THE KEY FACTORS THAT INFLUENCE THAI CUSTOMER'S INTENTION TO BUY A WEARABLE FITNESS DEVICE

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A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2016

Thematic paper
entitled

THE KEY FACTORS THAT INFLUENCE THAI CUSTOMER'S INTENTION TO BUY A WEARABLE FITNESS DEVICE

was submitted to the College of Management, Mahidol University
for the degree of Master of Management
on
August 21, 2016

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ACKNOWLEDGEMENTS

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ABSTRACT

The purpose of this research is able to answer the research question about what are the key factors that influence Thai consumer's age between 25 to 45 years who live in Bangkok uncover their purchase behavior to make a decision to purchase Wearable Fitness device. The research used a conceptual model base on Unified Theory of acceptance and use of technology 2 (UTAUT2) to develop model of conceptual framework model and Hypotheses. This research uses quantitative method with total of 129 respondents by using the online survey. The data was analyzed using factor analysis, descriptive statistics, correlation analysis and multiple linear regression analysis. There are 11 hypotheses tested.

According to the result illustrates that reference group is the key factors of Thai consumers age between 25 to 45 years old. The result shows that the reference group has a positive relationship to Thai consumer purchasing intention on wearable fitness device which mean the reference group has a strongly factor to impact with Thai consumer's intention to buy a wearable fitness device. As a result, from finding, it would help marketing manager of wearable fitness device company as the guideline to apply a suitable marketing strategy to match with Thai consumer behavior to promote the product into Thai market efficiency.

KEY WORDS: Wearable Device/ Fitness Tracker/Thai Consumer Behavior

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CHAPTER I
INTRODUCTION

Nowadays the new technology trends are dramatically changing, most of the new technologies have impacted and influenced on people's life around the world. From 2007, consumer electronics products which include desktop computers have been continually decreasing on the consumer electronics demand. However, the consumers spent more money on the smartphones and tablets. Since Apple has become a very successful company for changing the consumer perception. They have created an intelligence smartphone which is achieved customer expectation (Hunn, 2015). Currently the shipment record of Internet Data Center (IDC), the smartphone market is moving into the single-digit growth and maintaining the rhythm of stability sale. (IDC, 2015). The big companies such as Apple, Google, Samsung, Nike, Qualcomm, and Microsoft are making the strategy to invest in the wearable technology. They are trying to develop the new technologies and expected to stimulate sale volume in another segments. At the moment, Apple, Samsung, Google and Nike have launched their new products which are Apple watch, Samsung gear, Google glass, Fitbit, Jawbone and Fitness tracker. The global wearable technology is expected to go up from $750 million in 2012 to $5.8 billion in 2018. In addition, the number of wearable devices shipped is expected to increase from approximately 13 million in 2013 to 130 million in 2018. Ä(İkram Dastan, 2016). As a result, in the future the big market area which most innovative companies will entry is the wearable device area. The wearable device has a lot of type of the products, the scope of wearable device is very board and some product categories are overlapped in terms of functionality and application. Base on the concept adapted data from IDC, they classified the wearable device into the groups as shown in the table below. (Park, 2014)

Device type	Description	Example
Simple wearables	Most basic category of wearable computing devices which do not communicate with other devices or with the Internet.	Digital wrist watch
Simple connected accessories	Device transmits data to another device.	Heart rate strap paired to a wrist-worn heart rate monitor
IP-connected accessories	Device transmits data wirelessly to another device that is able to connect to the Internet.	Bluetooth headset
Complex accessories	These devices are designed to operate partially independent of any other device but fully operate by connecting with an IP-capable device such as a smartphone/tablet PC. These devices collect and display data independent of any other device.	Nike+ Fuelband, Jawbone UP, etc.
Smart Accessories	A complex accessory with an added feature of enabling a user to install and run third-party software or apps.	Pebble, Sony Smartwatch, Galaxy Gear, etc.
Smart Wearables	Wearable computing devices that fully function autonomously, independent of any other device. They connect to the Internet wirelessly and are capable of running third-party apps.	Google Glass

Figure 1.1   Wearable computing devices: Classification

If we consider and classify the wearable device by industry area, currently the main interesting products are dominated by fitness-tracking and health-monitoring devices. Increasing awareness of fitness and personal health is the key factors to drive the market expansion of wearable technology. People are concentrating on sensor integration and advance metrics such as blood sugar, blood oxygen, heart rate and exercise tracking. (Kelly Barnes, 2014)

45%	35%	20%	19%	13%
Fitness band	Smart watch	Smart clothing	Smart glasses	People-tracking devices
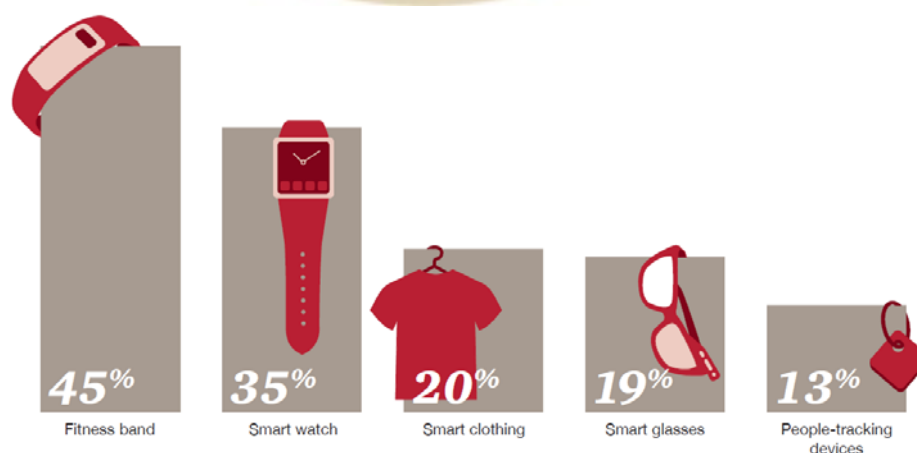
Figure 1.2   Fitness bands remain US consumers﹐ top wearable pick

According to the Figure 1.2, the wearable device market which has a high potential expansion area is Fitness tracker. Within the Fitness tracker industry there are three main companies which are a top three largest of shipment, market share and year-over-year growth in quarter 1, 2016 as shown in Figure 1.3. Furthermore, this illustrates that Fitbit is a successful product and became a worldwide top market leader of wearable fitness tracker device. Surprisingly Fitbit is able to beat Apple's smartwatch and take market share from Apple, who is the leader of innovation company, and other competitors.

Top Five Wearables Vendors, Shipments, Market Share and Year-Over-Year Growth, Q1 2016 (Units in Millions)					
Vendor	1Q16 Unit Shipments	1Q16 Market Share	1Q15 Unit Shipments	1Q15 Market Share	Year-Over-Year Growth
1. Fitbit	4.8	24.5%	3.8	32.6%	25.4%
2. Xiaomi	3.7	19.0%	2.6	22.4%	41.8%
3. Apple	1.5	7.5%	N/A	0.0%	N/A
4. Garmin	0.9	4.6%	0.7	6.1%	27.8%
5. Samsung*	0.7	3.6%	0.7	5.8%	4.5%
5. BBK*	0.7	3.6%	N/A	0.0%	N/A
Others	7.3	37.2%	3.9	33.1%	87.9%
Total	19.7	100.0%	11.8	100.0%	67.2%
Source: IDC Worldwide Quarterly Wearables Tracker, May 16, 2016					

Figure 1.3 Top Five Wearable Vendors, Shipments, Market Share and Year-Over-Year Growth, Q1 2016

Fitbit has been established in 2007, Eric and James were founder, they realized that sensors and wireless technology had advanced to a point where they could bring amazing experiences to fitness and health. They embarked on a journey to create a wearable product that would change the way we move. ((Fitbit, 2016)). Being successful of Fitbit in a global market, they have seen the opportunity in Thailand because now Thai consumer behavior has been changed in the past decade and there is a health-conscious trend among Thais (Unchurit, 2013). In addition, we can see the expanding of Fitness

service which is increasing from 2% in 2007 to 16% in year 2011 (Panpeng, 2015). Moreover, bicycle trend is also going up, there are more people using bicycles for their exercise activities. The number of Thais bicycle users have been expected and increasing and from 3,200,000 people in 2015 to around between 3,680,000 and 3,840,000 people in 2016. (Marketeer, 2015). As a result, in June 2015, Fitbit have been official launched in Thailand under the strategy to be a number one product in Thailand for Wearable Fitness Device. (Kampanart, 2015). Even though Fitbit is a very successful product in a global market, but that does not guarantee that global strategies will be suitable for Thai consumers. This project will show the factors that influence Thai consumer decision to purchase the Fitbit and the wearable fitness device in order to develop marketing strategy and customer satisfaction.

