

Factors Affecting the Students and the Parents' Adaptation towards the Electronic Payment System, For the Tuition Fees Of Thai Business Administration Technological College via Smartphones

by

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Abstract

The objective of this research is to study about the factors affecting the adaptation, by the parents and students, of paying the tuition fees by Electronic Payment System via smartphones. The sample groups consist of 310 parents and students of Thai Business Administration Technological College, Bangkok, Thailand. The questionnaires, used as the instruments, are divided into 3 parts. First part checks personal status of the respondents using a series of checklist. The second part is composed of questions related to factors which affect the respondents' decision of adapting the payment system. And the third part is the questionnaire related to the decision whether the respondents would adapt the payment method or not. For the reliability test of the instruments, the Cornbach Coefficient value is equal to 0.913. The results of this study are as following: 1) there are at least 4 factors which highly affect the decision to adapt the electronic tuition fee payment via smartphones of the parents and the students, including: personal attitude, conformity with reference groups, confident of online services and perception of risks, 2) there are 3 factors which highly encourage the adaptation of the electronic payment system including: perception of the benefits, perception of easy usage and the respondents' determination to use the system, 3) various degree of the attitude, conformity with reference groups, confident of online services and perception of risks of the whole picture affect different degrees of adaptation. If taking all aspects into consideration, the result shows each of the factors differ.

Keywords: Adaptation, Electronic Payment

1. Introduction

From the past until the present, human communication has rapidly changed and constantly developed. The major catalyst is technology which, now a day, has become an indispensable part of human daily life.

Various technologies are used as the means of communication and one of them is the online network which is used for almost all dimensions. It gives rise to a new type business call "E-Commerce" enables the business enterprises to reach for the customers faster than ever using the Internet. Recently, the E-Commerce has been attracting Thai commercial entities because of the increasing channels for the online consumers to purchase products and services, whether through Facebook, Line, Instragram or via other online stores.

Therefore, contemporary entrepreneurs must be able to utilize the online network as an instrument to increase their sale value. Proper uses of the internet can stimulate business growth. Presently, many entrepreneurs have been operating their off-line storefronts in conjunction with their online stores. On the other hand, most of the newer entrepreneurs operate only online store since it does not require large amount of capital and, it can operate around the clock.

The development of telecommunication helps stimulating the growth of Thai E-Commerce. Increasing Internet speed enable rapid data transfer to be more convenient. The reducing price of Internet-accessible devices such as smartphones and computers enable the consumers to easily acquire the devices which result in the increasing Internet accessibility. The above factors flavor the expansion of E-Commerce in Thailand. In addition, Kasikorn Research Center has anticipated that the tendency of Thai E-Commerce Expansion in 2016 is about 15 – 20% which has been increased about 230,000 – 240,000 million Baht over 2015.

As technology advances and economy expands, the complexity of payment system becomes more important and been developed to cope with the demands of business sectors, financial institutions and the consumers. Computer and communication technology have been increasingly incorporated into monetary and banking system. Commercial banks have been developing systems which making transition from conventional fiat monetary system, to electronic system. The innovation of Internet and its commercial integration has created a new platform for Electronic Commerce which allows trading of goods and services, advertisements, and money transfers electronically. It also reduces the cost and increase the efficiency of businesses. Electronic Commerce Transaction process would not be completed without the Payment System.

Electronic Payment System, or E-Payment for short, depends upon electronic devices. Although there are several ways to complete the transaction such as making payment with a credit card online through the Internet network with encrypted security enhancement, the fiat payment using bank checks, bank transfers, or crypto-currencies in a form of digital money stored in a smart card or hard drive, the advantages of Electronic payment outweigh them. The benefits of Electronic Payment for the organizations are rapid monetary transactions. The usual means of transportation are unnecessary. It saves time and expenses, reduces the risks of handling large amount of cash.

Electronic Payment System also increases the efficiency of monetary management since the payments are made online and real-time. Urgent payment can be made regardless of time and distance. The receivers can acquire the payment and manage the amount within in time. The factors which revolutionize the payment system are including the advancement of Information Technology, and behavior of the consumers which open up to the technology. These result in the new behavioral patterns of using payment services through high-speed internet services and mobile devices, such as mobile phones, tablets, and laptop computers. The developments of numerous applications are able to support a wide array of consumers' activities. Also, the government has been increasingly developing various telecommunication infrastructures and pushing Digital Economy hoping to drive the country's economy. By incorporating digital technology, we can increase the proficiency of competitiveness and to add value of domestic products, through innovations and creativities. The mentioned factors would open up new opportunities for business sectors, thus stimulate the consumer to use the Electronic Payment Services.

The authors would like to conduct a research to study the factors which may affect the adaptation of the Electronic Payment System, via smartphones. The results of this study can be used as a data for business sectors and governmental organization to support any developments of Digital Technology for business transactions or to increase the efficiency of electronic monetary transfers.

