

**THE FACTORS THAT INFLUENCE CUSTOMERS' IN-APP
PURCHASE MOTIVATION IN MOBILE APPLICATION IN
THAILAND**

The image shows a large, faint watermark of the Mahidol University logo in the background. The logo is circular with a blue center containing a golden emblem of a stupa. The Thai text 'มหาวิทยาลัยมหิดล' (Mahidol University) is written around the perimeter of the circle.

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FULFILLMENT OF THE REQUIREMENTS FOR
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entitled
**THE FACTORS THAT INFLUENCE CUSTOMERS' IN-APP
PURCHASE MOTIVATION IN MOBILE APPLICATION IN
THAILAND**

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Poonyisa Pongsakornsathien

THE FACTORS THAT INFLUENCE CUSTOMERS' IN-APP PURCHASE MOTIVATION IN MOBILE APPLICATION IN THAILAND

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ABSTRACT

The purpose of this paper is to investigate the factors that influence the intention to buy towards in-app purchase. Secondly, to find out what kind of users' characteristics that tend to have an intention to buy in-app features. Thirdly, to investigate whether Self-identity affect in-app purchase behavior toward a mobile app. The assumptions were tested by questionnaire and collect data from 100 respondents who have exposure to an in-app purchase within the last 365 day.

The finding of this research showed that social identification and perceived usefulness are the essential factors that mainly impact on consumer purchase motivation. In addition, young adult consumers are more receptive to in-app purchase compare to other age groups. Also, the most purchased application category is social networking which emphasizes that social identification has a crucial impact on the intention to buy.

KEY WORDS: In-app purchase/ Mobile application/ TAM Model/
Purchase intention/ Self-identity

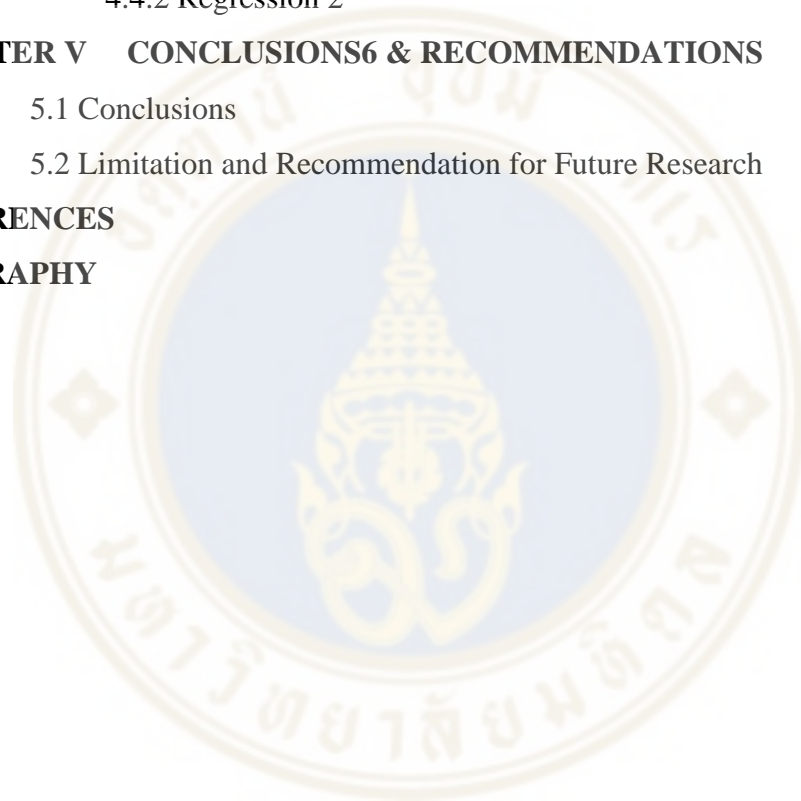
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CHAPTER I

INTRODUCTION

Mobile application market has become increasingly growing popular among all age groups and genders in recent years (Entertainment Software Association, 2015). New business model has been generating in recent years which alter digital product market. This occurred from the incidence of digital products delivered to clients free of charge has increased dramatically (Anderson, 2009; Kumar 2014). In the fast-growing markets in specific, sector studies show that more than 90% of mobile applications begin as free, and the revenues come from goods that have started as free trial also. (AppBrain, 2016; Taube, 2013). At the same time, consumers could choose among more than million apps which rising rapidly in either the Google or Apple stores.

There are total of 22 categories for applications consisting of Education, Entertainment, Finance, Food & Drink, Games, Health & Fitness, Lifestyle, Magazine, Medical, Music, Navigation, News, Photo & Video, Productivity, Reference, Shopping, Social networking, Sports, Sticker, Travel, Utilities, and Weather. As a result, different users can value and purchase each mobile application for different intentions and several reasons, such as productivity enhancement and entertainment.

Even though in theory in-app purchase seems to be the most way that can monetize free apps, implementation has faced a challenging in the market. Due to the insufficiency of an underlying business model of the application itself threatening users retention, even free-trial strategy is able to attract consumers to download the application but the company still cannot monetize from the apps as much as possible and cannot retain their customers' loyalty (Leimeister & Krcmar, 2004). In contrast to standard shopping situations, in-app purchases strategy is to attract consumers' attention with free download and also offer trial version before subsequent purchases occur, and only regular consumers tend to make actual purchases (Yaloz, 2015). Furthermore, previous studies have verified that consumers' buying choices can be influenced by their peers' comments (Bearden and Etzel, 1982; Engel et al., 1993; Yang et al., 2007). Apps users can communicate to build communities online and thereby improve their

social interactions. For example, the application in social networking category, such as Facebook and LINE provide the space and also encourage consumers to express, share and exchange their self-identity and social lives through text, images, video and audio via mobile devices. Consequently, social influences, including social norms and social identity, are included as extra convictions and play an important role as immediate determinants in the intention of a user to use applications and make in-app purchases.

