plc.'s product, namely ACLEDA Unity ToanChet App. With the influential factors included in the study, researchers could easily find the intervention of technology in the correlation between customers and mobile banking. Notably, the number of ACLEDA Unity ToanChet App users is approximately 1.2 million (ACLEDA Bank Plc., 2020). Owing to limited resources and time in assembling the data, researchers can approach respondents around 204 people which is much smaller if compared with the whole population, which has limited the generalization of the findings to the whole population.

2. Literature Review

This section discusses the theoretical framework and concepts for the present study by using Decomposed Theory of Planned Behavior (DTPB) to support the investigation of the research purpose, which is to find out the factors that inspire customers to use mobile banking services.

2.1 Definition of Mobile Banking

Mobile banking has been defined by Chitungo & Munongo (2008) as the financial transaction application app to be downloaded in the mobile phone to enable customers to bank anywhere anytime based on wireless handsets. According to Kelly and Palaniappan (2019), Mobile Banking refers to the mobile communication services and integration of electronic money through multi-platform cooperation and multi-industry between mobile telecom carriers and banking institution. According to Sadiku et al. (2017), mobile banking consists of banks, telecommunication companies and mobile devices. It uses software called an app, which can be downloaded to a mobile device. In short, Mobile Banking is a trending and the latest service by which customers access bank services remotely by using mobile devices with wireless connectivity.

2.2 Theoretical Framework

2.2.1 Decomposed Theory of Planned Behavior (DTPB)

Decomposed Theory of Planned Behavior (DTPB) was first proposed by Shirley Taylor and Peter A. Todd in 1995 in the study on the users' behavior of a computer resource center; they had applied Structural Equal Model between Theory of Reasoned Action, Theory of Planned Behavior and TAM (Taylor & Todd, 1995). As noted by Davis (1989), future research of Information System or Information Technology usage has to address the other variables which affect the user acceptance and intention. Consequently, those determinants may not fully explain the factors which predict the acceptance of a technology application such as mobile banking (Yu, 2009). Thus, besides studying the Decomposed Theory of Planned Behavior, this research would further explore the relevant models which influenced the acceptance and the intention of customers in using mobile banking.

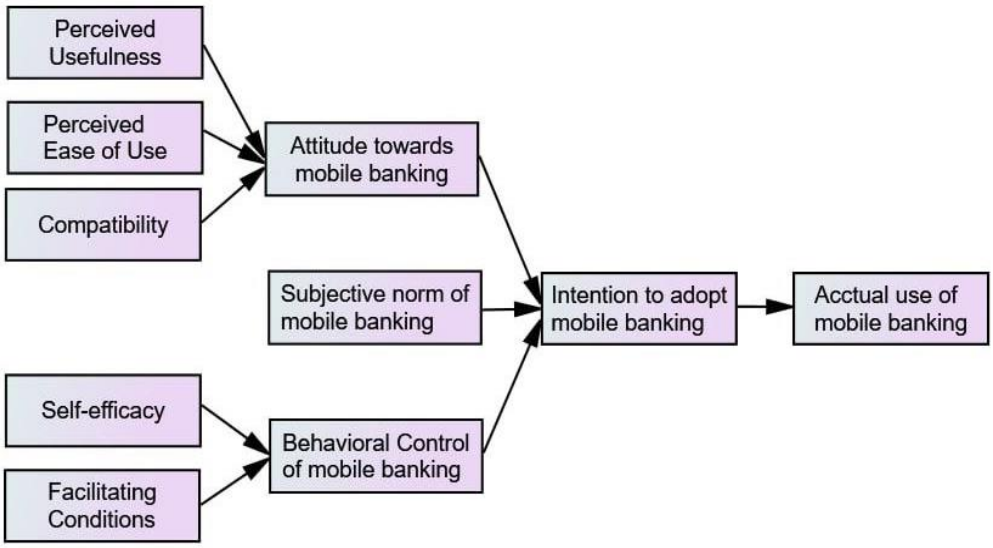

Figure 1: Decomposed Theory of Planned Behavior (DTPB) (Taylor and Todd, 1995).