1.1 Problem Statement

Fitbit is a successful product and became a worldwide top market leader in western country. However, in Thai market, Fitbit is not much growth in term of sales volume. As a result, this research will study about the factor that influence Thai consumer decision to buy Wearable Fitness device. This research will help Fitbit to understand more about Thai consumer behavior after that they are able to implement and develop the marketing strategy to suit with Thai consumers.

1.2 Research Question

What are the key factors that influence Thai consumers' decision in Bangkok to purchase the wearable fitness device?

1.3 Research Objective

1. To investigate the factors that influence with Thai consumer's intention to buy a wearable fitness device.

   2. To examine the relationship between significant factor and Thai consumer's intention to buy.

1.4 Research Scope

   To study factors that impact on Thai people's age between 25 to 45 years who live in Bangkok uncover their purchase behavior and purchase intention on the wearable fitness device.

CHAPTER II
LITERATURE REVIEW

The Wearable device technology in Thai market is quite new for Thai people. There are not many previous studies on consumer behavior of wearable device technology. Therefore, this research would focus on the factors that can influence Thai consumer's purchasing intention by using literatures of information systems or technology and consumer behavior. Besides this research are applied Unified Theory of acceptance and use of technology 2 (UTAUT2) to develop model of conceptual framework model and Hypotheses.

2.1 Theoretical Foundations

2.1.1 Unified Theory of acceptance and use of technology 2 (UTAUT2)

Unified Theory of acceptance and use of technology 2 (UTAUT2) are applied and developed to this research model and Hypotheses. In 2012, Visanath Vekatesh, Jame Y. L. Thong and Xin Xu extended Theory of acceptance and use of technology (UTAUT) theory including consumer acceptance and use of information technology (Zhongwei Gu, 2015). According to the extending UTAUT for the consumer context, Figure 2.1 shows the original UTAUT has four factors that effect on behavioral intention and using behavior. These include Facilitating Condition, Performance Expectancy, Effect Expectancy, Social Influence, and the three new factors for UTAUT2 which are Hedonic Motivation, Price Value and Habit (Zhongwei Gu, 2015)
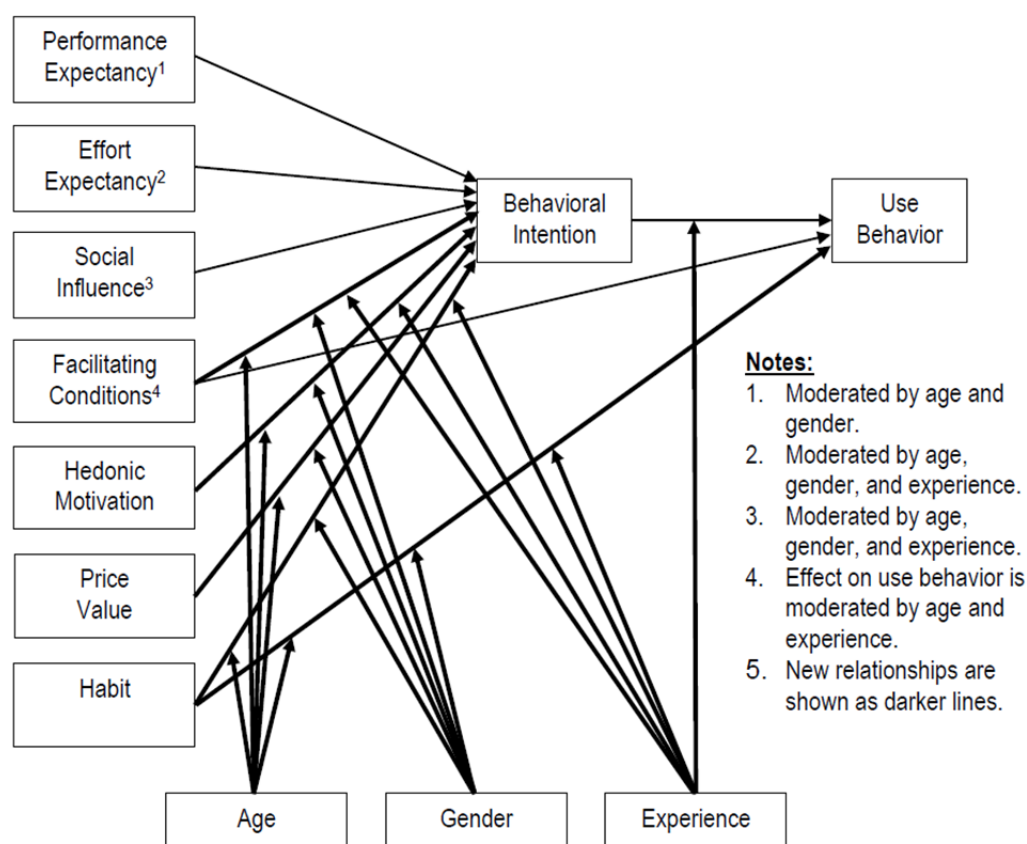
Figure 2.1 The model UTAUT1 and UTAUT2

Source: Viswanath Venkatesh (2012)

2.1.2 Performance expectancy

Performance expectancy is defined as the degree to which an individual believes and adopting a technology for users which help them to attain gain for their job performance. (Viswanath Venkatesh M. G., 2003). In UTAUT model, performance expectancy is considered to be the most effective tool to predict and explain for intention. (İkram Dastan, 2016). For this research, performance expectancy illustrates a user's belief that using wearable fitness device will help them to attain gain and get the benefit from wearable fitness device. According to the study of Onaran, Bulut and Ozmen in year 2013, it describes that functional value did not effect on customer satisfaction (Onaran, 2013). However, in year 2016, the other study about the purchasing attitudes and behaviors of individuals for wearable technologies, the result showed that people considered more about functional benefit of wearable technology device and in term of a variety of products was increasing over time (İkram Dastan, 2016).

As a result, the purpose of hypothesis is:

H1: Functional value has the positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

2.1.3 Effort Expectancy

Another important factor for UTAUT2 is effort expectancy, which referred to the degree of ease related with the use of technology. There are three constructs which are perceived ease of use, complexity and ease of use (Viswanath Venkatesh M. G., 2003). According to the research of wearable device, effort expectancy has been shown that the new technology's ease of use effects on consumer's intention for buying wearable device (Hensel, 2006). However, in 2015, another study illustrated that wearable device users had more concerns about effort expectation factor such as an ease of use. (Yiwen G, 2015).

As a result, the purpose of hypothesis is:

H2: Effort Expectancy has the positive influence on Thai consumer's purchasing intention for Wearable Fitness Device.

2.1.4 Social Influence

Social influence is determined as the degree of an individual comprehend that the user's decision making is able to influence by others' perceptions. There are three aspects which are **Subjective Norm** (Ajzen, 1991), **Social Factors** (Thompson, 1991) and **Image** (Moore, 1991). Firstly, the example of **Subjective Norm** is the people who is important to others, they can influence other people behavior and lead them to use the new system. Secondly **Social Factors** (Thompson, 1991) for example, people who use wearable technology because organization support them. Lastly **Image** (Moore, 1991), this is the degree to use a social status perspective such as people who use wearable fitness device has a high profile (Viswanath Venkatesh M. G., 2003). Social value relates to the social influence comes from buying product and services, in particular social status and sense of belonging. Many researchers studied in their projects about the effect of social value effect on consumer purchase intention (Öztürk, 2014). The previous studies have shown that the time changes the purchasing attitudes and behaviors

of individual. The social value significant effects on the consumer purchase intention. (İkram Dastan, 2016)

As a result, the purpose of hypothesis is:

H3: Subjective norm has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H4: Social factor has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H5: Image has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

2.1.5 Hedonic Motivation

Hedonic motivation is defined as the fun, enjoyable which have been referred to people's pleasure by using technologies, Hedonic motivation has been shown an important role in determining technology acceptance (Brown, 2005). In addition, Brown and Venkatesh found that it is an important determinant of technology acceptance and use (Brown, 2005). In term of wearable technology, Hedonic motivation as a predictor of consumer intention to buy, it can expose entertainment and happiness. People would focus on the enjoyment of the wearable product. The consumers enjoy to use wearable device product in term of variety of functions, they can check physical condition both sleep or diet. (Wei, 2014). In addition, Wearable Fitness Device is suitable for young and healthy person to implement with their daily life, for example steps, sleep and diet. (Chan, 2012). Yiwen, He Li and Yan Luo found that consumers of Wearable Fitness device paid more attention for Hedonic Motivation. (Yiwen G, 2015).