However, there is few researches investigating in the area of the relation between self-image of individual on the branded application towards the intention to buy, or how self-image presentation of consumers affects purchase decision in this market. For example, those who consume conspicuously, or are materialism may want to upload pictures of themselves with a latest feature of camera apps. Moreover, there is no research investigating in the area of Thailand yet, so this paper will focus specific on Thailand context to search for the influence of their in-app purchase intention.

1.1 Problem Statement

The purpose of this study is to identify the effective factors that influence customers' in-app purchase motivation in mobile application in Thailand. As a result, it would be useful and beneficial to those in mobile application industry and also in marketing field to understand the behavior of the end users. Therefore, the literature review is conducted to derive concepts and theories that are relevant to solving the problem which will be explained in Chapter II.

1.2 Research Objectives

- 1) To investigate in-app purchase motivation by proposing a model based on theories of TAM and Self-identity.
- 2) To explore on whether self-identity has an impact towards purchase motivation and how service providers can leverage those factors for customers' retention.
- 3) To examine the relationship between consumer self-identity and purchase intention in an in-app mobile context.

4) To investigate the relationship between consumer social influence and purchase intentions in an in-app purchase.

1.3 Research Questions

- 1) What factors are affecting the user motivation in an in-app purchase?
- 2) What are the users' characteristics that tend to have an intention to buy in-app features?
- 3) To investigate whether Self-identity affect in-app purchase behaviors toward a mobile app?

1.4 Research Scope

To accomplish the research objectives, this research attempts to investigate in-app purchase motivation by using quantitative method based on theories of perceive usefulness, perceive ease of use, and social influence from TAM model, and Self-identity concept including self-presentation and self-efficacy. Furthermore, the user's previous experiences – such as attitudes, satisfaction and the probability of continuing to use the app – play a significant part in the user's readiness to pay for additional features since that motivation happens after a user is already acquainted with the particular app.

Previous surveys have confirmed the difference between prospective customers and experienced customers in the determining variables of IT and IT (IS) adoption (Dwivedi and Irani, 2009; Hsu et al., 2007). Thus, this research study is intended to indicate factors that have an impact towards in-app purchase motivation for existing consumers – users who have made in-app purchase previously. Nevertheless, the findings of this research can benefit apps developer to develop efficient mobile apps to enhance their competitiveness, and also and marketer in terms of better understanding in consumer behavior.

CHAPTER II

LITERATURE REVIEW

2.1 TAM Model

According to Lee et al (2003), Technology acceptance model (TAM) is considered as the most influential and common theory in information systems field which applied based on the theory of reasoned action (Fishbein & Ajzen, 1975), used to explain how attitude impacted behavior.

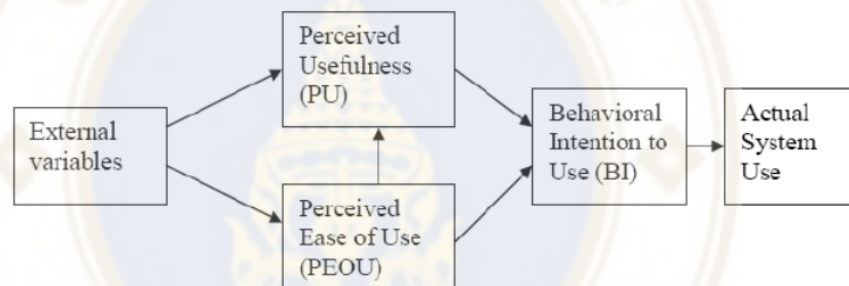


Figure 2.1: TAM Model

Previous studies have been examined on TAM model regarding intention to buy on mobile application. They have added social influence in order to investigate the other external factor that would impact intention to buy, and the results of the past studies are that social influence is showing a positively significant effect towards purchase intention. As a result, in this research, TAM would be opted into three core factors: perceived usefulness, perceived ease of use, and social influence. Moreover, this study would like to investigate more in terms individual personal aspect of consumer so we would like to propose Self-identity concept as another variable in figure 2.2 which will be explained in a following sector.

2.1.1 Perceived ease of use

Perceived ease of use is defined as the degree to which a person believes that using a particular system would be free of effort, and not difficult to use (Davis, 1985; Davis 1989, Moore & Benbasat, 1991). According to Davis (1989) effort is not an infinite resource and is divided between the different activities that a person does. Consequently, if the use of a scheme needs less effort, the usage limit will be reduced. This in turn impacts perceived utility; it is more likely to be helpful if the system is user-friendly.

2.1.2 Perceived usefulness

According to Jen and Hung (2010) the perceived usefulness can be understood as the degree to which the user believes that using technology or this application would help enhance the user's performance on a task. According to Davis (1989) the perceived usefulness is defined as what a person believes that a particular system can be used to improve the performance. Huang (2017) defines the perceived usefulness as the value that a consumer is expecting from using, or after using such information system.

