

# FACTORS INFLUENCING OFFICIAL MOBILE APPLICATION PURCHASING INTENTION IN BANGKOK

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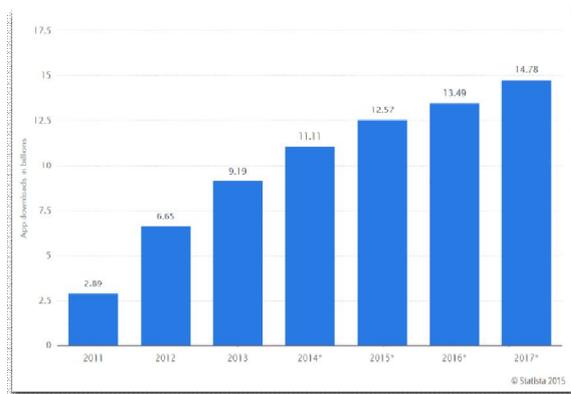
**Abstract:** Mobile applications become the most successful innovation in the world as most of people not only use mobile for communicative channel, but also for accessing the internet via application for many proposes. This paper aim to discover the factors that affect online mobile application purchasing intention in Bangkok and consumers' behavior and perception which can help the online mobile application producer to develop and make better strategies to their business and motivate mobile users to buy or download the official applications for their mobiles. The finding reveals that demographic such as age, education and income are assumes not related to official mobile application purchase intention, but gender and type of employment are related to official mobile application purchase intention.

**Keywords** - Bangkok, Mobile Application Industry, Official Mobile Application, Purchase Intention.

## I. INTRODUCTION

The popularity of mobile apps has continued to rise and number of global mobile users is dramatically increase every year, around 1,900 million users in 2015. Mobile applications become the most successful innovation in the world as the demand of online mobile application market has been risen significantly. It's also the way for application producer to improve applications and sell in the mobile industry.

The statistic provides the number of paid mobile applications downloaded worldwide from app stores from 2011 to 2013 in billions. Approximately 6.65 billion paid applications were downloaded via mobile devices in 2012 and will be reach 13.49 billion by 2016. Asia has emerged as the world's top marketplace for mobile applications and it's still growing. In Thailand, the average users consume 7.4 hours of media per day and Thai consumers spend 3.1 hours on their daily media routine via their mobile device (Millward Brown AdReaction 2014).



**Figure1:** Number of paid mobile application downloaded worldwide from 2011 to 2017 (Source: Statista, 2015)

As you may be aware, the illegal vendors and Peer-to-peer (pirated downloading) are widespread in Thailand and lead a lack of motivation for mobile

application producer to create new application. There are many sources to download illegal applications such as Getapk, Free store, Jailbreak, Mobogenie, and others piracy websites such as www.thaifreeapps.com. Due to the rapid change of technology, it's necessary for people to adapt and change their lifestyles. This research will study factors influencing official online mobile application purchasing intention in Bangkok, consumers' behavior and perceived experience which can help the mobile application producer to develop and make better strategies to their business and motivate mobile users to buy or download the official applications for their mobiles.

When mobile users would like to download official application for their mobile, there are many ways to download paid application for free and illegal. Although they can download paid application for free because the illegal vendors and Peer-to-peer (pirated downloading) are widespread, some mobile users still intend and willing to pay that official mobile application, but some mobile users would like to download paid mobile application for free.

Therefore, in order to understand mobile users in Bangkok, this study would like to find whether demographic and perceived experience are the important factors will have effect Thai mobile users' purchase intention of official mobile application in Bangkok or not.

## II. LITERATURE REVIEW

### Demographic factors and purchase intention

Age, gender, education, type of employment and income are evaluated as demographic factors in this study. Most of the past researches study on demographic factors and the impact of demographic on purchase intention.

### Age

Patricia Sorce, Victor Perotti, Stanley Widrick, (2005) found that there are different attitudes between

older online buyer and younger such as younger online buyer feel that there is more convenience when purchase products online than older online buyer, while older online buyer are more likely to buy the products online than younger consumers. Meanwhile, the finding of research of Homburg, (2001) show that older consumers buy the product and service based on satisfaction and experience, but younger consumers aren't are not reply on satisfaction as they get information from sales person, then making decision to buy products.