In Theory of Planned Behavior (TPB), the Attitude (ATT), Subjective Norms (SN), Perceived Behavior Control (PBC) are affected by human behavioral beliefs. To explain and to predict human behavior on different conditions, Taylor and Todd proposed the Decomposed Theory of Planned Behavior (DTPB) to decompose the unidimensional belief constructs into multidimensional belief constructs (Tao and Fan, 2016). In this model, the actual behavior is determined by intention to use, which in turn is determined by the attitude toward behavior, subjective and perceived behavioral control (Taylor and Todd, 1995).

2.3 Conceptual Framework

The study applies the Decomposed Theory of Planned Behavior (DTPB) to the applications of mobile banking and to develop a thorough understanding on consumer behavior as far as this service is concerned in the context of Cambodia. Therefore, the reason behind choosing this particular model lies in the fact that it has excelled itself in predicting the performance of behavior and intentions toward products' trials.

The research conducted by Majali & Mat (2010) suggests that attitude and perceived behavioral control are important for positive behavior intention toward mobile banking adoption. The result emphasized that customers' attitude and perceived behavioral control are influenced by the new innovation, intention and adoption of new technology as well as the support and help they could gain from bank and internet providers. However, their study has found that compatibility has no positive influence on attitude toward mobile banking usage. In contrary, Yu (2014) has found that compatibility with lifestyle is proved to be a crucial factor in determining mobile banking use because people would consider using mobile banking service as a personal matter which is compatible with their daily needs, preferences, and lifestyles.

The empirical study by Celik (2008) in Turkey, illustrates that perceived usefulness, compatibility and attitude are typical drivers of mobile banking usage intention and adoption, and also found to be critical in influencing the intention to adopt mobile banking. It means that attitude does reflect what individuals think about the benefits of mobile banking in terms of perceived usefulness and its characteristics. The researcher has added that customers would have a perception of how to access banking services anywhere and anytime at the same time, it saves money and time among other benefits.

Another research study in Vietnam conducted by Vuong et al, (2020) has illustrated that perceived behavioral control was found to be an influential factor to affect an individual behavioral intention to adopt mobile banking services. Drawing on an analogy to the expectancy-value model of attitude, it is assumed that perceived behavioral control is determined by the total set of accessible control beliefs. Specifically, the strength of each control belief is weighted by the perceived power of the control factor, and the products are aggregated. To the extent that it is an accurate reflection of actual behavioral control, perceived behavioral control can, together with intention, be used to predict behavior.

Based on the study of Kanimozhi & Selvarant (2019) developed over Kazemi's research (2013), in developing countries, the attitude and perceived Behavioral Control had more influence to the adoption of Mobile banking than the Subjective Norm. Subjective norms were insignificant to explain the intention to adopt mobile banking (Shih&Fang, 2004).

The empirical study conducted by Lin (2010) has shown that perceived usefulness and compatibility are significant influenced attitude, which in turn leads to behavioral intention to adopt or continue to use mobile banking. Customers who have more positive beliefs about the perceived usefulness of mobile banking, formed more favorable attitude toward adopting (or continuing to use) mobile banking. Moreover, customers become more willing to use mobile banking to conduct banking transactions when they find it easy to use.

According to Khasawneh and Hamdi (2015), with regard to the perceived behavioral control, both self-efficacy and facilitating conditions were found important. However, facilitating conditions in comparison to self-efficacy has higher impact on customer's behavior's regarding the use of mobile banking. Thus, perceived behavioral control is considered to be one of the most significant variables.

As a result, the main variables, influencing the usage of mobile banking adoption to be studied in the research, include the intention to adopt mobile banking, attitude toward mobile banking, perceived usefulness, compatibility, perceived behavioral control and facilitating conditions. Hence, subjective norm and self-efficacy, namely the control variables, are considered to be the less significant variables.

2.3.1 Perceived Usefulness and Attitude

Based on the study of Jawira (2018), perceived usefulness refers to the degree of individual's belief by using specific technology and innovation which enhance his or her productivity or job performance. Ramlugun and Issuree (2014) have demonstrated that once a consumer feels that such services are directly beneficial to his or her personal and business life, then he or she will be positively influenced to keep using such services. In this regard,

the construct of attitude "perceived usefulness" has also been proven to affect the consumers' attitudes and intentions.

H1: The perceived usefulness impacts the customer's attitude toward mobile banking

2.3.2 Compatibility and Attitude

Compatibility refers to the degree to which the innovation fits with the potential adopter's current needs, existing values, and previous experiences (Khasawneh & Irshaidat, 2017). According to the study conducted by Shih and Fang (2004), since compatibility is consistent with current needs, values and experiences, it is safe to say that the advancement of mobile banking falls in alignment with two components in terms of compatibility: current needs and existing values. Thus, such components operate as drivers to positive attitudes towards mobile banking.