In the context of present study, app users can derive usefulness values as they download and use various apps such as social networking, community, and communication (e.g., Facebook, Line, etc.), problem-solving apps (e.g., apps for productivity, online learning, travel arrangement, location positioning, etc.), entertainment and leisure apps (e.g., games, music, video, photos, etc.), information (e.g., news and magazines) and others for commercial transactions and shopping. Therefore, this study defines perceived usefulness as the consumers' overall assessment of the application based on usefulness values, and interrelation with social influence and self-identity.

2.1.3 Social influence

Social influence is described as the perceived internal pressure that people feel and decide to use in the process of being informed about an innovation and the degree to which a person perceives that significant others think he or she should use the new scheme (Fishbein & Ajzen, 1975). People tend to adapt their views to the group

they are in, and be possibly influenced by the majority of the group. According to Ash (1951), if a big part of the referent social community of a person has a particular thought, the person has a high tendency to embrace it as well.

Many previous studies have shown that social influence has an impact on individual's usage behavior (Luarn & Lin, 2005; Cheung et al., 2011; Ting et al., 2014). Moreover, it can be defined as the extent to which customers perceive their peers - family and friends - to think they should use a specific technology, and use to accentuate consumers' behavior, such as evaluation of alternatives and purchasing decision, can possibly be influenced by the opinions of friends, or particular group. (Venkatesh et al., 2012; Brown & Reingen, 1987; Kotler, 1999). As a result, in this research, social influence is a feeling of membership and belonging in specific organizations that people create, and lead to an increase in their perception in the extent of social identification when identifying with and assuming a position in a group through group action involvement.

2.2 Self-Identity Concept

Self-Identity concept can be described as a perception of each self-individual in a relation to various characteristics of a person – for example, personality, appearance, skills, group membership (Owens, 2006; Ruyter & Conroy, 2002). Identity is subsumed within the wider notion of self and is regarded as an instrument by which an individual categorizes himself or herself and expose that to others. (Ma & Agarwal, 2007; Owens, 2006). An identity refers to a physical self in the physical or offline universe (Donath, 1998). As a result, self-identity could be defined as the extent of self-presentation of offline identities which is influenced by both virtually and physically expressed attributes.

Apart from social influences, self-efficacy is another personal belief that may affect self-presentation (Döring, 2002). Social cognitive theory (Bandura, 2001) identifies the behavioral control of self-efficacy as the single most important determinant of how people select their behavior.

2.2.1 Self-presentation

Goffman (1959) and Leary (1996) explains why people engage in projecting a desired image of themselves to others. Two main motives that govern self-presentation are suggested (Schlenker, 2003). First, individuals tend to influence others to obtain benefits, rewards, or incentives through self-presentation. The incentive could possibly be money, presents, or just compliment comments. The second motive proposed is for individuals to present an image to assert a personal identity and use it to associate with comparable individuals. This motivation is obvious when participants present themselves to create relationships, especially when there are online community involved: Facebook, LINE (community platform) or MMORPGS (Multiplayer Mode Online Role Playing Games - gaming platform) that may possibly allow them to obtain rewards as well (Ma & Agarwal, 2007). The second motive is particularly relevant for social network application where self-presentation can expose to the world in the aspect of what an individual prefers the world to perceive. It can help people find similar others with whom to build relationships also.

2.2.2 Self-efficacy

Self-efficacy derives from the theory of social cognition and in principle implies the perception of a person's capacity to execute a task. Bandura (1993) theory's indicates that those who have higher self-efficacy may acquire more confidence due to less of anxiety and increasing in the ease of performing (Compeau et al., 1999; Venkatesh, 2000) which will enable to fulfill a specified job and allows the individual to set greater goals. Thus, individuals with high self-efficacy tend to demonstrate superior performance (Compeau & Higgins, 1995; Wei et al., 2011).

As a result, efficacy beliefs influence choices and aspirations (Relich et al. 1986), so it could say that efficacy partly form self-identity with self-presentation. Further, people with a strong belief in their abilities would want to engage in those behaviors because individuals tend to maximize value by doing those things at which they know they can succeed or wish to (Thaler, 1985). They could acknowledge these attributes (aspirations, abilities, trends) from their own perspective, and perceived through peers. Hence, self-efficacy should have a relationship with self-presentation and social influence.

2.3 Conceptual Framework

In this chapter of literature review, the study has found a study of factors that influence the intention to buy of in-application features in mobile for people in Thailand are perceived usefulness, perceived ease of use, social influence, self-presentation and self-efficacy which can see in below figure.

