Study of Marketing Communications and Attitude toward QR Code Payment: A Comparison between Thailand and Taiwan

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Abstract:

QR Code Payment is a technology to pay goods or services by scanning QR Code through smartphone or tablet that connects with various ways to pay such as Direct Debit, Credit Card, and Cash Wallet and so on. The purpose of this research is to compare between Thai and Taiwanese about Demographic Characteristics, Perception of Market Communication, and Attitude toward QR Code Payment. The data had been collected from 400 samples of Thai and Taiwanese by Questionnaire and analyzed by t-test, One-Way ANOVA (F-test), and Pearson Correlation in SPSS (Statistical Package for the Social Sciences) program. This research mainly indicated the differences of Age, Education, and Occupation of Thai samples; and the differences of Age, Occupation, and Income of Taiwanese samples lead to the different perception of marketing communication. Moreover, Taiwanese samples have more positive perception and attitude concerning marketing communication than Thai samples. On the other hand, the perception of marketing communication both Thai and Taiwanese samples has a significantly low correlation with attitude toward QR Code Payment

Keywords: QR Code Payment, Perception, Marketing Communications, Attitude.

1. Introduction

Nowadays, technology becomes an essential part of in our daily life. Technology attributes to fulfil four necessities of life (clothing, food, lodging, and medicine). Moreover, every people on over the world can connect via technology, especially communications that interactively makes real-time and informs news anywhere anytime. Using technology facilitates the job or creates products, innovation for reinforcing industries both macro and micro. The main reason for technology that we use technology to fulfil our need and make our life more comfortable, it is no doubt to say that people cannot exit or develop without technology.

Square symbol is a one of technology that became well known more than before. QR code was utilized to substitute the information and interacts swiftly. QR code is an abbreviation of Quick Responses that is 2D (Dimension) barcode. This invention was born in 1994 by Denso-Wave Company.

Most companies use QR Code to facilitate the consumer to find more detail of products or services, link to the website, advertising or payment with QR Code Payment. When the smartphone has already had "QR Code Reader" application, a user can take a picture through QR code symbol, and then the user gets the information entirely and purchase immediately by connecting smartphone with various ways to pay such as Direct Debit, Credit Card, and Cash Wallet and so on.

There is some case that cash is becoming outmoded in China. One of the reason is Chinese people have been preferred use mobile to scan and pay goods or services by QR Code Payment in daily life. They call this phenomenon is "cashless society." Therefore, probably, China will be the first country to be phase out cash in the nearest future, which people do not need to hold substantial money in a pocket in daily life.

On the other hand, QR Code Payment is incubating in Thailand. Initially, five banks that have given the green light for QR Code Payment in Thailand include Kasikornbank, Siam Commercial Bank, Krungthai Bank, Bangkok Bank and Government Savings Bank. By the way, there is a survey result from Visa (2017, cited by Thumsub, 2017) explained 74% of Thai samples knew QR Code Payment and 46% of Thai samples want to use QR Code Payment in daily life.

In Taiwan, QR Code Payment is also the new payment platforms. Ted Chen (2018) suggested about 70% of consumers are willing to adopt contactless credit card payments, while 60% of active cards are ready to be used in mobile payment applications, adding that 80% of local banks have made their systems compatible with contactless terminals. Besides, Visa survey (2017, cited by Tsai Yi-chu and Frances Huang, 2017) depicted 77% in Taiwan who used non-cash payment services in the past favored QR code as a payment platform.

Therefore, Researcher wants to focus on Demographic Characteristics, Perception of marketing communications, and Attitude between Thailand and Taiwan that researcher will highly hand this research to a relevant organization for improvement QR Code Payment in Thailand and Taiwan further.

2. Literature Review

2.1 QR Code Payment

Meaning is a technology to pay Goods or Services by QR Code Payment Scanning through Smartphone By connecting with various ways to pay such as Direct Debit, Credit Card, and Cash wallet and so on.

2.2 Demographic Characteristics

Siriwan Serirath and group (1996: 41-42) suggested demographic characteristics include gender, age, education, occupation, income. Market Segmentation used commonly demographic characteristics to define the target market. While the psychological and socio-cultural aspects help to explain the idea and the feeling of the target audience, demographic data will be accessible and useful to find a target marketing, as well as easier to measure than other variables. In summary, the different demographic characteristics influence the consumer behavior.

