

# FACTORS AFFECTING THE SERVICE USAGE BEHAVIOR OF CHINESE CUSTOMERS TOWARD THE ALIPAY MOBILE PAYMENT SERVICE IN THAILAND

Liu Yunxi<sup>1</sup>

Asst.Prof.Dr. Leela Tiangsoongnern<sup>2</sup>

## ABSTRACT

With the rapid development of mobile payment, the competition of payment enterprises is becoming more and more fierce, which prompts the payment platform to reduce or even cancel the fees. Chinese enterprises such as blue pay and lazada wallet have entered the Thailand market successively. Alipay is facing fierce competition in the mobile payment market. Alipay wants to obtain sustained competitiveness. Against this background, Alipay services need to fully understand consumers, improve the payment experience of consumers, and win the recognition of consumers.

This study use the questionnaire to collect data from 354 Chinese consumer who use Alipay mobile payment service in Thailand. Data was analyzed using demographic statistics and tested the hypotheses by chi-square ( $X^2$ - test), and regression analysis. This study found that majority of respondents age between 19-24 years old, and earn monthly income or pocket money 20,001-25,000 bath. Hypothesis testing revealed that (statement of H1: The demographics factors of Chinese customers will not have significant different to use Alipay mobile payment service in Thailand); and (statement of H2: The perceived product attributes of Chinese customers has a positive impact on their choice to use Alipay mobile payment service in Thailand). This partial relationship is significant at  $\alpha = 0.05$ .

**Keywords:** Alipay, Mobile payment, Consumer behavior.

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<sup>1</sup> A Student of MBA (International Program), College of Innovative Business & Accountancy, Dhurakij Pundit University, Bangkok, Thailand.

<sup>2</sup> A Research Supervisor, Deputy Dean of International Programs and Connectivity and Director of International MBA & Ph.D. BA Programs.

## **Introduction**

Alipay initially attached to Ali's electronic business platform, through joining the financial services such as borrowing, flower and other financial services, and opening a series of life and communication functions such as living numbers and family accounts, and opening the commercial service interface of the three party, such as travel and takeaway, penetrated into various real life scenes of consumers, including consumption, life, financial management, communication and other fields. It is intended to be a one-stop scenario platform centered on each consumer. Similarly, Wechat Payment is attached to the Wechat platform, integrating social, entertainment, financial and life services, and rapidly expanding the online and offline application scenarios of Wechat Payment. Therefore, Alipay's advantage in mobile payment business is due to the huge transfer of electricity users accumulated over the years at the PC end, as well as the high transfer costs of the platform ecosystem to users. However, as a social platform, Wechat has more natural advantages. On the one hand, WeChat platform has more active users than Alipay; on the other hand, services integrating social and entertainment features can be integrated into the real life scene of consumers faster. For example, the functions of Wechat red envelope and AA payment make Wechat payment popular with new users quickly. In recent years, Chinese enterprises such as blue pay and lazada wallet have entered the Thailand market successively. Alipay is facing fierce competition in the mobile payment market. Alipay wants to obtain sustained competitiveness. The choice of user's choice largely determines the competitiveness and survival cycle of enterprises in the market.

In the offline consumption scenario, consumers are free to choose among various payment modes. Comparing with the present situation traditional payment methods such as gold and bank cards provide more convenience and benefits to consumers, so Chinese customers generally accept mobile payment. However, Chinese customers in Thailand need further research on Alipay's choice behavior. Which factors will affect the choice of Chinese customers to Alipay? This problem needs further analysis of customer choice behavior after receiving mobile payment. The aims of this research study are as follows:

H1: The demographics factors of Chinese customers have a positive impact on

H2: The perceived product attributes of Chinese customers has a positive impact on their choice to use Alipay mobile payment service in Thailand.

## **Investigating constructs**

The service usage behavior of Chinese use Alipay which is examined in terms of service type, usage place of customers, and reason for using, influencers, frequency of usage, and amount of customers spend per time.