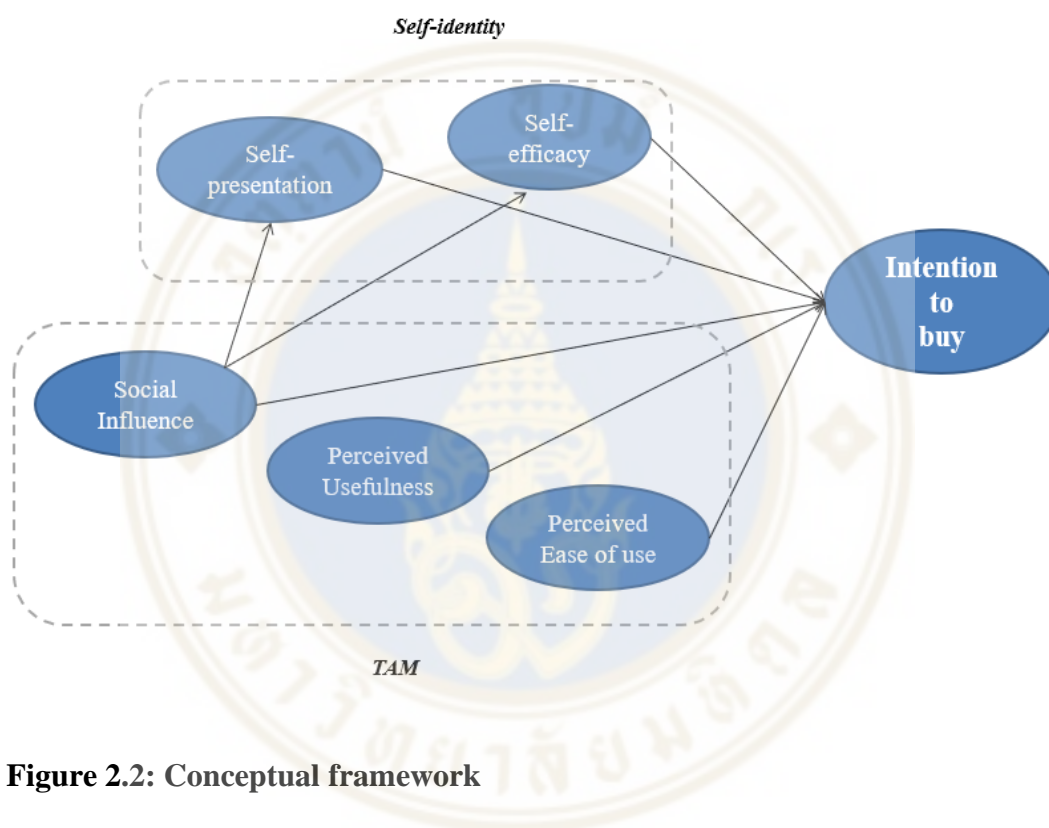


Figure 2.2: Conceptual framework

Table 2.3 Summary of literature review

Variables	Items	References
Perceived ease of use	Using a particular system would be free of effort, and not difficult to use	Davis 1985; Davis 1989, Moore & Benbasat, 1991
	The system is user-friendly	
Perceived usefulness	Using this particular application feature would enhance the user's performance on a task	Jen and Hung (2010) ,Davis (1989) , Huang (2017)
	A particular system can be used to improve or advantage his or her performance	
	The value that a consumer is expecting from using, or after using such information system	
Social influence	The internal pressure of being informed which a person perceives that significant others think what they should do	Fishbein & Ajzen, 1975, Ash (1951), Venkatesh et al., 2012; Brown & Reingen, 1987; Kotler, 1999
	People tend to adapt and be influenced by the majority of the group	
	The extent of social identification and feeling of membership and willing to be a part of a group	
Self-presentation	People engage in projecting an image of themselves to others due to incentives (money, presents, compliments, reputation)	Schlenker, 2003, Goffman (1959) and Leary (1996), Ma & Agarwal, 2007
	People present their image to assert a personal identity to create relationships in online community	
Self-efficacy	The perception of a person's capacity to execute a task	Bandura (1993) , Thaler, (1985), Compeau et al., 1999; Venkatesh, 2000
	Efficacy beliefs influence choices and aspirations	
	Efficacy could be acknowledged by from their own perspective, and perceived from peers	

CHAPTER III

METHODOLOGY

In recent years, many academic researchers have adopted a web-based survey as an effective method to collect data and information. Thus, the empirical data of this research study is gathered via online survey posted for 12 days on heavily-trafficked web sites such as Facebook, Twitter as well as Line (SNS application). The questionnaire included prompts to ensure that the respondents completed all survey items, thus eliminating invalid responses.

To gather material for this thematic paper, quantitative method was opted. The reason for using quantitative method is that there is no research investigating in the area of the relation between self-image of individual on the branded application towards the intention to buy, or how self-image presentation of consumers affects purchase decision in this market. Henceforth, quantitative method provides the researcher the possibility to discover on this subject. To create a possible theory for this relation, it is necessary to gain a huge data in in-app purchase experiences of mobile application and how they perceive the relation between their identities and the applications.

According to the information, the top 3 of category that obtain high rank of in-app purchase are social networking, games and entertainment (similarweb.com, 2019). As a result, this research will be conducted in quantitative and collect information from representative of each category in order to find the information regarding purchasing intention. Due to the website STIIC (2019), the information has shown the number of Thai populations who have acquired mobile phones consuming internet and application, which is 30 million people. Thus, this paper will be designed to set the target as 100 individuals as a minimum target.

3.1 Sample Size

The ideal for the respondents is to find an information whether self-identity has an impact towards purchase motivation, and the relation between TAM and self-identity towards intention to buy. To contact with the respondents, Facebook, Twitter, Instagram and Line are used. In general, posts were publicized and shared forward by my contacts on these SNS and information are forwarded directly to possible persons. The sample of this research is calculated by using Taro Yamane (Yamane, 1973) formula with 90% confidence level (according 30,000,000 persons from the data National Statistic Office Report 2017). The calculation formula of Taro Yamane is presented as follows;

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{56,700,000}{1 + 56,700,000(0.01)}$$

$$n = 99.999982$$

After calculated the sample size by substituting the numbers into the Yamane formula, the numbers of sample is 99.999982 persons. In order to obtain reliable of data in the short period of time, the sample size is set as 135 respondents since the more sample size would be considered better. The expected respondents will be a non-random of 135 individual Thai male and female, single or married. The respondents must have experience in an in-app purchase within 1 year to show continuous behavior.