H2: The compatibility impacts the customers' attitude toward mobile banking.

2.3.3 Facilitating Conditions and Perceived Behavioral Control

According to Jawira (2018), facilitating condition was adapted by Triandis (1980). Facilitating conditions are considered time saving sources which exempt the user from physically visiting the bank to conduct transactions (Irshaidat, 2017). With the development of technology and availability of different applications, users are becoming increasingly demanding regarding the Internet and mobile banking (Svilar & Zupancic, 2016). Thereby, it results in encouraging customers to endorse the technology-based-self-service. Thus, there is an obvious correlation between time saving and lower costs and a higher perceived behavioral control (Irshaidat, 2017).

H3: The facilitating conditions impact the customers' behavioral control toward mobile banking.

2.3.4 Attitude and Intention

According to the study by Ajzen (1991), Attitude (ATT) is the degree performed by individual, which reflects favorable and unfavorable toward performing a behavior. Jouda et al. (2020) demonstrate that an individual's perception greatly impacts their behavior intention towards any first-time service or technology usage. Subsequently, the literature concludes a correlation between attitudes and behavioral intention by raising two constructs of attitude: perceived usefulness and compatibility.

H4: The attitude impacts the customer's intention toward mobile banking.

2.3.5 Perceived Behavioral Control and Intention

With regard to the study of Jawira on the Perceived Behavior Control developed by Ajzen (1991), perceived behavioral control reflects the belief of individual that has power to

access the new innovation or technology that results in performing behaviors. The intention of customers to adopt mobile banking is found to be affected by perceived behavioral control in which facilitating conditions is the construct that is considered under the perceived behavioral control (Gayan & Damunupola, 2019).

H5: The perceived behavioral control impacts the customer's intention towardmobile banking

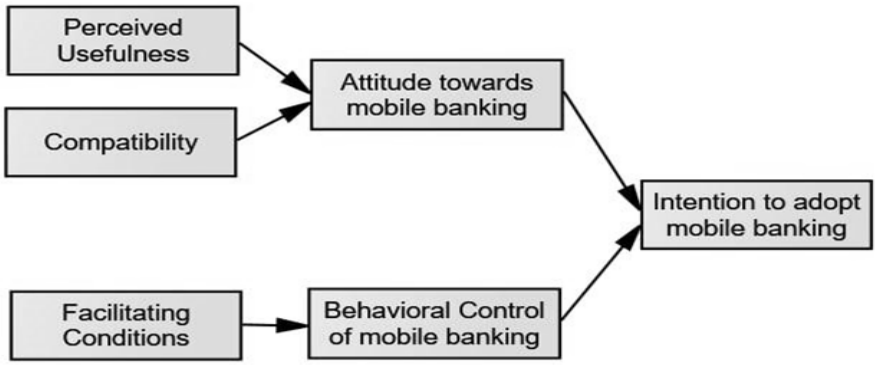

Figure 2: Conceptual Framework

In summary, based on aforementioned literature, the research hypotheses are derived from the modified DTPB model:

H1: The perceived usefulness impacts the customer's attitude toward mobile banking
H2: The compatibility impacts the customers' attitude toward mobile banking usage
H3: The facilitating conditions impact the customers' behavioral control toward mobile banking usage.
H4: The attitude impacts the customer's intention toward mobile banking
H5: The perceived behavioral control impacts the customer's intention toward mobile banking.

3. Research Methodology

3.1 Research Design

This research employed quantitative approach in the form of a descriptive study. This paper aims to investigate an issue that has not been clearly defined by using both primary and secondary data. The study conceptualized DTPB model into the Cambodian context with the focus on one specific mobile banking app, ACLEDA Unity ToanChet App. In this descriptive study, the primary data in numerical form were collected to find out the inspiring factors on the adoption of ACLEDA Unity ToanChet App.