#### Gender

Ndubisi, (2006) mentions that women are emotionally involved when buying products and look for more details of product and service than men, and women are more loyal than men that and enhanced more purchase intention. However, many researchers found that male make more online purchase and spend more money for online purchase than women.

#### Education

Schaninger, (1981) found that higher educated consumers required more information of products and services when making a decision. Meanwhile, the findings of research from Wang, G., Dou, W., & Zhou, N. (2008) show that well-educated consumer was suggestive of open-mindedness and lead to process new information.

#### Type of employment

The findings of research from Solomon, (1999) show that a good occupation generates good income and has impact on purchase intention.

#### Income

Ang, S. H., Cheng, P. S., Lim, E. A.C., & Tambyach, S. K. (2001) focus on motivation of purchase intention and found that lower income people have high intention to buy pirate goods. From the research of Bawa and Ghosh, (1999), families that have high income level will have more shopping. Moreover, Im, S., Bayus, B.L. and Mason, C.H. (2003) also mentions that high income consumers buy more technologies and products.

#### Perceived price and purchase intention

Perceived price refers to worth or value in purchasing and it is positive relation between price perception of consumers and purchase intention (Juha Munnukka, 2008) and it has influence to online purchase intention (Ching-Wen Chu Hsi-Peng Lu, 2007)

#### Perceived useful and purchase intention

Hsi-Peng Lu Philip Yu-Jen Su, (2009) mentions that perceived useful refers to able to be used advantageously and make user's perception of mobile skillfulness that is significant influence on purchase intention

#### Perceived ease of use and purchase intention

Previous study of Rakhi Thakur Mala Srivastava, (2013) found that perceived ease of use was significantly associated with attitude toward online purchase intentions and has influence on technology adoption readiness to use mobile commerce. Meanwhile, Ching-Wen Chu Hsi-Peng Lu, (2007)

found that perceived ease of use isn't influence on customers' online purchase intention

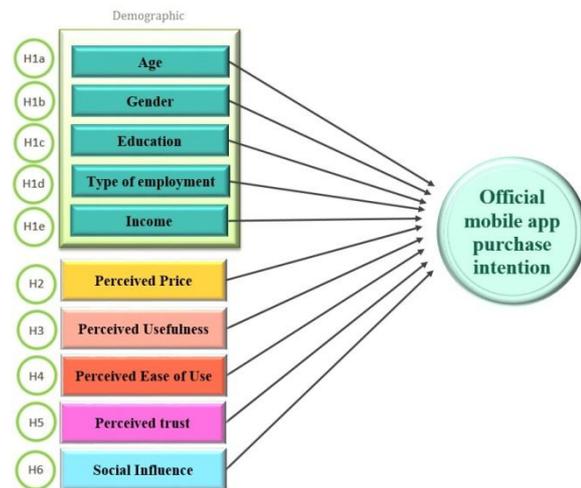
#### Perceived trust and purchase intention

Online trust is a necessity for online shopping. Experience in brand-level can affect trust and when consumer trust in something, it will build loyalty and affect purchase intention. Moreover, Hsin Hsin Chang Su Wen Chen, (2008) mentions that the quality website and trust in brand can affect consumers' trust that turn to purchase intention.

#### Social influence and purchase intention

Social influence is the change in behavior that one person causes in another and lead to purchase intention such as recommendations from expert advice, media, family and friends. Previous study of Jane E. Klobas Laurel A. Clyde, (2001) found that social influences is significantly to online purchase intention and can change perceptions of product value of online consumers. Meanwhile, Chang Chiao-Chen, (2013) found that Social influence is negatively significant to respondents' using intention of library application.

### III. CONCEPTUAL FRAMEWORK



The conceptual framework of this study is developed to identify factors influencing official Mobile application purchasing intention in Bangkok. It shows the relationship between independent variables (IDV) and dependent variables (DV). The independent variables are demography independent variables (age, gender, education, type of employment and income). Another group is perceived experience (perceived price, perceived usefulness, perceived ease of use, perceived trust and social influence). Official mobile application purchasing intention is the probability that the consumer will purchase mobile application legally and it is taken as dependent variable. In this research mentioned to paid applications of mobile users in Bangkok.