2.3 Perception Theory

Schiffman and Kanuk (1994: 162) suggested Perception is a process by which individuals are selected, organized, and interpreted information to create a meaningful overview of that information. That will influence the selection and know by an interpretation of the individual that depends on necessity, values, and expectations.

Siriwan Serirath (1998: 139) also suggested the Perception is the process of understanding (exposure) in the world that he or she lives.

Kraupl Taylor (1996: 162) suggested the step of perception as follows; (1) Field of sensations is when the perception happened. It is more than one perceptions of that information such as when listening to lectures, we will both hear the lecturer and see the audiovisual simultaneously. (2) Sensory percept is a process that only recognizes a shape of information. It is not yet to connect with recognition. Such as when seeing one object, then know that the fabric is the only rectangular shape. The fact, it is the flag. (3) Meaningful percept is the process that perceives the meaning of the stimulus. This step requires comparable to the recognition inside the memory. Such as when the fabric is rectangular in a horizontal streak of five colors with a large blue strip in the middle, white, and red stripes, respectively. That is the Thai flag.

2.4 Marketing Communication

Suwuttana Wongkapun (1987) explained marketing communications are a marketing activity to communicate meaning, knowledge, and understanding to the receiver. That creates a business-to-consumer relationship and achieves the objectives of the business.

Moreover, Warunee Tuntiwongwanich and group (2003: 244) suggested there are seven procedures to develop effective communication including; defining the target audience, determining the purpose of advertising or communication, design incentive content to the receiver, create a structure of the advertising, choose communication channels, selection sources (Personal communication channels or Non-personal communication channels), and collect the feedback.

Besides, Kornnika Ruktam (2012) suggested advertising media including printed media advertising, broadcast media advertising, outdoor advertising media, transit advertising, and point of purchase advertising.

2.5 Attitude Theory

Kendler (1963) suggested that attitude means a person to show behavior to support or against the person, institution, situation, or concept.

Good (1959) also suggested that the attitude is the readiness to be expressed in a certain way or against some situation, person or thing.

Decho Swananont (1969) mentioned the attitude that a person could be created or changeable. It is a motivation that determines how people behave towards the environment.

In summary, attitude is the mind, mood, feelings, and inclination of the person to the information and exposure in that situation, either positively or negatively. Attitude consists of thinking that affects emotions and feelings come out to behavior.

Zimbardo and Ebbesen (1970, cited by Pornthip Boonnipat, 1996: 49) distinguished three components of attitude: (1) The Cognitive Component is the belief component of the individual both like and dislike. If the person knows or thinks what is right, then they will have a good attitude towards that. Vice versa, if there is any knowledge that person feels something is not right. Then, the bad attitude will happen. (2) The Affective Component is the relevant part of emotions that relate to things that it is a characteristic of the individual. (3) The Behavioral Component is the expression of the person towards something, or who are influenced by the elements of knowledge, thinking and feeling.

Allport (1975) commented the attitude that could arise from: (1) Caused by learning. Newborn children will be educated about the culture and traditions of parents, both directly and indirectly, as well as parental practices and follow them on. (2) Caused by The ability to distinguish between good and bad. Such as adults and children, there are different knowledge and experience, so they have a different decision, which is good or bad. (3) Caused by individual experiences. Some student has a terrible attitude towards teacher because teacher blames that him/her. However, some student has a good attitude towards the same teacher because the teacher always caressed him/her. (4) Caused by imitating or accepting the attitude from the others. For example, children may gain the attitude of their parents or their favorite teachers to become their attitudes.

3. Methodology

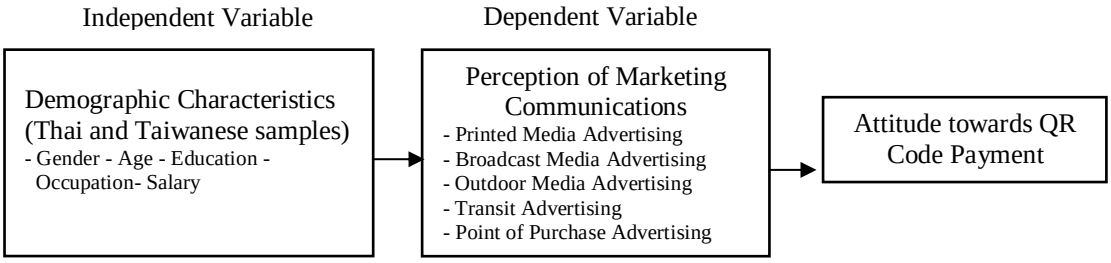

Figure 1: Conceptual Framework

This research is quantitative research that related literature about Demographic Characteristics, Perception Theory, Marketing Communication, and Attitude Theory to develop the questionnaire, which will gather data from samples.