3.2 Data Collection

This questionnaire consists of 4 parts, examining all the factors of the conceptual model by using 27 questions.

Part 1: “Introduction” to introduce what the study will be explored but not specific because it will get bias data from the respondents.

Part 2: “Screening Question” to filter out people who do not know the meaning of in-app purchase, never has experience in buying in-app before.

Part 3: “Specific Question” to see respondent’s attitude that influence factors of in-app purchase by using interval scales for 27 questions and four points of Likert scales, from 1 to 4 which are;

1 — Strongly Disagree

2 — Disagree

3 — Agree

4 — Strongly Agree

Part 4: “Demographic Question” to see the information of the respondents.

3.3 Data Analysis

The data will be analyzed by using Statistical Package for Social Sciences (SPSS) program to identify and test the independent variables: Perceived usefulness, Perceived ease of use, Social influence, Self-presentation and Self-efficacy and dependent variable (Intention to buy) from conceptual model in chapter 2. This research uses measurement tools as below;

- Descriptive analysis: To explain the basic features of given demographic data of all respondents by providing a simple summary of table of frequency, percentage, mean and standard.
- Correlation analysis: To understand the nature of relationships between two individual variables. In this research, it is used to examine whether the four independent variables have relationship with intention to buy, and to what level.
- Regression analysis: To indicate whether the relationship exists or not and how much variation in the dependent variable can be explained by independent variables. In other words, regression analysis is used for seeing the strength of a relationship and the form of the relationship. In addition, it is used to predict the value of the dependent variable. Lastly, it is used to control other independent variables when those variables are being evaluated and contributing to specific variables or a set of variables

(Malhotra & Birks, 2005). In this research, it is used to study the relationship between four independent variables towards intention to buy in-app features in mobile apps, and the relationship between dependent variables towards intention to buy in order to investigate the possible factors in forming consistent purchase and retention.

Refer to this research, it uses 4 level Likert scale to evaluate the degree of agreement. To determine the minimum and the maximum length of the 4-point Likert type scale, therefore the range is calculated by below formula;

Interval scale

$$\begin{aligned} &= \frac{4-1}{4} \\ &= 0.75 \end{aligned}$$

Table 3.1 Interval Scale and Meaning

Level	Likert Scales
3.26 – 4.00	Strongly agree
2.51 - 3.25	Agree
1.76 - 2.50	Disagree
1.00 – 1.75	Strongly disagree

3.4 Validity and Reliability

3.4.1 Validity Test

The researcher studied the relevant concepts and theories to be used as a framework for creating questionnaires. The researcher used 30 respondents from the considered target population for the validity test. The researcher delivered the questionnaire directly to the respondents. When the questionnaire was delivered, the researcher asked the respondents to comment on various aspects, such as wording, the length of the questionnaire, the question format, and the order of the factors, as well as the sequence. All respondents were asked whether there were problems or not, so that the communication was not biased.

However, after all the questions and answers were reviewed and run validity test, there were some points of concern. The five variables were grouped into four factors instead and some questions were cut out, which Perceived usefulness and Perceived ease of use remained the same, but the other three variables were separated into new groups of variables as follows;

- Perceived ease of use
- Perceiver usefulness
- Social identification: Social influence combined with Self-presentation and Self-efficacy
- Perceived enjoyment: Self-presentation combined with Self-efficacy

Therefore, the researcher made some adjustments to the abovementioned categories and launched the final questionnaire.

3.4.2 Reliability Test

Cronbach's Alpha will be used for testing the reliability of each factor. The results will be the average of all possible split-half coefficients from the different ways of splitting the scale items. The range of Cronbach's Alpha will vary from 0 to 1, and if the value of the coefficient is less than or equal to 0.6, it generally indicates unsatisfactory internal consistency reliability.

CHAPTER IV

DATA ANALYSIS

After collecting the data from the respondents, there are 165 people who give responses. However, there are 17.6 percentages, or 30 people never make an in-app purchase in the past year. Thus, the researcher collects the data from 82.4 percentages, or 135 people who experienced an in-app purchase in mobile application platform in the past year only. The second group would give an effective response to contribute the result better than the first group.

4.1 Respondent Profile

Table 4.1 Descriptive statistics of the respondent profile

Measure	Item	Frequency	Percentage (%)
Gender	Female	87	64.4
	Male	48	35.6
	Total	135	100.0
Age	18 - 24 years	10	7.4
	25 - 34 years	95	70.4
	35 - 40 years	24	17.8
	Above 41 years old	6	4.4
	Total	135	100.0
Employment	Student	13	9.6
	Office worker	92	68.1
	Manual worker	6	4.4
	Self-employed	21	15.6
	Unemployed	3	2.2
	Total	135	100.0

Table 4.1 Descriptive statistics of the respondent profile (cont.)

Measure	Item	Frequency	Percentage (%)
Income	Less than 10,000 THB	8	5.9
	10,001 - 20,000 THB	17	12.6
	20,001 - 30,000 THB	35	25.9
	30,001 - 40,000 THB	29	21.5
	40,001 - 50,000 THB	17	12.6
	Over 50,001 THB	29	21.5
	Total	135	100.0

From table 4.1, it demonstrates general information of respondents which are gender, age range, employment, and income as following;

Gender: From the survey showing the genders of 135 respondents, 64.4 percent or 87 respondents were female, and 35.6 percent or 48 respondents were male. The result of gender in this study will be further conduct testing and analysis.