The demographic profile consists of age, gender, education, type of employment and income. Wong

(2002) indicated that different groups of demographic factors cause different behavior, lifestyle and attitude. As a result of individual differences in demographic factors, this study hypothesized the following:

H1a: There is no relationship between Age and official mobile application purchase intention

H1b: Gender and official mobile application purchase intention are not independent

H1c: There is no relationship between Education and official mobile application purchase intention

H1d: Type of employment and official mobile application purchase intention are not independent

H1e: There is no relationship between Income and official mobile application purchase intention

The following hypothesis want to determine whether perceived price is related to official mobile application purchase intention or not. Perceived price in official online mobile application purchase is the degree that consumers believe that they must pay money for mobile application. Price of online mobile application has to be tangible and reasonable. Perceived price will influence positive on consumer attitude. As a consequence, this study hypothesized the following:

H2: There is no relationship between Perceived price and official mobile application purchase intention

The following hypothesis want to determine whether perceived usefulness is related to official mobile application purchase intention or not. Perceived usefulness in official online mobile application purchase such as the variety of official applications, official mobile application can fulfill mobile users' need faster and better than the past. Perceived usefulness will positively influence on consumer purchase intention. As a consequence, this study hypothesized the following:

H3: There is no relationship between Perceived usefulness and official mobile application purchase intention

The following hypothesis want to determine whether perceived ease of use is related to official mobile application purchase intention or not. Perceived ease of use in official online mobile application purchase such as consumer believes that online mobile application purchasing is effortless. The online mobile application purchasing service must easy to use, easy to understand and friendly with the mobile users. If the service has many of complexity, the user will still download illegally and not shift to purchase official mobile application. Perceived ease of use

will positively influence on consumer purchase intention. As a consequence, this study hypothesized the following:

H 4: There is no relationship between Perceived ease of use and official mobile application purchase intention

The following hypothesis want to determine whether perceived trust is related to official mobile application purchase intention or not. Perceived trust in official online mobile application such as the mobile users rely on the application can affect to the purchase intention of mobile application. As a consequence, this study hypothesized the following:

H5: There is no relationship between Perceived trust and official mobile application purchase intention

The following hypothesis want to determine whether social influence is related to official mobile application purchase intention or not. Social influence in official online mobile application is the change in behavior that one person causes in another, as a result of the way the changed person perceives themselves in relationship to the influencer such as mobile users purchase official mobile application that his or her friend recommend. Social influence will positively influence on consumer purchase intention. As a consequence, this study hypothesized the following:

H6: There is no relationship between Social influence and official mobile application purchase intention

#### **IV. RESEARCH METHODOLOGY**

This research is considered as correlational research and some descriptive research technique which is used to test relationship between independent variables (demographic and perceived experience such as perceived price, perceived usefulness, perceived ease of use, perceived trust and social influence) and dependent variable (purchase intention).

The technique of this research is questionnaire which is the tool that is used to gather data from sampling group. Data was collected from a total of 400 and target respondents is Thai mobile users who live in Bangkok and have experienced in spending money for the official mobile application (application downloaded, in app purchases, application upgrade from lite to pro version and membership paid yearly).

#### **V. RESULT**

The study found that most of people who purchase official mobile application in Bangkok is female (245 respondents or 61.3%). In term of age, Most of

respondents are those whose age between 26-30 years old (218 respondents or 54.5%). For highest graduate, the bachelor degree dominated with 302 respondents or 75.5%. The majority works as private

company officer (218 respondents or 54.5%) and has income between 30,001-35,000 baht per month (78 respondents or 19.5%).