3.2 Research Site

This study selected respondents who were staff at the Head Office of ACLEDA Bank, external customers who experienced using ACLEDA Unity ToanChet App in Phnom Penh City. 3.3 Target

3.3 Population and Sample

The target populations for this study were people working for financial institution or owning business, students majoring in finance-related field, and anyone who are familiar with mobile banking apps, and they are Cambodians at the age between 18 and 60 who live in Phnom Penh. Tabachnick, Fidell, & Ullman (2007) stated that a case-to-IV ratio of 40 to 1 is reasonable for a certain study. Thus, with five predictors, the study selected 204 respondents as a sample The elements were selected in the form of random sampling (Kumar, 2014). In this study, the random sampling was also divided to undergraduate or post graduate students and employee or employer of banking and finance related field or those who currently consuming ACLEDA Unity ToanChet App.

Table 1: Construct Measurements

Construct	Measurement Items	Sources
Perceived Usefulness	PU1: The usage of mobile banking ToanChet App is easier than the traditional banking. PU2: Mobile banking ToanChet App makes me easier to conduct my own banking transaction. PU3: Mobile banking ToanChet App gives me the chance to perform banking operations everywhere and every time. PU4: Mobile banking helps me to reduce the cost and save time.	Puriwat & Tripopsakul (2017), Baolin et al (2017); Yu (2009); Shih&Fang (2004); Aboelmaged& Gebba (2013; Aijaz et al (2015)
Compatibility	CPT1:Using mobile banking ToanChet App to do bank transaction fits well with my lifestyle and habits. CPT2: Using mobile banking ToanChet App fits well with my personal needs. CPT3: Using mobile banking ToanChet App fits well with my working or business styles. CPT4: Using mobile banking ToanChet App fits well with ATM and QR code usages.	Yu (2009); Shih&Fang (2004); Puchel et al. (2010); Yu (2014)
Facilitating Conditions	FC1: My different series of smart phone helps me access to mobile banking ToanChet App. FC2: The internet helps me access to mobile banking ToanChet App faster and easier. FC3: I get supportted from ACLEDA staff when I first used ToanChet App. FC4: I can get help from ACLEDA staff when I have problems using mobile banking ToanChet App.	Yu (2009); Shih&Fang (2004); SonYu(2014); Taylor&Todd (1995)
Attitude	ATT1: I feel interested in using mobile banking ToanChet App. ATT2: I feel that using mobile banking ToanChet App is beneficial. ATT3: I feel that using mobile banking ToanChet App is a modern lifestyle. ATT4: I feel that using mobile banking ToanChet App is totally good.	Ajzen (1991); Yu (2009); Shih&Fang (204); Aboelmaged& Gebba (2013); Aijaz et al (2015)

(Continued)

Table 1: Construct Measurements

Construct	Measurement Items	Sources
Perceived Behavioral Control	PBC1: It is easy to learn how to use mobile banking ToanChet App. PBC2: I believe I can control over the transaction in using mobile banking ToanChet App. PBC3: I believe I have the knowledge and the ability to use mobile banking ToanChet App.	Yu (2009); Shih& Fang (2004); Aboelmaged& Gebba (2013; Aijaz et al (2015)
Intention	INT1: I intend to use mobile banking ToanChet App whenever I purchase product offline and online. INT2: I intend to use mobile banking ToanChet App in any transaction in the future. INT3: I intend to use mobile banking ToanChet App to others. INT4: I intend to use mobile banking ToanChet App than any other App.	Al-Sharafi .et al (2017); Puriwat & Tripopsakul (2017), Yu (2009); Karma et al (2014); Aboelmaged& Gebba (2013;

3.4 Data Collection

Due to the fact that this research was conducted during COVID-19 pandemic, the data collection was generated in two forms. First, the Google Form of questionnaire was sent to the selected participants, who were requested to fill in the form accordingly and encouraged not to skip any parts or questions. The link was sent through social networking sites such as Facebook, Facebook messenger and Telegram. Second, the form of questionnaire was also printed in hard copies and handed to the selected participants who consumed mobile banking ACLEDA Unity ToanChet App, which was mostly conducted at the ACLEDA Bank Head Office. This method was created in order to fasten the data collection process and to make sure that the forms of questionnaire were handed to the right participants.

3.5 Data Analysis

The data gathered were analyzed, using the software called SPSS, Statistical Package for the Social Sciences. The data from the Google Form were extracted as a table in the form of Excel files and then were imported into SPSS tables. The research used ANOVA, Linear Regression, Pearson Correlation and descriptive statistics which include frequency, percentage, mean, and standard deviation that describe the degree of agreement on each concerning statement.