- Alipay means is a third-party mobile and online payment platform.
- Perceived usefulness means is one of the independent constructs in the Technology Acceptance Model (TAM). It is “the degree to which a person believes that using a particular system would enhance his/her job performance” (Davis, 1989).
- Perceived ease of use means is the degree to which a person believes that using a particular system would be free of effort.
- According to Thakur (2014), when studying the willingness to use mobile payment, "perceived security risk":

- Perceived Risk means economic risk refers to the situation that users fear that using mobile payment may cause property losses, including cheating, theft and other expenditures more than they can cope with. Nowadays, with the development of mobile payment, the security of mobile payment is mainly embodied in that mobile payment can guarantee the property security of users. Therefore, this study argues that perceived economic risk is one of the important attributes of perceived products of mobile payment.

## Methodology

Due to the number of population is unknown, the researcher use Taro Yamane table to calculate by the approximately sample size for this study. The sample size is calculated based on 95% confidence level and 5% sampling error based on the following formula:

$$n = Z^2 [P (1-P)] / e^2$$

n = Sample size

Z = Reliability of 95% is 1.96

e = Not reliability is 0.05

P = Percentage (0.05)

Calculation:

$$n = Z^2 [P (1-P)] / e^2$$

$$= (1.96)^2 [(0.50) (1-0.05)] / (0.05)^2$$

$$= 384$$

Because the number of population is inexplicitness, in order to ensure the reliability and validity of the sample in the sample survey, the sample is set at 384.

The questionnaires were through meet by accident randomly distributed to Chinese people. These areas were selected because these areas are highly crowded and can represent many citizens from the various studying group. Data collection was conducted during in June 2019.

## Results and Discussion

The questionnaire was distributed to 384 Chinese who had used Alipay. At DPU University, Chinese restaurant, King power duty free. 354 responds were received, resulting the response rate of 91.93% were achieved.

This study studies the perceived product attributes of mobile payment based on Utility Theory (perceived effort building, perceived external acceptance, perceived payment convenience, perceived economic risk, perceived record convenience, perceived price). The questionnaire was used to carry out hypothesis testing, and the results of Alipay regression were further analyzed:

According to the logistic regression analysis, we found that in the questions 13-17 representing perceived usefulness, the more consumers who agreed with Alipay were more inclined to spend more than 7 times a week, and the same phenomenon was also reflected in questions 18-20 representing ease for use. In the questions 21-23 representing the economic risk, we can see that the more consumers who think the use of high economic risk is more

inclined to use the frequency of one times per week, the less they agree that the longer the consumers with high economic risk spend on Alipay.

Finally, we use frequency and time as dependent variables, perceive ease of use, perceive usefulness, perceive risk and use scenario as independent variables to conduct disorderly multinomial logistic regression analysis.

In terms of usage frequency, we can see that the higher the consumer's recognition of ease of use, the more likely it is to use frequency more than 7 times a week. The more likely it is to use more than 7 times a week, the more worried about economic risks, the less frequent it will be used. In terms of usage time, the higher the recognition degree of ease of use, the greater the possibility that the usage time is longer than one year, and the shorter the usage time with economic risk, while perceived usefulness has little effect on the usage time.

To sum up, we find that demographic characteristics do not affect the factors that affect Alipay use, and perceived usefulness, perceived ease of use and perceived economic risk are the main factors that affect Alipay usage.

This leads to development of conceptual framework of the study and the following hypothesis:

H1: The demographics factors of Chinese customers have a positive impact on their choice to use Alipay mobile payment service in Thailand.

H2\*: The perceived product attributes of Chinese customers has a positive impact on their choice to use Alipay mobile payment service in Thailand.