Age: Majority of respondents' age is between 25-34 years old accounting for 70.4 percent or 95 respondents. Followed by age of 35-40 given 17.8 percent or 24 respondents, and age of 18-24 years old contribute 7.4 percent or 10 respondents. According to the survey, it can be implied that the age group of 25-34 years-old population has potential to be heavy spender target in this platform.

Employment: Majority of respondents is a White-collar worker or Office worker contributed 68.1 percent or 92 respondents. Followed by Self-employed given 15.6 percent or 21 respondents, and Student 9.6 percent or 13 respondents responsively. The smallest group is those who are unemployed with 3% of total respondents

Income: According to the table 4.1, it demonstrated that majority of respondents have monthly income in the range of 20,001 - 30,000 THB contributed 25.9 percent or 35 respondents, followed by 30,001 - 40,000 THB and Over 50,001 THB, which given the equal contribution with 21.5 percent or 29 respondents for each group. Additionally, for those who have 10,001 – 20,000 THB and 40,001 – 50,000 THB per month, the result showed that it contributed equal which are 12.6 percent or 17 respondents.

From table 4.1, the range of monthly income between 10,001- 40,000 THB which hold 60 percent of the total income of the respondents seems to relate to Age and Employment status of the respondents. Majority of respondents who are 25 - 34 years old with 70.4 percent, has a high possibility to work as Office worker which accounting for 68.1 percent, while those who have a monthly income greater than 40,001– over 50,0001 THB seem to hold a higher position in management or run their own business. In conclusion, Employment status and Age seems to be related to the monthly income.

4.2 In-app Purchase Behavior

The information of the sample group is to portray purchase behavior and preference, and to recommend the appropriate strategies which can be applied from this study. The data in this section will be present in the form of frequency distribution and percentage distribution. The data of the respondents are summarized in terms of Application category preference, Purchase frequency, and Basket size.

Table 4.2: Descriptive statistics of the respondent in-app purchase behavior

Measure	Item	Frequency	Percentage (%)
Which category do you typically purchase in-app products? <i>(Application category preference)</i>	Social Networking	66	48.9
	Games	34	25.2
	Entertainment	35	25.9
	Total	135	100.0
How often do you purchase? <i>(Purchase frequency)</i>	Daily	1	0.7
	Weekly	9	6.7
	Once a month	67	49.6
	2 to 3 times a year	58	43.0
	Total	135	100.0

Table 4.2: Descriptive statistics of the respondent in-app purchase behavior (cont.)

How much do you typically pay for each purchase? <i>(Basket size)</i>	30 THB	18	13.3
	60 THB	25	18.5
	90 THB	9	6.7
	120 THB	18	13.3
	Above 120 THB	65	48.1
	Total	135	100.0

From Table 4.2, it showed that Social networking application category, which included Facebook, Line, WeChat, Kakao, has the highest popularity in an in-app purchase market, followed by Entertainment and Games category responsively. Moreover, the table indicated purchase frequency which can be divided into big two group: Those who purchase once a month with 49.6 percent or 67 people, and 2 to 3 times a year with 43 percent or 58 people.

Table 4.2 also demonstrated the basket size of respondents for each purchase which, above 120 THB per purchase is the most popular basket size among the 135 respondents or 48.1 percent. Followed by 60 THB with 18.5 percent and 30 THB and 120 THB with equal contribution with 13.3 percent. It can be concluded that most respondents who has lower purchase frequency have more intention to buy and have willingness to continue to make purchase consistently with a typical price more than those who have high purchase frequency with smaller basket size.

4.3 Correlation

Table 4.3: Correlation analysis

		Correlations				
		MEAN_ EASE	MEAN_ SOID	MEAN_ USE	MEAN_ ENJ	MEAN_ ITB
MEAN_EASE	Pearson Correlation	1	.253**	.509**	.484**	.266**
	Sig.(2-tailed)		0.003	0.000	0.000	0.002
	N	135	135	135	135	134

Table 4.3: Correlation analysis (cont.)

		MEAN_ EASE	MEAN_ SOID	MEAN_ USE	MEAN_ ENJ	MEAN_ITB
MEAN_SOID	Pearson Correlation	.253**	1	.209*	0.142	.282**
	Sig.(2-tailed)	0.003		0.015	0.102	0.001
	N	135	135	135	135	134
MEAN_USE	Pearson Correlation	.509**	.209*	1	.425**	.305**
	Sig.(2-tailed)	0.000	0.015		0.000	0.000
	N	135	135	135	135	134
MEAN_ENJ	Pearson Correlation	.484**	0.142	.425**	1	.171*
	Sig. (2-tailed)	0.000	0.102	0.000		0.048
	N	135	135	135	135	134
MEAN_ITB	Pearson Correlation	.266**	.282**	.305**	.171*	1
	Sig. (2-tailed)	0.002	0.001	0.000	0.048	
	N	134	134	134	134	134

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

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

Pearson's correlation coefficient was computed for the study variables. The correlation analysis indicated that dependent variable, Intention to buy, was correlated with all the independent variables with a positive correlation. The correlation between Perceived usefulness toward intention to buy showed the strongest relationship with $r = .305$, $n = 135$ followed by Social identification with $r = .282$, $n = 135$. Furthermore, the result demonstrated a significant relationship between social identification, perceived usefulness and perceived ease of use with $r = .209$ and $r = .253$ respectively. These can demonstrate that perceived usefulness and social status are important and impactful forming purchase decision process and purchase intention.