This research has two samples including Thai and Taiwanese samples. Researcher defines sample size by setting confident level 95%, and an error margin is 0.05 (Yamane, T., 1973). Following this formula:

$$n = \frac{N}{1+NE^2}$$

Whereas:

n = number of samples

N = total population

E = error margin

Summary the samples of Thai samples and Taiwanese samples are 385 samples. Researcher permits more reserved error margin 15 samples. Therefore, the samples are 400 samples.

Researcher uses non-probability Sampling regarding; accident sampling, snowball sampling, and convenience Sampling that will distribute the questionnaire in Chiang Mai, Thailand 200 copies and in Yunlin, Taiwan 200 copies. Totally 400 samples are surveyed. The questionnaire is made in three languages, which are English, Mandarin and Thai languages and consisted of three parts.

Part one: demographic characteristics, which are interrogation regarding gender, age, education, occupation and income of samples that there are five questions in this part.

Part two: perception of marketing communications of Thai and Taiwanese samples toward QR Code Payment. There are five parts and eighteen questions regarding three questions of printed media advertising (Q1-Q3), four questions of broadcast media advertising (Q4-Q7), four questions of outdoor media advertising (Q8-11), five questions of transit advertising (Q12-Q16), and two questions of the point of purchase advertising (Q17, Q18).

Part three: attitude of Thai and Taiwanese samples toward QR Code Payment. There are five parts and fourteen questions regarding four questions of goods and services (Q1-Q4), three questions of usability

(Q5-Q7), two questions of store (Q8-Q9), three questions of government (Q10-Q12), and two questions of trends using QR Code Payment in the future (Q13-Q14).

4. Data Analysis

The hypothesis of this research is analyzed by t-test, One-Way ANOVA (F-test), and Pearson Correlation in SPSS (Statistical Package for the Social Sciences) program.

Table 1: Conclusion of the hypothesis

Hypothesis	**Result**
H1: The different demographic characteristics of Thai samples have a significantly different perception of marketing communications toward QR Code Payment.	
H1.1: The different Gender of Thai samples has a significantly different perception of marketing communications toward QR Code Payment.	Reject
H1.2: The different Age of Thai samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H1.3: The different Education of Thai samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H1.4: The different Occupation of Thai samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H1.5: The different Income of Thai samples has a significantly different perception of marketing communications toward QR Code Payment.	Reject
H2: The different demographic characteristics of Taiwanese samples have a significantly different Perception of marketing communications toward QR Code Payment.	
H2.1: The different Gender of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment.	Reject
H2.2: The different Age of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H2.3: The different Education of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment.	Reject
H2.4: The different Occupation of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H2.5: The different Income of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment.	Accept
H3: Taiwanese samples have a positive perception of marketing communications more than Thai samples toward QR Code Payment.	Accept
H4: Taiwanese samples have a positive attitude more than Thai samples toward QR Code Payment.	Accept
H5: Perception of marketing communications of Thai samples has a significant correlation with attitude toward QR Code Payment.	Accept
H6: Perception of marketing communications of Taiwanese samples has a significant correlation with attitude toward QR Code Payment.	Accept

5. Conclusion

The results of the study can be concluded concerning hypothesis. In the following order:

5.1 Hypothesis One. The different demographic characteristic of Thai samples has a significantly different perception of marketing communications toward QR Code Payment. The results from hypothesis one demonstrated Gender and Income do not have a significantly different perception of marketing communications toward QR Code Payment. Age, Education, and Occupation have a significantly different perception of marketing communications toward QR Code Payment.

