THE STUDY OF FACEBOOK USAGE ON THAI BABY BOOMER CONSUMER

BY

PHIRADA SINTHUWANICHSAID

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SECIENCE (ENGINEERING AND TECHNOLOGY)
SIRINDHORN INTERNATIONAL INSTITUTE OF TECHNOLOGY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2018

THE STUDY OF FACEBOOK USAGE ON THAI BABY BOOMER CONSUMER

BY

PHIRADA SINTHUWANICHSAID

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SECIENCE (ENGINEERING AND TECHNOLOGY)
SIRINDHORN INTERNATIONAL INSTITUTE OF TECHNOLOGY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2018

THE STUDY OF FACEBOOK USAGE ON THAI BABY BOOMER CONSUMER

A Thesis Presented

By
PHIRADA SINTHUWANICHSAID

Submitted to
Sirindhorn International Institute of Technology
Thammasat University
In partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE (ENGINEERING AND TECHNOLOGY)

Approved as to style and content by

Advisor and Chairperson of Thesis Committee _____
(Asst. Prof. Dr. Nattharika Rittippant)

Co-Advisor _____
(Assoc. Prof. Dr. Suebsak Nanthavanij)

Committee Member and
Chairperson of Examination Committee _____
(Assoc. Prof. Dr. Pisit Chanvarasuth)

Committee Member _____
(Assoc. Prof. Dr. Somrote Komolavanij)

OCTOBER 2018

Acknowledgements

I would like to acknowledge and thank people who have supported me and made this work possible. First, I would like to my express sincere gratitude to my advisor Assoc. Prof. Dr. Nattharika Rittippant, who provided me an opportunity to be a graduate student at SIIT. This thesis cannot be complete without her continuous support as she always provides assistance during my hard time in master degree.

Besides my advisor, I would like to thank the members of research committee, Assoc. Prof. Dr. Suebsak Nanthavanij, Assoc. Prof. Dr. Pisit Chanvarasuth, and Assoc. Prof. Dr. Somrote Komolavanij. Without their comments and guidelines, this study would not have been completed.

My research would have been impossible without support of the members of School of Management Technology (MT), especially Ms. Aroonkamol Samanchuen for her help on administrative issues.

I am highly grateful to be a graduate student at Sirindhorn International Institute of Technology (SIIT), Thammasat University through SIIT scholarship. I also owe my deep gratitude to the institution for supporting my graduate studies.

My special thanks are extended to my fellow graduate, Ms, Nuchjarin Intalar who taught me structural equation modelling technique. I truly appreciated her kindness and her help in my research.

Finally, I would like to thank my family and friends who encouraged me and always there for me throughout the time of my thesis. This accomplishment would not have been possible without them. Thank you!

Abstract

THE STUDY OF FACEBOOK USAGE ON THAI BABY BOOMER CONSUMER

by

PHIRADA SINTHUWANICHSAID

Bachelor of Science. (Technology), Sirindhorn International Institute of Technology, Thammasat University, 2015
Master of Science. (Technology), Sirindhorn International Institute of Technology, Thammasat University, 2018

The study aims to investigate influential factors of baby boomers' online purchasing intention. The research extends the Technology Acceptance Model and Consumer Socialization Process to include the relationship between Peer Communication and Online Purchasing Intention. The survey was collected from 256 Thai baby. The data was analyzed using factor analysis and structural equation models to find the pattern matrix and perform the hypothesis testing. The results of this study confirm that Perceived Playfulness, Self-Efficacy, Perceived Usefulness, and Perceived Ease of Use are highly significant toward Online Purchasing Intention.

Keywords: Online Purchasing Intention, Baby Boomer, Facebook

Table of Contents

List of Tables

List of Figures

Chapter 1
Introduction

Nowadays, countries around the world are facing the era of aging society due to low birth rate which leads to imbalanced ratio between aging and young population. The word "aging society" was defined by the United Nation (UN) as "the country with more than 10 percent of the total population having an age more than or equals to 60 years old". The aging population of Thailand is 17% according to the survey in Thailand. The aging population have enough income for living expenses (Jirapapai and Nomphet, 2018). The aging population (e.g., baby boomers) has revenue from pension, family and saving. The baby boomers' behavior mostly focus on reliability of the brand without any brand preferences.