3.6 Reliability Test

The measurement of Cronbach's alpha was shown in Tables 2, which displays Cronbach's alpha value ranging from 0.804 to 0.911. According to Chee (2015), the reliability coefficient of variables is acceptable if Cronbach's alpha is greater than 0.70. Therefore, the instruments that measure intentions to adopt m-banking are considered reliable and can be used to test the conceptual model.

Table 2: Reliability Test

No.	Variable	No. of Item	Cronbach's Alpha (n=204)
1.	Intention (INT)	4	0.842
2.	Attitude (ATT)	4	0.909
3.	Perceived Usefulness (PU)	4	0.885
4.	Compatibility (CPT)	4	0.911
5.	Perceived Behavioral Control (PBC)	3	0.838
6.	Facilitating Conditions (FC)	4	0.804

3.7 Ethical Consideration

There are three main ethical issues to be considered. Firstly, the researcher must maintain the confidentiality of the participants. The questionnaires contain some data related to the participants' financial information and their privacy. Secondly, it is about the appropriate use of information, using both in-text and end-of-text citations to avoid plagiarism. Lastly, the researcher tried to maintain honesty and transparency in gathering and analyzing the data to ensure the absence of data fabrication to obtain favorable results.

4. Results and Discussions

4.1 Results

4.1.1 Findings of Demographic Factor

Of the 204 participants, 107 were female, accounting for 51%, 93 were male, accounting for 45.6% while the remaining which is 3.4% of the respondents prefer not to reveal their gender. The responses indicated that the majority of the participants were aged from 25 to 35, with the response rate of 37.7%. Another distribution of the sample shows that there were 71.1% of the total participants holding bachelor's degree. Furthermore, 62.3% of the mobile banking users were bankers. Regarding the frequency of time, most of the participants would use mobile banking ACLEDA Unity ToanChet App every day, accounting for the response rate of 55.4%.

4.1.2 Analysis of Level of Agreement

As all variables contain the level of agreement from agree to strongly agree, the result showed the greater level of agreement in each factor which is used to determine the factors inspiring customers to use mobile banking ACLEDA Unity ToanChet App.

Table 3: Level of Agreement

Variables	Min	Max	Mean	SD	Level of Agreement
Intention (INT)	1.00	5.00	4.0662	0.63501	Agree
Attitude (ATT)	2.50	5.00	4.3333	0.56568	Strongly Agree
Perceived Usefulness (PU)	2.75	5.00	4.3480	0.55726	Strongly Agree
Compatibility (CPT)	2.00	5.00	4.1213	0.62110	Agree
Perceived Behavioral Control (PBC)	2.33	5.00	4.2092	0.55644	Agree
Facilitating Conditions (FC)	2.50	5.00	4.1556	0.54815	Agree

4.1.3 Correlational Analysis

The correlations are ranged from 0.576 to 0.840. According to Karl Pearson (1948), correlation coefficient should not above +1 to avoid the severe multicollinearity problem. Thereby, the study contained no multicollinearity problem based on the highest correlation coefficient at 0.840.

Table 4: Pearson Correlation Matrix

	ATT	**PU**	**CPT**	**PBC**	**FC**	**INT**
ATT	1					
PU	0.840**	1				
CPT	0.684**	0.738**	1			
PBC	0.740**	0.738**	0.710**	1		
FC	0.677**	0.681**	0.675**	0.669**	1	
INT	0.658**	0.576**	0.654**	0.644**	0.597**	1

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

4.1.4 Regression Analysis

The result of Linear Regression Analysis which tested on ANOVA, it suggested that the significance level was shown as $p=0.000<0.05$. This implied that the model is statistically significant in explaining that at least one of the predicator variables impacts on customers' intention to the use of ACLEDA Unity ToanChet App. The result of Table 5 showed that there was positive impact of perceived usefulness with ($\beta=0.737$) at level significant (0.000) and compatibility with ($\beta=0.140$) at level (0.013) on customers' attitude toward mobile banking. Moreover, there was a positive impact of facilitating conditions with ($\beta=0.669$) at level significant (0.000) on customers' perceived behavioral control toward mobile banking. Furthermore, there was a positive impact of attitude with ($\beta=0.402$) at level significant (0.000) and compatibility with ($\beta=0.346$) at level significant (0.000) on the intention to use ACLEDA Unity ToanChet App. Finally, Table 5 also illustrated that all hypotheses are supported.