5.2 Hypothesis Two. The different demographic characteristics of Taiwanese samples have a significantly different perception of marketing communications toward QR Code Payment. The results from hypothesis two demonstrated Gender and Education do not have a significantly different perception of marketing communications toward QR Code Payment. Age, Occupation, and Income have a significantly different perception of marketing communications toward QR Code Payment. The Results can be explained as follow:

Table 2: Summary demographic characteristics of Thai and Taiwanese samples about perception of marketing communications toward QR Code Payment

Demographic Characteristics	Perception of marketing communications	
	Thai samples	Taiwanese samples
Gender	-	-
Age	*	*
Education	*	-
Occupation	*	*
Income	-	*

*Different perception of marketing communications
- No different perception of marketing communications

The different Gender of Thai and Taiwanese samples do not have a significantly different perception of marketing communications toward QR Code Payment. Due to Advertising about QR Code Payment, anyone can see in daily life such as Television, Radio and Internet and so on. It is related with research "Perception and Attitude of Consumer towards Goods Purchasing through QR Code Payment in Bangkok Metropolitan Area" (Phachareeya Suta, 2012) that explained Gender of samples does not make a difference through QR Code Payment. Which means no matter either male or female, QR Code Payment Mobile Payment can also be perceptive as well. However, the result is contrasted with Demographic Characteristics theory (Siriwan Serirath and group, 1996: 41-42) suggested Gender is a variable in major market segments as well.

Marketers should carefully study this variable. At present, the gender variable changes in consumption behavior.

The different Age of Thai and Taiwanese samples have a significantly different perception of marketing communications toward QR Code Payment. In this case, the most Mean of Thai samples age is between 41-50 years old. That means they usually see QR Code Payment advertising more than another age. While the most Mean of Taiwanese samples age is between 21-30 years old, because of they typically up-to-date and use the new media to get the news or information from Smartphone, Tablet or Notebook more than older people. Likewise, QR Code Payment is a new technology to pay money and that undoubtedly more comfortable if companies advertise a new way to spend money by QR Code Payment via new media such as on the internet. Which corresponds to the concept Demographic Characteristics (Siriwan Serirath and group, 1996: 41-42) suggested "due to the product can respond to the needs of a different age group. Marketers take advantage of age as a demographic variable to study various aspects of the market segment. Marketers will find the niche market want by focusing on that age segment." Besides, the result also related to research "Perception and Attitude of Consumer towards Goods Purchasing through QR Code Payment in Bangkok Metropolitan Area" (Phachareeya Suta, 2012) suggested a different age has a different perception of marketing communications. Younger people will be more understandable and perceptive about technology than old people.

The different Education of Thai samples has a significantly different perception of marketing communications toward QR Code Payment. According to the results demonstrated that the most Mean of Thai samples education is Master's Degree. Due to QR Code Payment is the new technology way to spend money that particular advertising uses technical vocabulary to a consumer. It is related to research "Perception and Attitude of Consumer towards Goods Purchasing through QR Code Payment in Bangkok Metropolitan Area" (Phachareeya Suta, 2012) and Demographic Characteristics (Siriwan Serirath and group, 1996: 41-42) explained the higher education, the higher understanding. While Education of Taiwanese samples does not have a significantly different perception of marketing communications toward QR Code Payment, that means every level education of Taiwanese samples can be perceived about QR Code Payment Mobile Payment. Conclude, there is a different result of education between Thai and Taiwanese samples about perception of marketing communications toward QR Code Payment because of different countries have a different opinion.

The different Occupation of Thai and Taiwanese samples have a significantly different perception of marketing communications toward QR Code Payment. The most Mean of Thai samples occupation is Bureaucrat. While most mean of Taiwanese samples occupation is unemployed/ Retirement, because of different occupations have a different time or lifestyle. For example, Unemployed /Retirement also have

more free time than another job. Therefore, they might see QR Code Payment advertising more another job as well.

The different Income of Taiwanese samples has a significantly different perception of marketing communications toward QR Code Payment. Most Mean of Taiwanese samples income is income between 15,001 - 25,000 TWD (Taiwan New Dollar). That is the Minimum income of Taiwanese people. While Income of Thai samples does not have a perception toward QR Code Payment Mobile Payment, that means every wage of samples has the same perception of marketing communications about QR Code Payment.

According to the results, Most of Thai and Taiwanese samples income is lower or Equal 15,000 TWD and the most of samples are students. They probably obtain money from the parent. Therefore, they might do not care and buy goods or use service that expensive. This reason is also related to research "Perception and Attitude of Consumer towards Goods Purchasing through QR Code Payment in Bangkok Metropolitan Area" (Phachareeya Suta, 2012) suggested the people who have income that lower or equal 15,000 TWD will not be interested expensive products. Conclude there is a different result of income between Thai and Taiwanese samples about perception of marketing communications toward QR Code Payment because of different countries have a different opinion.