As a result, the purpose of hypothesis is:

H6: Hedonic motivation is positive influence Thai consumer's purchase intention in Wearable Fitness Device.

2.2 Marketing Strategy (Marketing Mix 4P)

The Marketing mix can be defined that "A set of tools intervention in the market". According to another research, the marketing mix includes four main factors (Product, Price, Place, Promotion) which are able to serve customers' need and want.

(Horovitz, 2003). Furthermore, Suk-Ki Hong who studied about Marketing Mix and links to characteristics of activity for Wearable Fitness device illustrated that the wearable device linked with Marketing Mix 4P. However, the wearable fitness tracker device is the relatively a new product and people are not familiar with them. (Hong, 2015).

2.2.1 Product

Product is more tangible goods which is included physical objects. There are several components of product such as product variety, design, features and facilities of product, brand, packaging, size of product (Shahram Gilaninia, 2002). Moreover, in Wearable device market, the functions and design are the most importance. The research showed that diverse function of wearable tracker can achieve customer need and acceptable even though the product is expensive. (Hong, 2015)

As a result, the purpose of hypothesis is:

H7: The function and design are positive influence Thai consumer's purchase intention for Wearable Fitness Device.

2.2.2 Price

The price is total of money that a person has to purchase the products. Set a price of product need to have deep understanding of the price strategy which price plays a role in a target market. Reducing the cost of goods sold is the things that many companies are doing because they need to enhance the value of their products to customers. (Hawkins, 2006) However, Suk-Ki Hong's research showed the appropriate price and maximum affordable prices are the key of price strategy in the wearable device market. (Hong, 2015)

As a result, the purpose of hypothesis is:

H8: Appropriate price and affordable price are positive influence Thai consumer's purchase intention for Wearable Fitness Device

2.2.3 Place

The Place means the location which is the company produce goods at an available place for customers and help them with a convenience place to purchase the products. Also, place will be contained information and be able to generate customer's

experience. There are many channels for customers to buy a product such as distributors, wholesalers, and retailers which are linked as distribution network and be able to serve the convenience way for customers to purchase the products (Kolter, 2000). Regarding the research of wearable device technology, the result showed that customers like to purchase through the distribution channel. (Hong, 2015)

As a result, the purpose of hypothesis is:

H9: Distribution channel is positive influence Thai consumer's purchase intention for Wearable Fitness Device

2.2.4 Promotion

Promotion is the tool that can deliver the messages to customers. Promotion has the big four groups which have a different dimension of each group, for example advertising, sales promotion, public relations and direct marketing. (Shahram Gilaninia, 2002). According to the research by Suk ki Hung which illustrated that they should not apply the standard of promotion strategy for wearable fitness tracker device. Therefore, the specific promotion should be applied for the package sales, buy Wearable Fitness device free activity tracker or free download application etc.(Hong, 2015)
As a result, the purpose of hypothesis is:

H10: Package sales promotion is positive influence Thai consumer's purchase intention for Wearable Fitness Device

2.3 Reference Group

The reference group is the group of people who has a direct and indirect influence on person's attitudes or behavior. In addition, the person who can force other people by using special skill, knowledge or personality would be an opinion leader. On the other hand, the important influencer of people in the reference group are included family, friends, neighbors and co-workers which are informal interactions.

As a result, the purpose of hypothesis is:

H11: The reference group is positive influence Thai consumer's purchase intention for Wearable Fitness Device

2.4 Purchase Intention

In order to be successful of the new business, the company needs to be aware and investigate the factors that can be efficient to lead and create awareness including increase demand of wearable device users. The attitude and purchase intention should be study instead. Theory of Resoned Actuion explained that the actual consumer behavior is defined by purchase intention (Fishbein, 2011). As a result, the purchase intention has an indirect effect for actual behavior.

2.5 Conceptual Framework Model
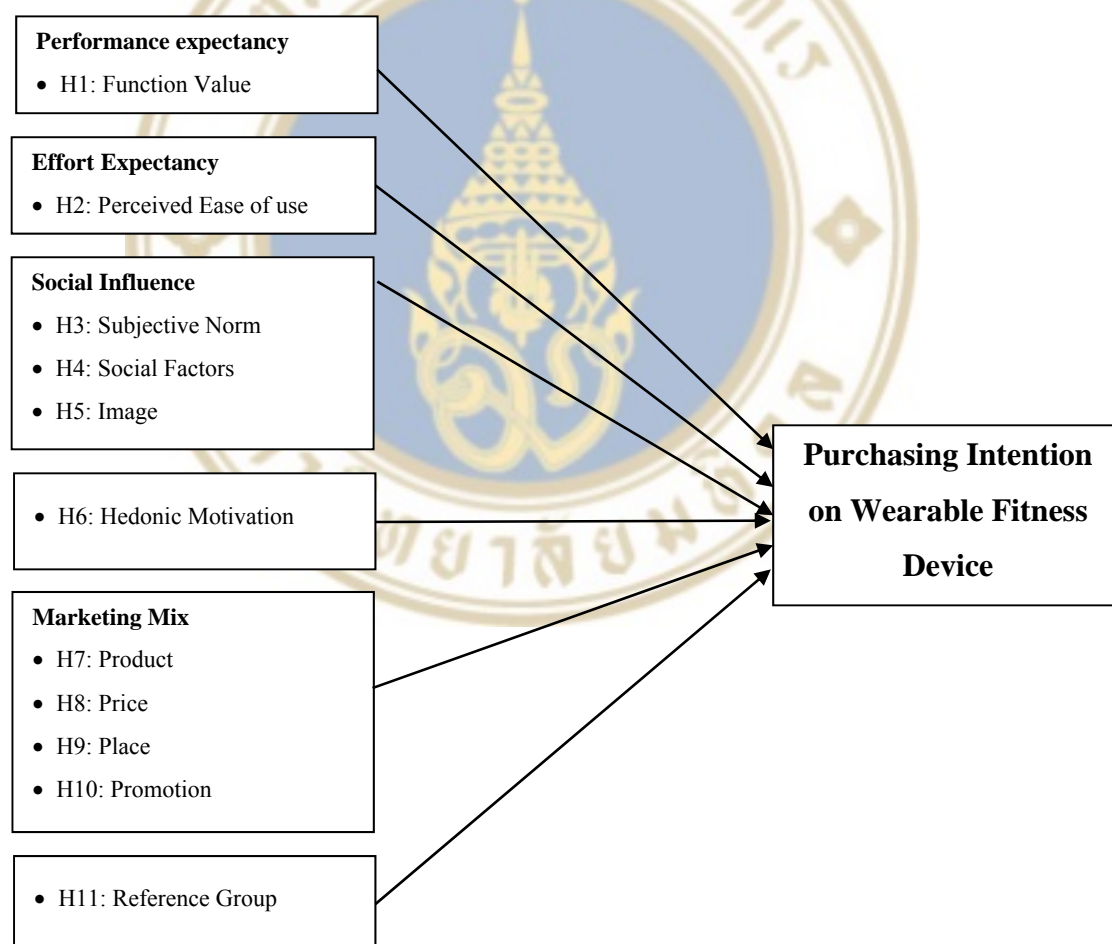
Figure 2.2 Conceptual Framework model for factors influencing with Thai consumers' intention to buy a wearable fitness device

Source: Adapted from Viswanath Venkatesh J. Y. (2012)

CHAPTER III
METHODOLOGY

The purpose of this study is for study the factors that influence with Thai consumer's intention to buy a Wearable Fitness device. This study targets on Thai people's age between 25 to 45 years who live in Bangkok. The study will use quantitative research which is using a standard data collection technique and statistical analysis to uncover about the research topic (Creswell, 2014). A method of data collection will use online questionnaire via googledoc.com and distribute to people in Bangkok area. In addition, the study will use SPSS to conduct exploratory factor analysis by using descriptive analysis, factor analysis and multi regression analysis.

3.1 Research Design

To achieved the main purpose of this study, the key factors of Wearable Fitness device are adapted into the structure of questionnaire. In order it is able to measure the main constructs which effect to purchasing intention of Wearable Fitness device. There are six main constructs which is Performance expectancy, Effort Expectancy, Social Influence, Hedonic Motivation, Group reference. In addition, the population of this study included potential users age between 25 to 45 years who are Thai people live in Bangkok.

3.2 Population size and Sample Size

The target of population size is the Thai people ages between 25 to 45 years who lives in Bangkok. According to the Wearable Fitness tracker population does not know the data precisely. As a result, the exactly Wearable Fitness tracker population cannot be found. However, according to National Statistical Office showed that total population for people who lives in Bangkok age between 25 to 45 years is approximately

1,767,000 peoples. (http://web.nso.go.th/pop2000/table/eadv_tab1.pdf, 2015). For populations that are large, this research would refer Taro Yamane study as Table 3.1 below.