Table 5: Hypothesis Testing Analysis

Hypothesis			**β**	**Sig.**	**Result**
H1 Perceived Usefulness	➡	Attitude toward mobile banking	0.737	0.000	Supported
H2 Compatibility	➡	Attitude toward mobile banking	0.140	0.013	Supported
H3 Facilitating Conditions	➡	Perceived Behavioral Control toward mobile banking	0.669	0.000	Supported
H4 Attitude	➡	Intention to use mobile banking	0.402	0.000	Supported
H5 Perceived Behavioral Control	➡	Intention to use mobile banking	0.346	0.000	Supported

4.2 Discussion

Traditional studies on the adoption of single technology or service have often indicated that the coefficients between constructs in DTPB model are all positive (Yu, 2014). First, the study has found that perceived usefulness has received tremendous support and recognition in various research works of (David et al, 1989; Taylor & Todd, 1995; Abdulkadir et al., 2013). Perceived usefulness is indicated to have a significant correlation with attitude, intention and usage of mobile banking services, which is consistent with the study of Alsamydai et al. (2014). Second, compatibility is found to have a significant positive influence on attitude and intention to use mobile banking. It showed that the considerations of lifestyle compatibility resulted in a reluctance to use mobile banking. Third, facilitating conditions are also found to have a significant positive influence on the perceived behavioral control and the intention to use mobile banking. This is consistent with the empirical study of Irshaidar and Khasawneh (2017) that mobile banking is highly efficient and time-saving to conduct transactions. Hence, technology resulted in service quality revolution, thereby encouraging customers to endorse the technology-based-self-service, and believed to have resulted in cost reduction for customers and staffs. Fourth, attitude is found to be the key factor that influence the consumers' intention to use mobile banking ACLEDA Unity ToanChet App. Attitude was found to be the factor that has driven the individuals to adopt any innovation their intentions. This study would appear to support Mawere et al. (2013) contention that attitude has a strong effect on intention. Last but not least, perceived behavioral control is found to have a significant impact on the intention to use mobile banking ACLEDA Unity ToanChet App. This finding is consistent with the study of Aijaz et al. (2015) and Yu (2014) that perceived behavioral control role as the important factor to influence the intention of consumers to adopt mobile banking app once consumers can estimate of how easy or difficult to use new technology adoption that will be to carry out the behavior that directly enhances intention to use mobile banking; thus, they will use those services accordingly.

This indicates that the pragmatic-free dimension of intention to use of mobile banking ACLEDA ToanChet App based on perceived usefulness, compatibility, attitude, perceived behavioral control, and facilitating conditions. The findings highlighted the two important aspects which were customers' attitude and perceived behavioral control towards mobile banking of the consumer behavioral intention to adopt such mobile banking services. This result has satisfactorily answered the research questions and responded to the research objectives.

5. Conclusion

5.1 Summary of the Key Findings

This research successfully identified the factors inspiring customers to use ACLEDA Unity ToanChet App. By drawing upon the strength of established theories in the information system and information technology, the study extends the applicability of DTPB construct in examining and validating the factors that motivate the customers to use

ACLEDA Unity ToanChet App. The results have shown that the customers of ACLEDA Bank Plc. in Cambodia will be more likely to adopt mobile banking services if they find it provide more convenient, useful, and fit for their lifestyle, value and demand. Also, they will intend to use the service if they can personally access all the financial options of traditional banks and mortar banks in their hands.

5.2 Research Implications

The findings of this study offered a few valuable practical implications for banking sector or other financial institutions which were offered and intended to provide mobile banking services in Cambodia to apply in practice. As using mobile banking is more convenient than traditional banking; therefore, it is crucially important for banks to provide features that would be of benefit to the consumers from a banking marketing perspective and to develop and design the mobile banking's functions and services in a way that is consistent and fit for people's lifestyles. For theoretical implication, in order to have a better understanding of DTPB, the researcher should add to and expand the knowledge of the most important factors influencing consumer behavioral intention towards adopting mobile banking services by synthesizing theories from the related literature.

5.3 Limitations and Future Research

This present study consists of some limitations. First, the sample is still small and some of the variables of the Decomposed Theory of Planned Behavior (DTPB) had been removed from the study. Therefore, a large sample size, qualitative method, and all variables of DTPB should be employed in the next study.

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