However, the correlation analysis showing that among all independent variables, Social identification and Perceived enjoyment were not having relationship to each other. Consequently, the new conceptual framework after re-adjusting the independent variable shows the direct correlation between each independent variable and dependent variable according to the correlation analysis. Table 4.3 presents the correlation coefficients for the study variables.

4.4 Regression

A regression technique was chosen to analyze the relationship between the independent variables and the dependent variable.

4.4.1 Regression 1

Table 4.4.1 and 4.4.2 summarizes the findings from the analysis. The results of the regression analysis suggested that among the four independent variables, Social identification and Perceived usefulness were the two characteristic which shows the significant result that affected the intention to buy among other independent variables. In this part, there are key factors presented in codes, as follows:

- MEAN_EASE is Perceived ease of use mean
- MEAN_SOID is Social identification mean
- MEAN_USE is Perceived usefulness mean
- MEAN_ENJ is Perceived enjoyment mean

Table 4.4: The model of explanation (R^2) of Regression 1

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391 ^a	0.153	0.127	0.529

a. Predictors: (Constant), MEAN_EASE, MEAN_SOID, MEAN_USE, MEAN_ENJ

The regression model for the dependent variable of the intention to buy made by the respondents explained 12.7% of the variance as shown in the table 4.4.1. The table showed a Standard error of the Estimate at 52.9% of which other independent factors that have possibility to influence intention to buy in an in-app purchase.

Table 4.5: Regression analysis of dependent variables towards intention to buy

Coefficients ^a					
Model	Unstandardized	Standardized		t	Sig.
	Coefficients	Coefficients			
	B	Std. Error	Beta		
1 (Constant)	1.411	0.323		4.373	0.000
MEAN_ EASE	0.116	0.105	0.112	1.106	0.271
MEAN_ SOID	0.159	0.062	0.215	2.566	0.011
MEAN_ USE	0.187	0.089	0.205	2.105	0.037
MEAN_ ENJ	0.001	0.079	0.001	0.007	0.995

a. Dependent Variable: MEAN_DEP_INT

The regression model for the dependent variable of the intention to buy indicated the result that the independent variable of Social identification with $\beta = 0.159$, $p = 0.011$, and Perceived usefulness $\beta = 0.187$, $p = 0.037$, had reached a significant level, $p < 0.05$. Therefore, user who has higher Social identification and Perceived usefulness characteristics will have a higher intention to make in-app purchase than the user who doesn't has these characteristics.

4.4.2 Regression 2

Table 4.4.2 summarize the result of the regression analysis suggested among the two significant independent variables which are Social identification and Perceive usefulness.

Table 4.6: The model of explanation (R^2) of Regression 2

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391 ^a	0.153	0.133	0.52739

a. Predictors: (Constant), MEAN_ USE, MEAN_ SOID, MEAN_ EASE

The regression model for the independent variable of the intention to buy made by the respondents explained 13.1% of the variance as shown in the table 4.6.

Table 4.7: Regression analysis of independent variables towards intention to buy

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	1.411	0.311		4.538	0.000
	MEAN_SOID	0.159	0.062	0.215	2.576	0.011
	MEAN_USE	0.187	0.086	0.205	2.175	0.031

a. Dependent Variable: MEAN_DEP_INT

According to the table 4.7, after running regression with Social identification, Perceived usefulness, the result indicated that the adjusted r-square has increased from 12.7% to 13.3%. Social identification and Perceived usefulness still showed a significant result with a positive $\beta = 0.111$ and $\beta = 0.031$. Moreover, running only significant variables not only increase r-square, but also help improving a positive significant beta of Perceived usefulness from $\beta = 0.033$ to $\beta = 0.031$.

Consequently, we can assume that these two independent variables which are Social identification and Perceived usefulness have an influence to purchase motivation as they also have a relationship to each other according to table 4.3 of correlation analysis. As a result, the regression equation shall be made as following;

Regression Formula

$$Y = a + b(X)$$

$$ITB = 1.411 + 0.159(SOID) + 0.187(USE)$$

If SOID factor increases by 1 unit, the intention to buy rises by 0.159 units. This can explain that customers who have a social identification (SOID) will have higher intention to make in-app purchase by 0.159 times. If USE factor increases by 1 unit, the intention to buy rises by 0.187 units. This can explain that customers who can perceive the usefulness (USE) will have a higher intention to make in-app purchase by 0.187 times.

According to the result of the data and the above analysis, the conceptual framework can be adapted to the new framework which includes 4 factors: Perceives ease of use, Perceived usefulness, Social identification, and Perceived enjoyment. Social identification showed a significantly influence over Perceives ease of use and Perceived usefulness, and also Intention to buy.