For the entrepreneurs who already have employed Electronic Payment System, they can increase and effectively implement the system uses to further reduce operational cost and other expenses. The data also can be used as a guide line to improve satisfactory and develop convenient customer services for public consumers. Furthermore, the use of Digital Technology to enhance Thailand's Electronic Payment System is also in conjunction with the government's policy of Digital Economy.

Objective

To study about the factors which affect the decision to adaptation the payment of tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.

Research Hypothesis

1. Personal attitude which affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
2. Conformity with reference groups affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
3. Personal confident of online services affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
4. Perception of risks affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.

Theoretical Framework

In this research, the research authors have observed several factors which affect the decision of whether the parents and students of Thai Business Administration Technological College would adapt the Electronic Payment System to pay for tuition fees using their smartphones or mobile devices. The theoretical framework is as following figure 1.

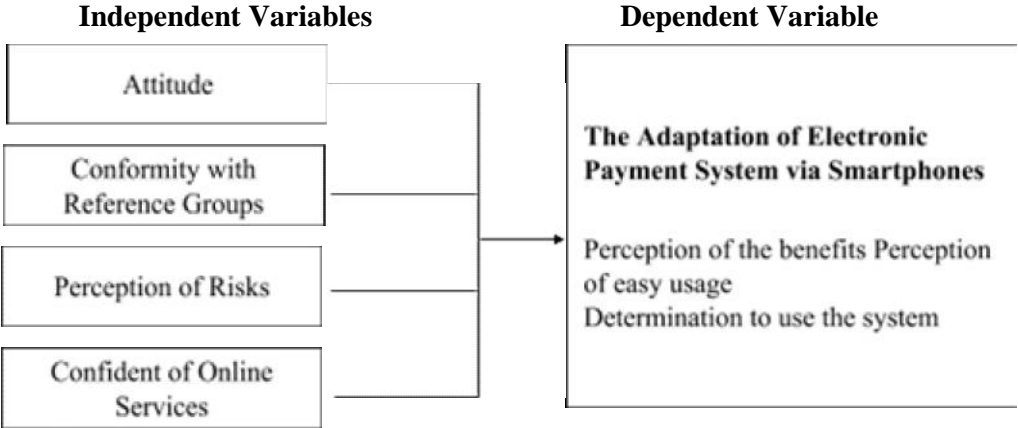


Figure 1 Illustration of the Theoretical Framework

2. Literature Review

2.1 Concepts and Theories Related to Consumer Behaviors

Consumer Behaviors can be defined as a process of decision making and the manners of each individual to make an assessment of procuring the payment for products and services. The assessment of behaviors related purchasing and spending of the consumers depends upon personal factors, psychological factors, and socio-cultural factors as the external stimulants that induce the decision of purchasing. In meanwhile, the process of such decision making is including the perception of problems, data gathering, evaluation of alternatives, making decision to purchase and post-purchase behaviors.

Theories of Adaptation

The adaptation of innovations means the decision to accept and utilize the innovations to their possible full potential considering as a better solution and to be more beneficial. Innovations adaptation of the individuals begins with the process of the initial exposure to the innovation. Then, such individuals are convinced to make a decision of either accepting or rejecting the innovation, proceed with actions according to the decision and confirm the actions' outcome. The time taken during the process, short or long, depends on each individual's characteristics and the types of innovations. [Orathai Luanwan, 2012, p. 6]

Concept of Adaptation

The publics can be educated through the process of learning. Personal adaptation can occur spontaneously through self-learning and, such learning would be accomplished through the individuals' direct operational experience. When the individuals are sure about the benefits of such innovations, they would be keen to invest or make purchase of the innovation.

To summarize, adaptation is an act of each individual's consenting to receive such innovations and willingly acts upon. Such behaviors of each person would change through a process and would take time [Orathai Luanwan, 2012, p. 6].

Adaptation Process can be defined as a type of psychological process of each individual starting from the first reception of the changes through the acceptance and utilization [Jirawat Wongsawatdiwat, 1986].