Table 3.1 Sample Size for ±3%, ±5%, ±7%, and ±10% Precision Levels where Confidence Level Is 95% and P=.5

Size of Population	Sample Size (n) for Precision (e) of:			
	±3%	±5%	±7%	±10%
500	a	222	145	83
600	a	240	152	86
700	a	255	158	88
800	a	267	163	89
900	a	277	166	90
1,000	a	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100

a = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Therefore, the size of population is more than 100,000 peoples under the precision of +/-10%, as a result, this research needed to be used the target sample size is 100.

3.2.1 Sample characteristics

The respondents have to be Thai people's age between 25 to 45 years who live in Bangkok as the purpose of this study to uncover their purchase behavior and purchase intention on the wearable fitness device.

3.3 Quantitative Design

The research objective is to determine about the effect of factors influencing consumer behavior and purchasing intention. To study the hypothesized model, the quantitative is used as a tool to study the intention to buy of targeted respondents towards Wearable Fitness device. As the most of questions were adapted from previous published studies with a minor change in wording to suit with Wearable Fitness device. In addition, the attributes will be measured following the questions are aiming to examine the relationship with consumer behavior and purchasing intention.

3.4 Research Instrument

In this researched used quantitative research and questionnaire survey that obtained from respondents.

3.4.1 Constructs Measurements

The standard tool of research instrument is a questionnaire that gathering the data, using a several types of scales, for example nominal, ordinal, interval and ratio that can use for the quantitative research (Sekaran, 2009). According to this study would use nominal scale in part 1, part 2 and part 4. For part 3 uses interval (Likert) scale of the questionnaire. In addition, Five Point Likert Scale as a measurement to measure level of agreement and satisfaction. (Malhotra, 2007)

3.4.2 Questionnaire Design

The questionnaire includes of three main sections. The first section is screening question which is using nominal scale. The second section is a general question which is included place, factor influence and frequency of purchase by using nominal scale

and interval scale. The third section is a specific question which has a factor that influence Thai consumer's purchasing intention in Wearable Fitness Device which uses five Point Likert Scale as a measurement and nominal scale. The last section is a demographic question which is consist age, income, gender by using a nominal scale. In addition, for Likert Scale of this research use four point 5-point Likert scale (5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly agree).

Table 3.2 Section1: Screening questionnaire references (1 questions)

Factor	Question	Adaptation from the reference
Screening question	Have you ever used the wearable fitness device?	

Table 3.3 Section2: General data questionnaire references (3 questions)

Factor	Question	Adaptation from the reference
Place	Where do you convenient to buy wearable fitness device?	
Influence factor	What is the factor that influence you to buy wearable fitness most?	
Frequency	How often do you buy wearable fitness device in a year	

Table 3.4 Section3: Specific questions

Independent factors questionnaire references, Independent variables (11 factors: 27questions)

Factor	Question	Adaptation from the reference
Performance expectancy		
Function Value	1. I find wearable fitness device useful in my daily life.	(Zhongwei Gu, 2015)
	2. Using wearable fitness device helps accomplish things more quickly.	(Yiwen G, 2015)

Table 3.4 Section3: Specific questions (cont.)

Factor	Question	Adaptation from the reference
Function Value (cont.)	3. I find wearable fitness device improve the quality of the work I do.	(Zhongwei Gu, 2015)
	4. Using wearable fitness device health helps me to manage my health.	(Krogoll, 2015)
	5. Using wearable fitness device increases my chances of becoming healthier.	(Krogoll, 2015)
	6. Using wearable fitness device helps me to prevent diseases.	(Krogoll, 2015)
Effort Expectancy		
Perceived Ease of use	1. I find wearable fitness device is easy to use.	(Yiwen G, 2015)
	2. I find wearable fitness device is flexible to interact with.	(Viswanath Venkatesh M. G., 2003)
	3. It is easy for me to become skillful at using wearable fitness device.	(Yiwen G, 2015)
Social Influence		
Subjective Norm	1. I always ask someone before purchasing the products	(Viswanath Venkatesh M. G., 2003)
	2. I prefer to buy somethings as following my friend's recommendation	(TAETIANGTAM, 2014)

Table 3.4 Section3: Specific questions (cont.)

Factor	Question	Adaptation from the reference
Subjective Norm (cont.)	3. If my friend buys the product, I usually buy the same thing with them to maintain the relationship in the group	(TAETIANGTAM, 2014)
Social Factors	1. I always to review wearable fitness tracker before I make decision to purchase	(Viswanath Venkatesh M. G., 2003)
	2. My roles of job responsibilities are influencing on my purchase decision for wearable fitness device	(Viswanath Venkatesh M. G., 2003)
Image	1. I like to use wearable fitness device which is make me look high profile	(Viswanath Venkatesh M. G., 2003)
	2. I am so proud when I use wearable fitness device	(Viswanath Venkatesh M. G., 2003)
	3. I am proud of being the first person who try a new thing because it is make me look a trend leader	(Viswanath Venkatesh M. G., 2003)
Marketing Mix		
Product	1. I prefer to buy for the design of wearable fitness as I like	(CHAISURIYATHAVIKUN, 2014)
	2. I like to buy wearable fitness that are able to give me for the multifunction	(Hong, 2015)

Table 3.4 Section3: Specific questions (cont.)

Factor	Question	Adaptation from the reference
Price	1. I willing to pay an expensive wearable device, if it can give me for a multifunction benefit	(Hong, 2015)
Place	1. I like to buy wearable fitness device by online	(Hong, 2015)
	2. I prefer to has an experience with wearable fitness device in traditional shopping mall	(Hong, 2015)
Promotion	1. I willing to pay even wearable fitness device has no promotion discount	(Hong, 2015)
	2. I prefer to buy wearable fitness device, if they are giving me a promotion discount by cash rather than giving me a free application download	(Hong, 2015)
	3. I prefer to buy wearable fitness device, if they give me a free application download rather than giving me a discount by cash	(Hong, 2015)
Reference Group	1. Most of people around me uses a wearable fitness device	(Nagarkoti, 2009)

Table 3.4 Section3: Specific questions (cont.)

Factor	Question	Adaptation from the reference
	2. Social characteristics (such as friends, family) influence you while purchasing your wearable fitness device	(Nagarkoti, 2009)
Purchase intention	1. I have an intention to buy the wearable fitness device within one year	

Table 3.5 Demographic questionnaire references

Demographic part (3 questions)

Factor	Question	Adaptation from the reference
Gender	1. Could you please select only one choice in each characteristic that most describe yourself	
Age	1. Could you please select only one choice in each characteristic that most describe yourself	
Income	1. Could you please select only one choice in each characteristic that most describe yourself	

3.5 Data Collection

Data analysis will use in SPSS by suing both paper and online distributed to respondents, the questionnaire is 100 questionnaires will distribute to people who lives in Bangkok. In addition, we will split 29 respondents that will distributed the paper and the rest 100 will using online survey method by googledoc.com and distributed to respondents by using e-mail, Facebook and Line.

3.6 Data Analysis

To analysis the data of this research will using Statistical Package for Social Sciences (SPSS) program to study the hypothesized model and test the constructs that affect to the purchase intention. There are six main constructs which is Performance expectancy, Effort Expectancy, Social Influence, Hedonic Motivation, Group reference.

This research has three measurements includes factor analysis, descriptive and multiple regression with the sample size is 100 respondents.

1. Exploratory Factor analysis (EFA) is used for data reduction and summarize to identifying items of questionnaire. It results in factor loading. In this research, values of under 0.4 will be eliminated

2. Descriptive analysis is defined for the respondent personal information which is consist of age, gender, personal monthly income.

3. Correlation analysis uses to explain correlation within the group of variables.

4. Multiple linear regression is used to illustrate a relationship between two variables, for example how much variance in one variable has a relationship with other variance in (Carver, 2012)

CHAPTER IV
RESULTS AND DISCUSSION

4.1 Result and Analysis

For this research was conducted to the respondents who are living in Bangkok and age between 25 to 45 years old. The result of data analysis illustrated that total of the sample of respondents 129 persons which is consisted 100 persons who did an online survey and 29 persons who did an offline survey. The first analysis included a result of demographic profile of respondents and general information of respondents by using descriptive frequency analysis. Secondly, this research is analyzed the attributes that are not significant by using both Exploratory Factor Analysis (EFA) and confirmatory factor analysis, thereby the attributes which did not significant are removed, one by one until the data was cleaned. After that, this research analyzed constructs with dependent variable and tested the hypothesis by using multiple linear regression analysis.