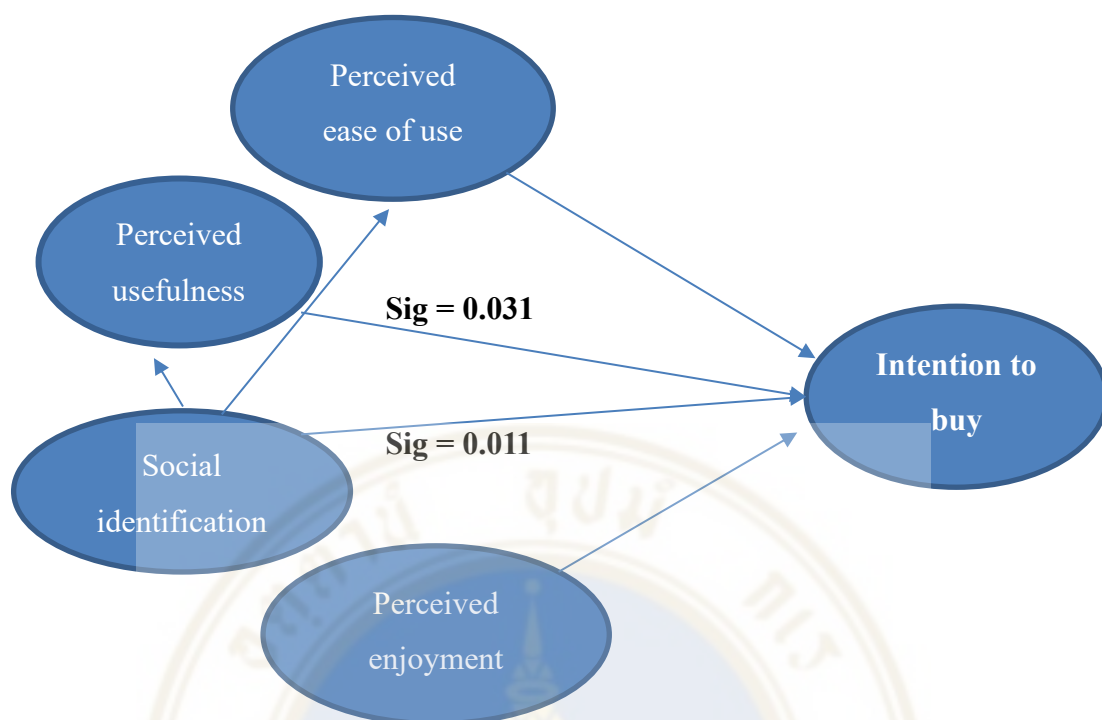


Figure 4.1: New Conceptual framework

CHAPTER V

CONCLUIONS & RECOMMENDATIONS

5.1 Conclusions

According to the result from Chapter IV, the researcher can explore and gain a better understanding of factors that influence purchase intention of Thai people make in-app purchase in mobile application platform. This leads to answer to the research questions. There are two key highlights of the factors that Thai people are influenced and give priority to, which are Social identification and Perceived usefulness. A user with a high level of Social identification and Perceived usefulness has a greater motivation in intention to buy. Also, the significant findings with respect to male users who have monthly or semiannual purchase with a typical value tend to have more consistency in making in-app purchase. However, Perceived ease of use and Perceived enjoyment appeared to have no significant to intention to buy. The users could perceive ease of use and enjoyment as presented in table 4.3, however, the incentives of the two variables are not delivered strong enough to motivate users to make purchase.

In addition, this study mainly focuses on Thai context. There are very few studies in Thailand which have been conducted about this topic. Due to the fact that smartphones and mobile applications have become vital organs of people everyday lives, this research is working in the fields of marketing and technology adoption which investigating a deeper understanding of consumer behaviors in in-app purchase motivation of mobile platforms. In this wide and diverse business sector, especially for advertising and mobile application market, businesses compete head to head to increase their market share and their revenue. Most products or services seem to be more or less identical and with nearly the same features. Therefore, consumer purchase intention has become an important part of this equation for businesses to differentiate themselves or make their products more noticeable at the purchase stage.

The result from the research can provide the new information for the developer who wants to survey the Thai market and to promote or increase their sale revenue and to maintain the existing customer or attract new customer to use the app. Furthermore, the results can be applied with a market strategy for the application market and mobile market to understand their target market. In the future, the people in marketing division, game development, programmer, or application related can leverage this data to their advertising or application development.

Our findings seem to have significant consequences for developers of apps and publishers seeking to promote their products and services in-app. Perceived usefulness and social identification had been empirically confirmed to have a significant influence on users' intention to make in-app purchases. In the recent years, conspicuous consumption has become a trend and people have addicted to mobile and social, at the same time, consumers have become more convenience-craving due to the mobile-dominant era. Therefore, app developers should focus and investigate more on the consumers insight in terms of the hidden need and the service, that can fulfill consumers' need, and purchase power to see new opportunity in the market. Moreover, developers should also incorporate features which allow and encourage users to create, personalize and share their social lives through text, pictures, images and video since consumers are demanding personalization from their online shopping experiences, and consuming partly just to present their self-identity to the social. This sharing conduct will attract enhanced feedback from colleagues, enabling the user through group action to create a powerful feeling of social identity. This will, in turn, enhance intention to make in app purchases.

5.2 Limitation and Recommendation for Future Research

The limitation of this study would be the size of the respondents, the sample size of this research was 135 which is fairly small to fully identify the effective in-app purchase motivation on Thai consumers. For the future research, it is recommended to have an equal sample size for each gender and age group, so that the relationship of gender and age group and in-app purchase can be explored deeper. Likewise, for

education and income: extending the scope of the respondents' characteristics would help the researcher understand the linkage of attitude towards intention to buy and purchasing power more.



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