**Table 1** Result of Hypothesis 1: Relationship between demographic profile and toward to use

Items	X <sup>2</sup>	P
Frequency of usage:		
Gender	3.105	0.376
Age	8.222	0.512
Education level	6.742	0.664
Monthly income	8.269	0.764
Spending of time:		
Gender	6.774	0.079
Age	4.706	0.859
Education level	8.291	0.505
Monthly income	15.14	0.234
Usage place:		
Gender	0.161	0.984
Age	4.348	0.887
Education level	5.87	0.753
Monthly income	5.088	0.827
Spending amount of time:		
Gender	0.398	0.941
Age	13.755	0.131

Education level	4.319	0.889
Monthly income	3.987	0.912

The table 1 showed that the demographic of Chinese customers was found having no significant relationship with impact on their choice to use Alipay mobile payment service in Thailand. ( $P > 0.05$ )

**Table 2** Result of Hypothesis 2: Relationship between perceived product attributes and toward to use

Perceived usefulness:	Frequency of usage	
	Coeff.	P
Transaction speed	-9.215	0.001
Records of consumption	6.269	0.006
Preferential benefit degree	-5.995	0.043
Perceived ease of use:		
Account creation complexity	4.669	0.02
Using the interface	13.233	0.014
Payment facilitation	-10.771	0.016
Perceived Risk:		
Information security	19.999	0.015
Security Payment	-9.243	0.035
Operational security	4.587	0.026
Perceived usefulness:	Usage time	
	Coeff.	P
Transaction speed	8.773	0.008
Records of consumption	-6.566	0.008
Preferential benefit degree	1.189	0.016
Perceived ease of use:		
Account creation complexity	5.228	0.012
Using the interface	-1.123	0.01
Payment facilitation	7.966	0.003
Perceived risk:		
Information security	6.316	0.002
Security Payment	-4.541	0.026
Operational safety	-7.071	0.023

The table 2 showed that the perceived product attributes were found having significant relationship with impact on their choice to use Alipay mobile payment service in Thailand. ( $P < 0.05$ )

### **Implication of the study**

This study mainly studies the impact of mobile payment perception product attributes on consumer choice. Therefore, mobile payment product design, marketing and other aspects are of great significance.

(1) The research results have enlightening significance for mobile payment product design.

In the era of more and more optional products, how to make quick decisions has become an important problem that troubles consumers. Therefore, the Internet platform will be welcomed by consumers. On the contrary, mobile payment with weak user dependence is difficult to continue to grow. For example, Apple Pay, UnionPay and other mobile payments have excellent product performance, but it is difficult to occupy a large market.

(2) Understanding user's needs and improving value perception

In order to achieve sustainable development, enterprises must shift their focus from price advantage to user perceived value orientation, fully tap user needs by means of technology and services, improve product and service quality from user needs, further improve the convenience and interesting of products, expand business and service areas, and meet users' higher needs. Create more benefits for users.

(3) Enhancing payment experience and enriching payment scenarios

Third-party mobile payment makes users independent in payment time and space. This usefulness is a huge advantage of third-party mobile payment and a key factor affecting user satisfaction. Enterprises should maintain their advantages, improve the payment experience, complete payment activities in a more convenient and fast way, and enrich the payment scenarios so that users can really pay safely and effectively at any time and anywhere.

(4) Optimizing product quality and seeking the way of differentiation

In the current third-party mobile payment market, the homogeneity of payment products is quite serious. To break through in the fierce market, we must seek the way of differentiation, innovate functions and optimize quality on the basis of meeting the diversified needs of users.

### **Limitations and Recommendations for Future Study**

There are some limitations in this paper. First of all, this study only focuses on the population of three places: DPU University, duty-free shops and Chinese restaurants in Bangkok, Thailand, without considering other places. This paper chooses Alipay as a mobile payment method according to the development of mobile payment, but cash, credit card and so on are also commonly used by consumers. At the same time, emerging mobile payment such as UnionPay cloud flash payment is also an option for consumers. Therefore, in the future, scholars can further incorporate other payment modes into the scope of research. For example, we can make a comparative study between developed countries that have not yet accepted mobile payment and Thai markets that have accepted mobile payment. We can add such payment modes as Wechat payment and cloud flash payment to the scope of research, so as to analyze the different payment modes. The relationship between the two markets can also be further in-depth analysis of what factors lead to consumers' different acceptance of mobile payment in the two markets.

This study lacks in-depth analysis of the other functions of Alipay's perceived product attributes and mobile payment choices. Later studies can focus on consumer satisfaction, loyalty and other factors to analyze the formation process of consumers from use to dependent use and then to use.

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