4.1.1 Demographic of respondents' information

According to table 4.1 demographic profile of respondents which is consisted of gender, age and income respectively. According to this survey has total respondents 129 persons, as a result, gender illustrated female 65.9% (85 persons) and male 34.1 % (44 persons). Second is age, age is divided by three groups. The majority is age between 25 to 35 years old 73.6% (95 persons) followed by 36 to 46 years old 20.2% (26 persons) and more than 47 years old 6.2% (8 persons). Lastly monthly income is divided by six groups which is 25,001 to 50,000 Baht 29.5% (38 persons) is the majority followed by 50,001 to 80,000 Baht 27.9% (36 persons), 15,001 to 25,001 Baht 11.6% (15 persons), more than 100,001 Baht 10.1% (13 persons) and less than 15,000 Baht 3.9% (5 persons).

Table 4.1 Demographic profile of respondents

Item	No. of respondents	Percent (%)
Gender		
Male	44	34.1
Female	85	65.9
Total	**129**	**100.0**
Age		
25-35 Years old	95	73.6
36-46 Years old	26	20.2
>47 Years old	8	6.2
Total	**129**	**100.0**
Personal Income (Monthly)		
<15,000 Baht	5	3.9
15,001 – 25,001 Baht	15	11.6
25,001 – 50,000 Baht	38	29.5
50,001 – 80,000 Baht	36	27.9
80,001 – 100,000 Baht	22	17.1
>100,001 Baht	13	10.1
Total	**129**	**100.0**

4.1.2 General Information of respondents

According to table 4.2 showed that general information of respondents. According to   total of respondents for this survey is 129 persons. As a result, 51.9% (67 persons) has an experience to use wearable device. In other hand, 48.1% (62 persons), they do not have an experience to use wearable device. In addition, according to the total of respondents for this survey is 129 persons. However, from table 4.2 showed that total respondents 70 persons who use wearable fitness device which is excluded 59 persons who do not use wearable fitness device, the most of respondents use Apple is 31.4% (22 persons), Fitbit is 25.7% (18 persons), Garmin is 20% (14 persons) and there were 4.3% (3 persons) who use Jawbone, Samsung, Pebble and Xiaomi. According to the most of respondents answer that multifunction is the most factor that influence

respondents to buy wearable fitness device 48.1% (62 persons) followed by Ease of use 21.7% (28 persons), Good design 12.4% (16 persons), Look trendy and Durable battery are the same which is 7% (9 persons) and Long lasting 3.9% (5 persons). Respondents answer that Shop in department store where is the most convenient place to buy a wearable fitness device 67.4% (87 persons) followed by Online shopping 22.5% (29 persons), other 5.4% (7 persons) and Life style mall 4.6% (6 persons). Moreover, the frequency time of purchase wearable fitness device illustrated that most of respondents purchase 1 to 2 times a year 45.7% (59 persons), more than 5 times a year 5.4%(7 persons) and 3 to 4 times a year 1.6% (2 persons). However, the respondents who do not buy wearable fitness device in a year 45.7% (59 persons).

Table 4.2 General Information of respondents

General Information of respondents		No. of respondents	Percent (%)
Have you ever used the wearable fitness device?	Yes	67	51.9
	No	62	48.1
	Total	129	100.0
What wearable fitness device do you use	Apple	22	31.4
	Fitbit	18	25.7
	Jawbone	3	4.3
	Samsung	3	4.3
	Pebble	3	4.3
	Garmin	14	20.0
	Xiaomi	3	4.3
	Other	4	5.7
	Total	70	100
What is the factor that influence you to buy wearable fitness most?	Good design	16	12.4
	Ease of use	28	21.7
	Look trendy	9	7.0
	Durable battery	9	7.0
	Multifunction	62	48.1
	Long lasting	5	3.9
	Total	100	100

Table 4.2 General Information of respondents (cont.)

General Information of respondents		No. of respondents	Percent (%)
Where do you convenient to buy wearable fitness device?	Shop in department store	87	67.4
	Online shopping	29	22.5
	Life style mall	6	4.7
	Other	7	5.4
	Total	129	100.0
How often do you buy wearable fitness device in a year?	None	59	45.7
	1-2 times a year	61	47.3
	3-4 times a year	2	1.6
	More than 5 times a year	7	5.4
	Total	129	100

4.2 Factor analysis

Factor analysis is a tool to group similar as constructs. The information can be summarized into meaningful word and related direction group which create new significant constructs (A., 2005). The factor analysis is used to see whether the constructs successfully measures which is identified items of questionnaire that stick together and reduced attributes that are not significant. According to defined the significant variable, this research has criteria by using factor loading to see a correlation between the original variable. As a result, the criteria of cutting insignificant variables are included Low scores which mean attributes with factor loading below 0.4 should be eliminated (Hair, 2006). In addition, initial eigenvalue score needs to be greater than 1 because it illustrates the level of each variable contribution (A., 2005). Scree plot illustrated the number of significant factors that suitable for analysis. (Malhotra, 2007).

4.2.1 Total Variance Explained

Total variance explained illustrated the number on constructs and the percentage of the significant level of the constructs**.**

Table 4.3 Total variance explained five factors influencing Thai consumers' intention to buy a wearable fitness device

Total Variance Explained						
Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.821	26.785	26.785	2.641	14.675	14.675
2	1.984	11.023	37.808	2.443	13.572	28.247
3	1.586	8.813	46.621	2.210	12.279	40.526
4	1.449	8.049	54.669	1.987	11.037	51.564
5	1.069	5.937	60.607	1.628	9.043	60.607
7	.866	4.813	70.365			
8	.805	4.472	74.838			
9	.706	3.920	78.758			
10	.641	3.563	82.321			
11	.595	3.305	85.626			
12	.555	3.082	88.708			
13	.421	2.339	91.047			
14	.418	2.322	95.450			
15	.375	2.081	95.450			
16	.328	1.820	97.270			
17	.277	1.541	98.811			
18	.214	1.189	100.000			

Extraction Method: Principal Component Analysis.

From table 4.3 illustrated five factors that is able to influence Thai consumers' intention to buy a wearable fitness device. The Total variance explained showed that initial eigenvalues (Total column) is more than 1 with higher % cumulative more than 60% (A., 2005). As a result, from table 4.3 explained that there are five components at 60.607% significant of total variability of data.

4.2.2 Scree Plot

Scree Plot is determined as a number of factors in order to show clear constructs in the plot as Figure 4.4
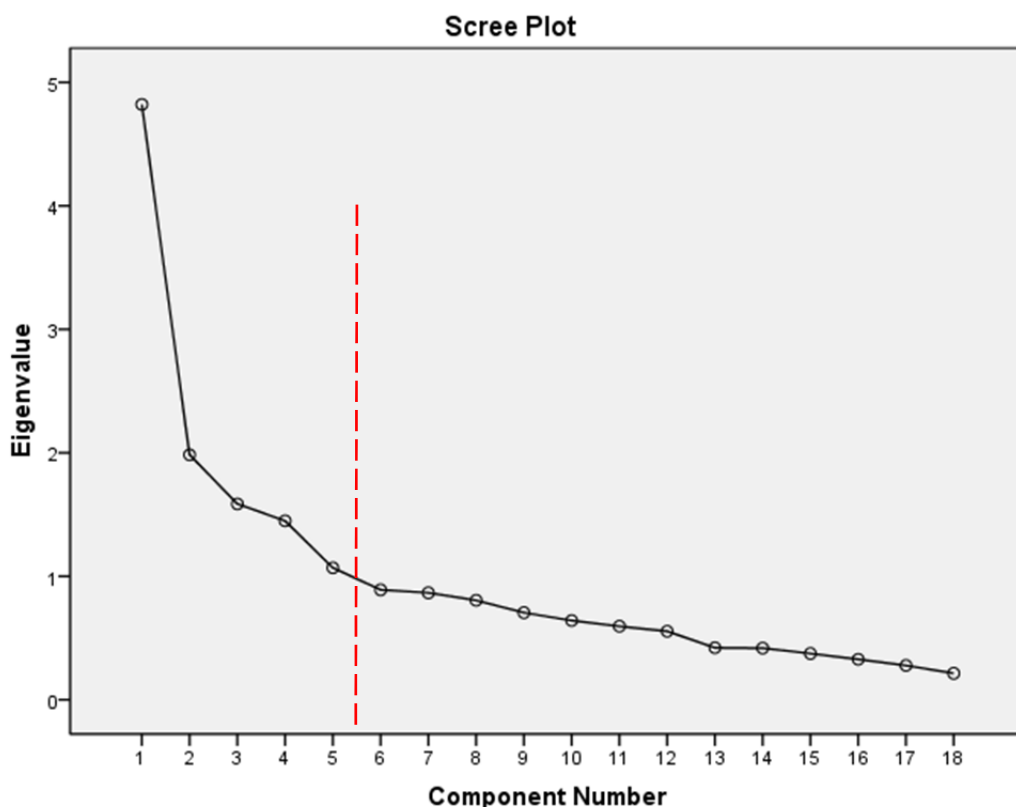
Figure 4.1 Scree Plot of five factors influencing Thai consumers' intention to buy a wearable fitness device

According to figure 4.1 illustrated that five of significant factors which are important for Thai consumers' intention to buy a wearable fitness device.