**Table 1: The result of the relationship between all hypotheses and official mobile application purchase intention**

Variable	Level of Measurement	Method	p-Value	Result
Age	Ordinal	Spearman	0.053	Not reject
Gender	Nominal	Chi-Square	0.013	Reject
Education	Ordinal	Spearman	0.202	Not reject
Type of employment	Nominal	Chi-Square	0.000	Reject
Income	Ordinal	Spearman	0.328	Not reject
Perceived price	Ordinal	Spearman	0.000	Reject
Perceived usefulness	Ordinal	Spearman	0.000	Reject
Perceived ease of use	Ordinal	Spearman	0.000	Reject
Perceived trust	Ordinal	Spearman	0.000	Reject
Social influence	Ordinal	Spearman	0.000	Reject

## VI. DISCUSSION

The finding of this study found that gender and type of employment are supported with the significant level of 0.013 and 0.000, respectively. However, age, education and income might not be claimed to be related to official mobile application with the significant level of 0.053, 0.202 and 0.328, respectively.

Perceived price is a moderate positive relation to official mobile application purchase intention. This study supports previous study of Juha Munnukka, (2008) and Ching-Wen Chu Hsi-Peng Lu, (2007) because when consumer would like to purchase products online, it's easy to access the internet and check for the best price that is reasonable, worth purchasing and compare price with others.

Perceived useful is a moderate positive relation to official mobile application purchase intention. This study supports previous study of Hsi-Peng Lu Philip Yu-Jen Su, (2009) because purchasing online including mobile application purchasing in intangible as consumers cannot touch. It's important for customer to know the benefit of products before buying.

Perceived ease of use is a weak positive relation to official mobile application purchase intention. The result of this study is different from the study of Ching-Wen Chu Hsi-Peng Lu, (2007) because this research focus on mobile application which is a technology that change all the time and mobile user didn't have experience to use some application. For

online music, consumer can listen from radio or website before buying online, so consumer think that it's easier to make a decision when buying online music than purchase official mobile application.

Perceived trust is another key factor that is a moderate positive relation to official mobile application purchase intention. This study supports previous study of Hsin Hsin Chang Su Wen Chen, (2008) and Marianne Horppu Olli Kuivalainen Anssi Tarkiainen Hanna-Kaisa Ellonen, (2008) as perceived trust is important factor that affect not only online purchase, but also official mobile application purchase intention.

Finally, Social influence is a moderate positive relation to official mobile application purchase intention. This study supports previous study of Jane E. Klobas Laurel A. Clyde, (2001) that Social influence is significant influence on official mobile application purchase intention. But the result of this study is different from the study of Chang Chiao-Chen, (2013) who researches about Library mobile applications in university libraries, so this study can be inferred that different results cause of official mobile application is mention to general type of application, but the previous study focus on library application.

## CONCLUSION

There are some limitations of this research. Firstly, the study mainly concentrated on respondents who live in metropolitan area and all samples were

collected in Bangkok only, with a large percentage of the respondents being young adult and private company officer so it might not represent the whole Thai people. Moreover, the findings of the research are obtained at a specific period of time (May-June, 2015), so the results of finding may not be generalized in the general.

The result of this study can be applied with the marketing strategy for mobile application producer who want to promote and increase sales of official mobile application in order to maintain exist consumer and attract new consumers. Social influence should be concerned. The mobile application can get the app reviewed by well-known or popular bloggers, create posts in media, social networks, then people have to start talking about the official mobile application and recommend it to others. Having a social event marketing and sales promotion with special occasions and events such as mobile expo is also a good opportunity to promote mobile application and involving new users. Moreover, creating a video for official application allows mobile users to experience a deeper interaction that is much different than looking at an image and reading a description and make people feel that it's easy to use. For perceived trust, mobile application system should have bug fixing in order to make people feel that the official application system is stable and trust to use it.

The study also found that perceived price, perceiver useful, perceived ease of use are related to the purchase intention, so the mobile application producer should announce the beta-testers in order to attract investments and catch the interest of the potential mobile users. Moreover, beta can make them want to follow the development process, useful of application and how to use it, then wait for the released of the official mobile application. Moreover, mobile application producer may give consumers a promotion codes for discount when the official application is released or set the reasonable price that related to perceived price. Due to majority of gender is female, so discount promotion is also the way to draw attention to female.

The mobile industry growing very fast and dynamic change, including change in customers' behavioral intentions, it would be interest for future research to understand the ongoing changes in consumers' behavior. In addition, scope of the next research should be included the newcomers of mobile user.

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