Theories of Technological Adaptation

The Theory of Reasoned Action (TRA) by Ajzen [Ajzen, 1991] mentions about the actions according to reasons that, each individual's decision to act or not to act is based upon the acquired data. Any course of action or behavior is determined by behavioral intention which composed of 2 factors: first, Personal Attitude toward the behavior and, second, personal perception of either social pressure or social influence is present. The concept of the majority of people would appropriately act or refrain from acting is called Behavioral Conformation of Subjective Norm. Generally, a person would intend to act, any one of the behaviors, after an assessment whether it would result in positive outcomes toward him, her or the significant others. The positive outcome indicates that such behavior can be an appropriate course of action. Once Personal Attitude and conformation of Subjective Norm are consisted with one another, the intention to act would arise. In addition, the scholars should weigh between Personal Attitude and conformation of Subjective Norm to be able to

better understand and explain the behavioral intention. [Ajzen, 1991; Fishben, 1990] Both Personal Attitude and conformation of Subjective Norm are based on beliefs. The beliefs which are the foundation of Personal Attitude called Behavioral Belief, while the Subjective Norm is based upon the beliefs according to the reference group. Even though, each person possesses many forms of belief, there always be a belief, which governs the attitude toward particular behaviors, influenced by and conformed to the reference group. To certain extent, people combine their belief in the reference group who are important to them with the expectation of the group toward themselves, think they should or should not perform particular behaviors. Such behaviors are especially affected by the intensity of Normative Beliefs and Motivation to comply with the Reference. The aim of this theory is to predict and understand human behaviors. [Ajzen & Fishbein, 1980] The initial agreement of this theory is that human's intention to act or not to act is governed by Behavioral Criteria, which proposes that factors determining human's intention is Attitude and Conformation of Reference.

2.2 Literature Survey

Kunnatee Aksornkan (2007) has studied about the adaptation of the management system of E-Budgeting, from the factors affected personal and operational adaptation. The result has shown that there are significant differences between personal adaptation and operational adaptation point of view. By comparing the task effectiveness, the personnel are not familiar with the E-Budgeting system and still attached to the conventional system while personnel foreseen the advantage of new technology that would assist the work faster and more effectively. From the operational point of view, the system is moderately complex to operate. The protocol is hard to understand, the usage is cumbersome and fairly complex. A large number of simultaneous users cause the system to halt or produce more errors which cause more lost-working time. Therefore, the degree of adaptation to the system is only modulate since the users view the system as complex and may actually obstruct their work tasks.

Chutinon Nakalertkawe's (2010) the Adaptation of E-Service Technology has studied about factors which affect the use of E-Service to make payment for services. The ricks perception, security and privacy are the factors, in means time, the users can perceive that the ease of usage would also affect their perception toward the advantage of functionalities.

Pornpong Jongprasitpon's (2009) Online Payment of the Internet Users found that the Internet users prioritize on the factors of security risks and benefits of online payment, which is extremely fast. Learning how to make an online payment is relatively easy. Some online stores offer cheaper prices or give more discounts than conventional shops, which attract more users to choose online payments instead of cash payments. Demographic factors, increasing personal experience of computer and internet usage among the population result in the increasing trend of online payment adaptation.

3. Research Methodology

The sample populations in this research are 1,613 students or parents of Thai Business Administration Technological College that were randomly selected by systematic sampling and simple random sampling based on the number of students or parents of Thai Business Administration Technological College. The sample size in the questionnaires was used to compare the sample size from the Krejcie and Morgan tables. The total sample size was 310. The questionnaires were divided into 3 parts.

Part 1 Physical Factors, a series of check list to acquire personal status, divided into 11 categories.

Part 2 Influential Factors on the decision making to accept electronic payment method by parents and students of Thai Business Administration Technological College through via Smartphone devices. These questionnaires were based on 5 rating scales, divided into 4 categories 13 numbers and testing on total reliability was 0.98.

Part 3 E-Payment Acceptance of parents and students of Thai Business Administration Technological College via Smartphone Devices. These questionnaires were based on 5 rating scale, and divided into 3 categories 8 numbers.

4. Research Methodology

1. The researcher asked for a letter from the Graduate School, The field of educational administration, Sripatum University, for a permission to conduct the research with the sample group at Thai Business Administration Technological College.

2. Researchers sent all documents and make an appointment for the returning date of the questionnaires.

3. The researcher picked up all 310 questionnaires, or 100%.

4. Check the returned questionnaires and select only the completed questionnaires for data analysis.

Statistics used in data analysis were comparative analysis, factors analysis on decision making payment of tuition fee by the parents and students in Thai Business Administration Technological College, suing E-Payment via Smartphone Devices, and Classification Factors influencing on the decision making of the sample by using hypothesis test. F-Test was the case that the first variable had only two options. And one-way ANOVA test was used for the first variable had two or more alternatives, it could be tested by using the Least Significant Difference (LSD)

5. Results Analysis

1. The affecting factors on the decision making to accept the payment electronically of parents and students of Thai Business Administration Technological College via Smartphones including: personal attitude, conformity with reference groups, confident of online services and perception of risks were at a high level. While the Bloggers' Feedback / Website Ads influenced on using electronic payment service via Smartphone devices was moderate.

2. Adaptation of Electronic Education Payment made by Parents and Students of Thai Business Administration Technological College via Smartphone Devices influenced by the factors of perception of the benefits, perception of easy usage and the respondents' determination to use the system were at a high level.