4.2.3 Rotated Component Matrix

The Rotated Component Matrix is the number of columns shows the number of factors. The values in the Rotated Component Matrix table is represented the factor loading of attribute on the factor. In addition, the meaning of variable has to match in the group.

Table 4.4 Rotated Component Matrix of five factors influencing Thai consumers'

intention to buy a wearable fitness device

Rotated Component Matrix[a]					
	Component				
	1	**2**	**3**	**4**	**5**
Q9: Using wearable fitness device helps me to manage my health.	.798				
Q10: Using wearable fitness device increases my chances of becoming healthier.	.779		**Health Benefit**		
Q8: I find wearable fitness device help me to improve my fitness performance.	.715				
Q11: Using wearable fitness device helps me to prevent diseases.	.602				
Q6: I find wearable fitness device useful in my daily life.	.513				
Q21: I am so proud when I use wearable fitness device		.805			
Q20: I like to use wearable fitness device which is make me look high profile		.762	**Social Influence**		
Q19: My roles of job responsibilities are influencing on my purchase decision for wearable fitness device		.678			
Q17: If my friend buys the product, I usually buy the same thing with them to maintain the relationship in the group		.632			
Q12: I find wearable fitness device is easy to use.			.887	**Perceived Ease of USE**	
Q13: I find wearable fitness device is flexible to interact with.			.783		
Q14: It is easy for me to become skillful at using wearable fitness device			.703		

**Table 4.4 Rotated Component Matrix of five factors influencing Thai consumers'
intention to buy a wearable fitness device (cont.)**

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
Q24: I like to buy wearable fitness that are able to give me for the multifunction		**Function value**		.808	
Q23: I prefer to buy for the design of wearable fitness as I like				.734	
Q25: I willing to pay an expensive wearable device, if it can give me for a multifunction benefit				.654	
Q16: I decide to buy wearable fitness device as my friend recommended		**Reference Group**			.776
Q32: Social characteristics (such as friends, family) influence me while purchasing your wearable fitness device					.697
Q31: Most of people around me uses a wearable fitness device					.564

In this research, Table 4.4 showed Rotated component matrix after dimension
reduction which included five dimensions of factor that influencing Thai consumers'
intention to buy a wearable fitness device. According to table 4.7, the data was grouped
after the factor analysis explored in rotated component matrix. As a result, the new factors
showed as below:

1. Health Benefit relevant to performance expectancy, health benefit and
function benefit

2. Social influence relevant to subjective norm, social factors and social
image

3. Perceived ease of use relevant to effort expectancy and user friendly

4. Function value relevant to product design and function

5. Reference group relevant to social characteristics (such as friends, family, co-workers)

According to the result of the factor analysis showed that some of variables were cut out because there were not significant. After that the new variable was regrouped from factors analysis. Thus new hypotheses are showed below:

H1: Health benefit has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H2: Social influence has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H3: Perceived ease of use has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H4: Function value has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

H5: Reference group has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.

The new hypotheses of this research would be tested by using multiple regressions with the regrouped constructs from the factor analysis in order to see the factor that influence Thai consumer's purchasing intention in Wearable Fitness Device.

4.3 Correlation Coefficient Analysis

Health benefit, Social influence, Ease of use, Function value and Group reference were used in correlation analysis to find the correlation of five factors that influencing Thai consumers' intention to buy a wearable fitness device. The correlations of each variable are show in Table 4.8. As result, all of factors have no correlations which illustrate Pearson Correlation < 0.6 and all factors were statistically significant which is Sig(2-tail) less than 0.05.

Table 4.5 Correlation of five factors influencing Thai consumers' intention to buy a wearable fitness device

Correlations		Health benefit	Social in flu	Ease of Use	Function value	Group R
Healthbenefit	Pearson Correlation	1	.312**	.403**	.341**	.167
	Sig. (2-tailed)		.000	.000	.000	.003
	N	129	127	129	129	129
Socialinflu	Pearson Correlation	.312**	1	.264**	.314**	.366**
	Sig. (2-tailed)	.000		.003	.000	.000
	N	127	127	127	127	127
EaseofUse	Pearson Correlation	.403**	.264**	1	.321**	.306**
	Sig. (2-tailed)	.000	.003		.000	.000
	N	129	127	129	129	129
Fuctionvalue	Pearson Correlation	.341**	.314**	.321**	1	.316**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	129	127	129	129	129
GroupR	Pearson Correlation	.167	.366**	.306**	.316**	1
	Sig. (2-tailed)	.003	.000	.000	.000	
	N	129	127	129	129	129

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

4.4 Multiple Regression Analysis

Multiple regression analysis is a powerful tool used to predict about individual value which is able to show relationship between two or more variable (Hair, 2006). The decision of accepting or rejecting the hypothesis for this statistical test based on 95% confidential interval which P-value is less than 0.05 level of significant in order to avoid errors (A., 2005).

4.4.1 ANOVA result of running Multiple regressions

Table 4.6 ANOVA showed the result five construct of Thai consumer's purchasing intention in Wearable Fitness Device which the significant rate showed 0% which less than 0.05 level of significant

	ANOVA[b]					
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1 Regression	12.054	1	12.054	11.241	.001[a]
Residual	134.041	125	1.072		
Total	146.094	126			

a. Predictors: (Constant), GroupR

b. Dependent Variable: Q33: I have an intention to buy the wearable fitness device within 1 year

According to table 4.8, ANOVA's result while running the multiple regression in order to measure the significant level of independents variables which is included Function value, Social influence, Perceived ease of use, product and reference group. Besides, the dependent variables which is intention to buy the wearable fitness device within 1 year. As a result of five constructs toward Thai consumer's purchasing intention in Wearable Fitness Device. Significance of R-Square value less than 0.05 which is considered significant.

4.4.2 Coefficients result of running Multiple regression

According to the coefficient of five factors with Thai consumer's purchasing intention in Wearable Fitness Device showed the significant factors when running multiple regression as result below:

Table 4.7 Coefficients and Excluded Variables of five factors influencing Thai consumer's purchasing intention in Wearable Fitness Device

		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
Model		**B**	**Beta**		
1	(Constant)	1.433		3.937	.000
	Group R	.409	.287	3.353	.001
	Health benefit	.123	.119	1.379	.170
	Social in flu	.040	.042	.451	.653
	Ease of Use	.120	.120	1.341	.182
	Function value	.027	.027	.299	.766

According to Table 4.7, Coefficients and Excluded Variables of factors influencing Thai consumer's purchasing intention in Wearable Fitness Device. As a result, from Table 4.7 Coefficients, there are one construct which has positive relationship with Thai consumer's age between 25 to 45 years old lives in Bangkok with purchase intention on the wearable fitness device. Reference Group has 0.001 significant which is less than 0.05 level of significant. Moreover, standardized coefficients (Bata) is 0.287. Therefore, Reference group is only one construct that impact on Thai consumer age between 25 to 45 years who live in Bangkok with purchase intention on wearable device.

In the other hand, from Table 4.9 Excluded Variables, there are four constructs which are consisted function value, social influence, perceived ease of use and product that are not significant because of the significant of coefficient estimates is more than 0.05. As Table 4.9 Excluded Variables illustrated that the result does not support **H1:** Health benefit (Sig 0.170), **H2**: Social influence (Sig 0.653), **H3:** Perceived ease of use (Sig 0.182) and **H4:** Function value (Sig 0.766) which are rejected.

Therefore, H5: Reference group is only one construct has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device is accept. According to the regression equations. The model of this research by using 'B' to be coefficient of factor is:

$$Y = 1.433+0.409X1$$

Y = intention to buy the wearable fitness device within 1 year

X1 = Reference Group

If Reference group increase equally at 1 point, thus intention to buy the wearable fitness device of Thai consumer within 1 year would increase at 1.842.