5.3 Hypothesis Three. Taiwanese samples have a positive perception of marketing communications more than Thai samples toward QR Code Payment. Taiwanese samples, Mean is 3.21 more perception of marketing communications than Thai samples, which Mean are 2.89. Standard Deviation is 0.729 and 0.772 respectively. According to the results, depicted Technological Readiness of countries affects to perception of Thai and Taiwanese samples, which is related with the Global Competitiveness report 2017-2018 of World Economic Forum (World Economic Forum, 2017) explained in parts of Technological Readiness, Thailand is sixty-first while Taiwan is twenty-fifth in ranking. On the side of Innovation, Thailand is fiftieth while Taiwan is eleventh in ranking. That means the more understand technology, the more percept technology, which corresponds to

the perception theory (Siriwan Serirath, 1998: 139) that suggested the Perception is the process of understanding (exposure) in the world that he or she lives. Besides, The results demonstrated that it is

an excellent opportunity for companies to advertise

a new way to pay money about QR Code payment of their products or services to increase more receivers in Taiwan such as exhibition booth, Trade Shows, Sign or Billboard, and so on. Which corresponds to the Marketing Communications (Suwuttana Wongkapun, 1987) that suggested marketing communications are a marketing activity to communicate meaning, knowledge, and understanding to the receiver? That creates a business-to-consumer relationship and achieves the objectives of the business.

***5.4 Hypothesis Four*.** Taiwanese samples have a positive attitude more than Thai samples toward QR Code Payment. Taiwanese samples, Mean is 3.74 more attitude than Thai samples, which Mean is 3.72. Standard Deviation is 0.549 and 0.555 respectively. Because, In Taiwan, Ted Chen (2018) suggested about 70% of consumers are willing to adopt contactless credit card payments, while 60% of active cards are ready to be used in mobile payment applications. While in Thailand, Prutthisathaporn Manoje (2018) explained in the article that there are four reasons why QR Code Payment probably cannot be bloom in Thailand including: (1) there is only China where people use QR Payment instead of cash and because there are fake money problems. (2) Thai samples do not feel that taking money is a problem. (3) The QR Code Payment is not as convenient as buying by wallet for a buyer. (4) The benefit of QR Payment is clear to both seller and banks, but not for the paying side. The result also related to Attitude theory, Good (1959) provided that, Attitude is the readiness to be expressed in a certain way or against some situation, person or thing.

In the other hand, there are comments in Questionnaire. Such as: QR Code would be able to facilitate payment, the government should take care Using QR Code Payment, QR Code Payment should be more security and Stability, Some people do not know the technology that the technical problem might cause it, I believe that in the future QR Code Payment will be useful in daily life, and so on.

***5.5 Hypothesis Five and Six*.** Perception of marketing communications of Thai and Taiwanese samples has a significant correlation with attitude toward QR Code Payment. Pearson Correlation of Thai samples between perception of marketing communications and attitude toward QR Code Payment. r = 0.361, which is a Low Correlation level and P-value is 0.000. While Taiwanese samples r = 0.292, which is a Low Correlation level and P-value is 0.000. From the result, both P-values are lower than 0.01, which means perception of marketing communications of Thai and Taiwanese samples has a significant correlation with attitude toward QR Code Payment.

The result showed the more perception of marketing communications, the more attitudes toward QR Code Payment. The effect demonstrated the attitude of Thai and Taiwanese samples arise from; Caused by individual experiences that they are informed QR Code Payment from media channels and feel positive or negative in this technology and Caused by imitating or accepting the attitude from the others. The result is related to the cause of that attitude arise from (Allport, 1975), (1) Caused by individual experiences. Some student has a terrible attitude towards teacher because teacher blames that him/her. However, some student has a good attitude towards the same teacher because the teacher always caressed him/her. (2) Caused by imitating or accepting the attitude from the others. For example, children may gain the attitude of their parents or their favorite teachers to become their attitudes.

6. Limitations and Recommendations

(1) The wall of a different language might be caused to communicate with Taiwanese samples unclearly when collecting Questionnaire.

(2) This research focuses on Demographic Characteristics, Perception of marketing communications and Attitude of Thai and Taiwanese samples toward QR Code Payment. Therefore, future study should examine the other side such as Behavior of Using QR Code Payment because QR Code Payment is the new way to pay money buy goods or services that there are many Thai and Taiwanese never use QR Code Payment.

(3) Samples size are only 400 samples, Consist of Thai 200 samples and Taiwanese 200 samples; that does not represent all Thai or Taiwanese people opinion. Future Researcher will be served this study with large samples.

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