- From the comparison of Personal Attitudes affecting the adaptation of Electronic Student Payment by Parents and Students of Thai Business Administration Technological College via Smartphone Devices, it was found that the F value was statistically significant at .05 indicating that attitudes had an effect on the acceptance of electronic tuition payment by parents and students of Thai Business Administration Technological College. When considering each aspect, it was found that all aspects had different effects on acceptance.
- From the comparative results of conformity with reference groups affecting the adaptation of the electronic payment by parents and students of Thai Technology College, it shows that the F value was statistically significant at the .05 level indicating that the electronic payment acceptance of the parents and students of the College of Technology, Thailand, through smartphone devices. The results of the study showed that all aspects were different.
- The results of the confident of online services comparison affect the adaptation of the electronic payment by parents and students of Thai Technology College shows that the F value was statistically significant at .05. The acceptance of electronic student payment by parents and students of Thai Technology College, The difference in online confidence among the respondents was found to be different.
- For the Perceptions of Risk affecting the adaptation of the electronic payment by parents and students of Thai Technology College via Smartphone Devices, it was found that the F value was statistically significant at the .05 level indicating that the electronic payment acceptance of the parents and students of the Thai Technology College was via the smartphone device. The difference in perception of risk was found to be different, and it was found that each aspect was different.

6. Discussion

The factors affecting the decision to adapt the payment of electronic education of parents and students of Thai Business Administration Technological College via Smartphone Devices can be discussed are as following:

1. Factors influencing the decision to accept and adapt to the E-Payment method by parents and students of Thai Business Administration Technological College via Smartphone Devices were high, included personal attitude, conformity with reference groups, confident of online services and perception of risks.

2. Adaptation of E-Payments made by parents and students of Thai Business Administration Technological College, which was classified by the differences attitude, are diverse

as a whole, resulting in different degrees of adaptation. When considering each dimension, each of the dimensions is different from one another.

This study produce similar result with a research of Angkarn Meewanukul (2010), the study has shown that the factors affecting the intention to use financial transactions through 3G innovation of consumers Perception of easy usage and Confidence of Online transactions affect the customers' intention to use financial transactions through 3G innovation. The attitude towards personal intention to use financial transactions through the most innovative 3G represents is mostly positive. Interestingly, the introduction of 3G innovation increases the transactions.

3. The degree of Adaptation of Electronic Payment, for tuition fee, made by Parent and Student of Thai Business Administration Technological College were different. From the text above, the finding is similar to The Theory of Reasoned Action (TRA). It is possible to predict the behavior of a person. There are two important determinants: behavioral attitudes and the conformation to the reference group in that behavior. Theoretical model of acceptance of technology (TAM) states that the extended knowledge from rational action theory can predict the acceptance of such service. There are 3 important variables that are affecting: the benefits of E-Payment, the easy usage and the sample group' personal determination.

4. Degree of adaptation of the Electronic Payment System by parent and student of Thai Business Administration Technological College via Smartphone were different due to the perception of risk was found to be different for each individual, and it was found that each aspect was also different.

The above finding is in conjunction with the research of Orathai Luanwan (2012). It has found that personal factors would influence the adaptation of Information Technology. The government officials, at Chaeng Wattana, Bangkok Thailand, have found that personal aspects affecting the acceptance of different technologies according to the characteristics of each individual including sex, income and education. However, the factor of their respective professions has no effect to the adaptation of technology. The personal factors of perception of the benefits and perception of easy usage are vastly different from person to person depending on personal nature and their respective professions. All personnel recognize the benefits of such technology, but it doesn't affect the adaptation. In addition, the research of Chutanon Nakhartee (2010) the Adaptation of E-Service Technology has shown that the ricks perception, security and privacy are the factors. The users also perceive that easy usage would also influence their perception toward the benefits of such system.

References

Chutinon Nakalertkawe (2010). Factors Affecting Acceptance in Using E- Service to Pay for AIS Mobile Phone Users in Bangkok Metropolis. (Independent Study Master's Degree, Thammasat University).

Jiravat Wongsawasdiwat (1995). Attitudes, Beliefs and Behaviors. Bangkok: Three Fine Prints.

Kunthikarn, Kan. (2007). Acceptance of Electronic Budgeting System. (E-Budgeting) For the operation of the budget office staff. (Independent Study, Rajamangala University of Technology Thanyaburi).

Orrathai Launwan. (2012). Factors Affecting Adaptation of Information Technology: A Case Study of Department of Community Development, Chaeng Wattana Government Center. (Independent Study Master Degree, Rajamangala Campus, University of Technology Thanyaburi).

Pongpong Jongprasithphan. (2009). Factors Affecting Online Payment In Bangkok Metropolitan Area. (Independent Study Master's Degree, Thammasat University).