4.4.3 The Model summary of running Multiple of regression

According to running the model summary of five constructs of factors that influence Thai consumer's purchasing intention in Wearable Fitness Device, the result showed that adjusted R square at 7.5% and R Square at 0.083 as Table 4.10 below

Table 4.8 Model summary of five constructs of factors that influence Thai consumer's purchasing intention in Wearable Fitness Device

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
dimension0 1	.287ᵃ	.083	.075	1.036	.083	11.241	1	125	.001

a. Predictors: (Constant), GroupR

4.5 Hypotheses Summary

According to this research, Factor analysis and Multiple Regression methods were used to test hypotheses in order to describe the relationship with all variables both dependent variables and independents variable. The summary of the research finding is shown in Table 4.9 as follow:

Table 4.9 Hypothesis Summary

Hypothesis	Method Test	Result
H1: Health benefit has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.	Multiple regression	Rejected
H2: Social influence has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.	Multiple regression	Rejected
H3: Perceived ease of use has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.	Multiple regression	Rejected
H4: Function value has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.	Multiple regression	Rejected
H5: Reference group has positive influence on Thai consumer's purchasing intention in Wearable Fitness Device.	Multiple regression	Accepted

4.6 Discussion

Firstly, according to the result which illustrated that reference group is a key factor that influence Thai consumer's intention to buy a wearable device. The reference group is the group of people who effected either directly or indirectly on other people 's attitudes and behavior. For Thai consumers, it illustrated that Thai consumers were interested more in the collectivism culture of social relation exchanging information in order to secure their purchasing decision (Argo, 2005). This result also supports the research that reference group is one factor that is the most impact on Thai consumer's intention for buying a wearable device. Moreover, nowadays the number of web blogs or blog sites, which is a tool for opinion leaders, are increasing (Charles W. Lamb, 2008). According to wearable fitness device users, they tend to make their purchasing decision rely on their friends, family, colleagues or blogger influencer's suggestions. In addition, reference group including family and friends can assure and provide more confident

on Thai consumers' intention to buy wearable fitness device. It is because the product is definitely new for them where would fit with Thai consumers and easy to create a target strategy aimed to use reference group to generates a buzz within this community.

Secondly, for this research, the health benefit factor was rejected which means Thai consumers do not care about function benefit of Wearable Fitness device. However, in year 2016, Yiwen found that wearable device users focused more on expectation factor in term of perceived ease of use (Yiwen G, 2015) and according to Danstan study in year 2016 which described that people in Turkey considered more about function benefit of wearable fitness device as well (İkram Dastan, 2016).

Thirdly, both function and design factors were rejected in Thailand because there are not significant for Thai consumer intention to buy a wearable fitness device. On the other hand, the function and design of product are the most important base on Hong's research which was studied for the university Korea students in year 2015 (Hong, 2015).

Lastly in this research found that social influence is not a significant factor for Thai consumer's purchasing intention in Wearable Fitness Device. However, most of studies showed that social influence effected on consumer purchase intention (Öztürk, 2014). According to Dastan's studied, they believe that the social influence effected significantly on consumer purchase intention (İkram Dastan, 2016).

CHAPTER V
CONCLUSION AND LIMITATION

This research examined works which adapted from the model of UTAUT and UTAUT 2 by focusing on finding the factor that influence with Thai consumer's intention to buy a wearable device and to examine the relationship between significant factor and Thai consumer's intention to buy. According to the literature reviews, this research applied conceptual model based on UTAUT and UTAUT2 model (Viswanath Venkatesh J. Y., 2012) which suggests that performance expectancy (function value), effort expectancy (perceived ease of use), social influence (subjective norm, social factors, image), hedonic motivation, marketing mix (product, price, place, promotion) and reference group which is able to create 11 Hypothesis. In this research used quantitative research and questionnaire was adapted from previous studied by using a sample size 100 who is Thai people age between 25 – 45 years lives in Bangkok. The data collection used online questionnaire via googledoc.com. The data analysis has three measurement includes exploratory factor analysis, descriptive analysis and multiple regression. There were 129 respondents which were 85 females and 44 males participated in this survey. The majority of age group is between 25 to 35 years old for 95 respondents and the majority of income is 50,001 to 80,000 Baht for 36 respondents. In addition, the majority of respondents for 67 respondents who had experience to use Wearable Fitness device and the most of respondents use Apple for 22 respondents, the majority of respondents answered multifunction is the most factor that can influence them have an intention to buy Wearable Fitness device for 62 respondents and most of respondents 87 respondents answered that shop in department store is the most for them to buy Wearable Fitness device. Besides the majority of respondents purchase 1 to 2 times a year to buy a Wearable Fitness device for 59 respondents. According to the result of testing factor analysis described that some variable was cut and the new variable was regrouped and the new hypothesis was showed that H1: Health benefit, H2: Social influence, H3: Perceived ease of use, H4: Function value and H5: Reference Group. Besides after running multiple

regression analysis, the result showed that only **H5: Reference Group** has positive influence on Thai consumer's purchasing intention. The Reference Group is the factor most significant relationship between Thai consumers and intention to buy the Wearable Fitness device which is showed that most of Thai consumers referred to friend or family, word of month from friend or family are a more powerful to convince Thai consumers to make a purchase. On the other hand, **H1: Health benefit, H2: Social influence, H3: Perceived ease of use, H4: Function value** were insignificants to affect purchasing intention because the significant of coefficient estimates is more than 0.05. As a result, the all of Hypothesis (**H1: Health benefit, H2: Social influence, H3: Perceived ease of use, H4: Function value**) were rejected which mean all of Hypothesis (**H1: Health benefit, H2: Social influence, H3: Perceived ease of use, H4: function value**) cannot influence Thai consumer's intention to buy a Wearable Fitness device.

5.1 Conclusion

The results of this research is able to answer the research question about what are the key factors that influence Thai consumers to make a decision to purchase Wearable Fitness device, the research showed only one factor H5: Reference Group has a strongly to influence Thai consumer's intention to buy a Wearable Fitness device. As mention in previously, most of Thai consumer showed more on the collectivism culture of social relation exchanging information in order to secure their buying decision (Argo, 2005). The Reference group is the important factor that can be influence Thai consumer's intention to buy a Wearable device, for example family or friend discussion, in term of collectivism by using group opinion to lead Thai consumers interest in the Wearable Fitness device product and will be make a purchase by following the group opinion. The company of Wearable Fitness device will be provided their consumer to create word of mouth to suggest friend or family to use the same Wearable Fitness device. According to another study, the different in culture is able to lead consumer concern different in factor to make a buying decision and culture can be effect to consumer behavior (Siraporn Wongdatengam, 2011). The reason why, even Fitbit is a very successful in a Wearable Fitness device market but that does not confident that if they

will use their global strategies, it will be not suitable for Thai consumers. The results can be explained in Table 5.1 as follow:

Table 5.1 Explanation of key factors influencing Thai customers' intention to buy a Wearable Fitness device

Key factors influencing Thai customers' intention to buy a Wearable Fitness device		
		Support Finding
Reference Group	1. Thai consumer showed more on the collectivism culture of social relation exchanging information in order to secure their buying decision.	(Kim Y. J., 2010) (Tah Fatt Ong, 2015)
	2. The different in culture is able to lead consumer concern different in factor to make a buying decision and culture can be effect to consumer behavior which is illustrated that between Thai culture and western culture are difference. As a result, Thai consumers is more strongly influence by Group opinion.	(Siraporn Wongdatengam, 2011)

5.2 Contribution of the Study

According to result of this research, there are only one factor (Reference Group) is the most strongly influence Thai consumer's intention to buy a wearable device. In addition, this research investigates on the relationship between consumer's intention to buy a Wearable Fitness device and significant factor. This is a key factor that useful for marketing manager in Fitbit company to adapted their global marketing strategies to suit with a Thai consumer behavior. As a result, the company should focus more about Reference Group than other factors such as functional value, perceived ease of use or performance of product to set suitable strategies to created awareness and generate more sales for Thai market.

5.3 Recommendations and Practical Implications

From this research, the practitioners and marketing manager of the wearable fitness device company would be received a benefit to use this research to finding and setting a marketing strategies to dive a wearable fitness device market in Thailand because they should not copy and paste the strategies from their global and apply to Thai market, as previous mentioned that some culture between Thai consumers and Western consumers totally different. Thai consumer showed more on the collectivism culture than Western consumers (Argo, 2005). In addition, this research also supports for this article, from the result that Reference Group is a strongly factor that can influence Thai consumer's intention to buy a Wearable Fitness Device. To implement a suitable strategy for Thai consumers, the company should provide a word of mouth from friend or family to crated advertising to increasing awareness of Thai consumer's intention to try the product which is able to build trust and confident to make a purchase Wearable Fitness device especially the Wearable Fitness device technology is quite new technology for Thai consumer, therefore Reference Group from friend or family is able to have more effect and easy to build trust and confident to try Wearable Fitness device products. In a conclusion, the marketing manager should study more on Thai consumer behavior and develop the strategies to encourage in purchasing decision to gain more sale, benefit in term of relationship with consumers and repeat order. For example, referral program, if you recommend friend. You can get discount 20%, you can get a chance for lucky draw to win travel aboard or you can get free special gift. In addition, blogger review is another key tool to influence Thai consumers' intention to buy a wearable fitness device, for example, create an activity with influencer to promote wearable fitness device and to encouraged Thai consumers and stimulate sale, they should use Like and share on social media such as Facebook or Instagram. The most number of like will get reward for discount 20% or special gift set.

5.4 Limitations

According to this research, firstly the limit of time was a barrier to receive sample result which is not enough to give a representative sample of the Thai consumers as a whole. Secondly this research was used a convenience sample to conduct the survey

and collected data over a short time period. Therefore, the lower accuracy level and reliability happened which is able to lead the respondents finding being restricted. (Fisher, 2004). Lastly, this research had to translation from English version of questionnaires to Thai version of questionnaires and in term of the Wearable Fitness device is a new technology for Thai consumers and some questions used a specific wording which may cause miss understand the meaning of questionnaires.

5.5 Future Research

For the future research, to collected the various information, the future research should be increased the number of sample size and find out more insight for Thai consumers by using the qualitative research to measure and deeply understand more about Thai consumer's behavior. In addition, the future research can be included on others dimensions such as demographic segmentation and brand preference toward wearable fitness device purchasing intention in order for the next research could sharp and apply the factor to create marketing strategy that suit with Thai consumers.

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APPENDICES

Appendix A: Questionnaire

This questionnaire is a part of a 'Thematic Paper' as a part for Master's degree at College of Management Mahidol University (CMMU). **The purpose of this questionnaire is to investigated the factors that influence with Thai consumer's intention to buy a wearable fitness device and examined the factors that make significant influence the market success and future opportunities in this area.** Please answer each question that most suitable with your opinion. Your information will be kept in confidential and used for academic purpose only. This questionnaire will take approximately 15 minutes of your valuable time. Thank you for your cooperation.

The questionnaire consists of 4 parts:

1. General questions about place, influence factor and frequency
2. Specific questions about factors that influence consumer intention to buy
3. Demographic questions

Note: The definition of wearable fitness device for this questionnaire which mean fitness tracker and smart watch.

Q1: Have you ever used the wearable fitness device?

☐ Yes, please continue to Q2　　　☐ No (Thank you for your time)

Q2: What wearable fitness device do you use?

☐ Apple

☐ Fitbit

☐ Jawbone

☐ Samsung

☐ Pebble

☐ Garmin

☐ Xiaomi

☐ Others (Please be specific) _____

Q3: Where do you convenient to buy wearable fitness device?

☐ Shop in Department store

☐ Online shopping

☐ Life style mall

☐ Others (Please be specific) _____

Q4: What is the factor that influence you to buy wearable fitness most?

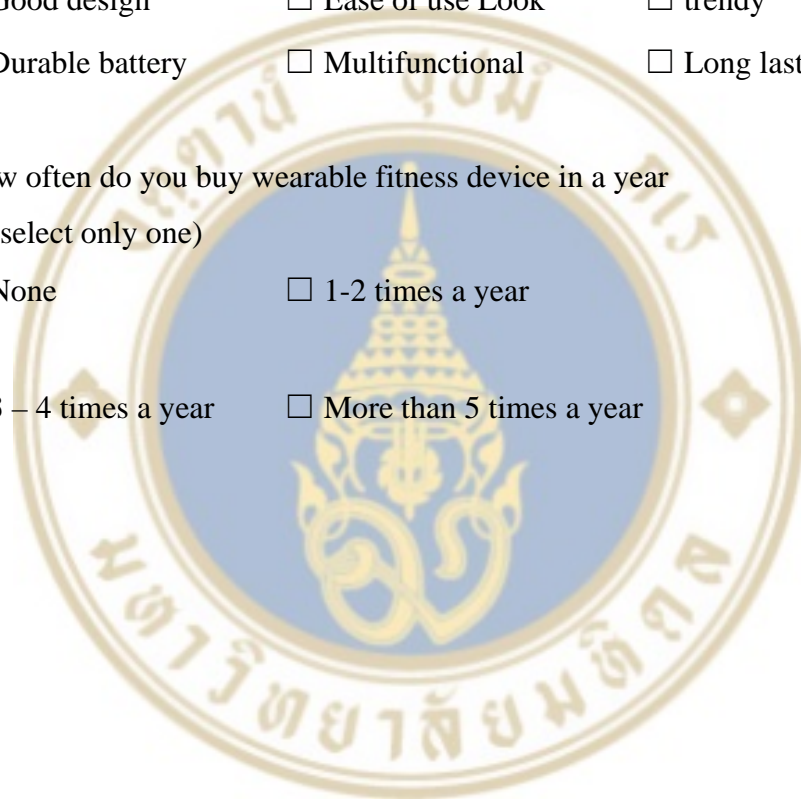 (Please select only one)

☐ Good design   ☐ Ease of use Look   ☐ trendy

☐ Durable battery   ☐ Multifunctional   ☐ Long lasting

Q5: How often do you buy wearable fitness device in a year

(Please select only one)

☐ None   ☐ 1-2 times a year

☐ 3 – 4 times a year   ☐ More than 5 times a year

Part 3: Please mark X in table to rate the scale to show your opinion about factor influencing consumer behavior for each question.

Please specify the level of your agreement on the following statement: (Assessment scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly agree)

Questions	(5)	(4)	(3)	(2)	(1)
Performance expectancy (Function Value)					
Q6: I find wearable fitness device useful in my daily life.					
Q7: Using wearable fitness device helps accomplish things more quickly.					
Q8: I find wearable fitness device improve the quality of the work I do.					
Q9: Using wearable fitness device helps me to manage my health.					
Q10: Using wearable fitness device increases my chances of becoming healthier.					
Q11: Using wearable fitness device helps me to prevent diseases.					
Effort Expectancy (Perceived Ease of use)					
Q12: I find wearable fitness device is easy to use.					
Q13: I find wearable fitness device is flexible to interact with.					
Q14: It is easy for me to become skillful at using wearable fitness device					
Social Influence (Subjective Norm)					
Q15: I always ask someone before purchasing the products					
Q16: I prefer to buy somethings as my recommended					
Q17: If my friend buys the product, I usually buy the same thing with them to maintain the relationship in the group					
Q18: I always to review wearable fitness tracker before I make decision to purchase					

Questions	(5)	(4)	(3)	(2)	(1)
Q19: My roles of job responsibilities are influencing on my purchase decision for wearable fitness device					
Social Influence (Image)					
Q20: I like to use wearable fitness device which is make me look high profile					
Q21: I am so proud when I use wearable fitness device					
Q22: I am proud of being the first person who tries a new thing because it is make me look a trend leader					
Marketing Mix (Product)					
Q23: I prefer to buy for the design of wearable fitness as I like					
Q24: I like to buy wearable fitness that are able to give me for the multifunction					
Marketing Mix (Price)					
Q25: I willing to pay an expensive wearable device, if it can give me for a multifunction benefit					
Marketing Mix (Place)					
Q26: I like to buy wearable fitness device by online					
Q27: I prefer to has an experience with wearable fitness device in traditional shopping mall					
Marketing Mix (Promotion)					
Q28: I willing to pay even wearable fitness device has no promotion discount					
Q29: I prefer to buy wearable fitness device, if they are giving me a promotion discount by cash rather than giving me a free application download					
Q30: I prefer to buy wearable fitness device, if they give me a free application download rather than giving me a discount by cash					

Questions	(5)	(4)	(3)	(2)	(1)
Reference Group					
Q31: Most of people around me uses a wearable fitness device					
Q32: Social characteristics (such as friends, family) influence me while purchasing your wearable fitness device					

Purchase Intention

Q33: I have an intention to buy the wearable fitness device within one year

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Q34: I do not want to buy this product because ………. please select only one choice

(This question is for respondents who answer Disagree and Strongly Disagree in Q33)

☐ I do not believe its performance

☐ I do not want to change because I have my current one.

☐ It seems complicated to use

☐ I concern about it is not privacy or security

☐ Other (Please specify) …………………

Demographic questions

Could you please select only one choice in each characteristic that most describe yourself?

Q35: Gender

☐ Male ☐ Female

Q36: Age

☐ 25-35 Years old

☐ 36-46 Years old

☐ >47 Years old

Q37: Personal Income (Monthly)

☐ <15,000 Baht

☐ 15,000 - 25,000 Baht

☐ 25,000 - 50,000 Baht

☐ >50,000 Baht

Thank you for your cooperation