Social network is the most widely used communication tools and is defined as a form of electronic communication (as websites for social networking and microblogging) which users creates online communities to share information, ideas, personal messages, etc. (Rauniar, Rawski, Yang, and Johnson, 2013). These environments allow people to connect with each other, surpassing geographical and time boundaries as well as creating virtual communities (Kamel Boulos and Wheeler, 2007). Popular social media include Line, Facebook, Twitter, Instagram, Youtube, and LinkedIn. In Thailand, Facebook is the most visited site. Moreover, Thailand has 46 million registered Facebook users. The numbers rank Thailand as 9th place of countries with most Facebook users in 2017 (Kemp, 2017).

Based on Thailand Internet Users Profile 2016 by the Electronic Transactions Development Agency (ETDA), Thai baby boomers access the internet 31.8 hours per week or 4.5 hours per day. Most of them access the internet on smartphones. Baby boomers' activities on the internet are social networking, browsing, sending or reading email, reading electronic book, watching YouTube and purchasing products online (Electronic Transactions Development Agency, 2016). Facebook connect baby boomers with their family and friends more easily.

According to the PWC survey, 51 percent of Thai people purchased products via social media channels (e.g. Facebook). Moreover, Thailand Internet User Profile 2016 by Electronic Transactions Development Agency (ETDA) showed that 86.5 percent of the baby-boomer generation in Thailand used Facebook to connect with families and friends. Facebook was not only used to contact others to keep in touch, but also used as a channel to find product information and share their opinion about products via online channels that facilitates their purchase decisions (Kozinets, De Valck, Wojnicki, and Wilner, 2010). Many business organizations see this growing trend as the opportunity to expand their market because social media have high connectivity property. Many people use it to exchange and find product information and buy products via social media. Since Facebook is the most popular social media in Thailand, this research will focus on Facebook users.

This study has adapted the following concepts to create a conceptual model: Peer Communication, of Consumer Socialization and Perceived Playfulness, Self-efficacy, Trust, Perceived Ease of Use and Perceived Usefulness of Technology Acceptance Model (TAM) by Davis (1989). Consumer socialization can be seen as an external factors and is referred to the process by which baby boomer consumer interact with peer to learn skills, knowledge, and attitudes through communication which influence baby boomer consumers' intention to purchase online product (Ward, 1974). Consumer socialization occurs among consumers who know each other such as parents and children, colleagues, relatives, friends, and neighbors (Wang, Yu, and Wei, 2012). De Gregorio and Sung (2010) found that adult consumers' placement is related to attitudes and behaviors that have been influenced by friends and acquaintances. Peer communication is the strongest predictor of product placement attitudes and behaviors and also strongly influences consumers to the online shoppers. They suggest that retailers should have tell-a-friend function to encourage communication.

Technology Acceptance Model (TAM) can be seen as an internal factor and is used to predict the intention in the use of social media. TAM has become quite popular that it has been cited in researches that deals with user acceptance of technology (Lee, Kozar, and Larsen, 2003). The original TAM proposed that Perceived Ease of Use and Perceived Usefulness can predict the Intention to Use social network. Davis et al. (1985) concluded that the degree of social media usage depends on whether they believe it will help them improve their work performance (Perceived Usefulness), and whether the effort required to use the system can directly affects system usage behavior (Perceived Ease of Use)

This study investigates the factors that affect baby boomers' technology acceptance for online purchasing behavior by using Facebook and the result of this study. It can be a guideline for marketers to increase their knowledge about baby boomers' online purchasing behavior.

1.1. Problem statement

According to Electronic Transactions Development Agency (Public Organization) the highest activity on the internet is the use of social media. The top three most active social media are YouTube, Facebook, and Line. Many businesses use social media ecommerce strategies to target their customers on social network such as Facebook. People use Facebook to exchange their information and experiences about a specific product to improve and support their purchasing decisions. Facebook contains mass audience, great source of traffic and testimonials, highly targeted advertising, and built-in tools for event promotion. Facebook features, such as likes, shared, and comment allows users to engage to others.

There will be a market change in the aging society. In the next 20 years, the portion of the world aging population will increase twice in size. 71 percent of the aging population live in Asia. Also, in the next 15 years, Thailand will be ranked third of countries that will have a high aging population in Asia. Technology is changed rapidly and plays an important role in daily life. The aging population have to adapt themselves to learn new things. This group have higher knowledge, time and purchasing power (Nielsen, 2016). They can spend more time to search for more information on the internet because they concerned about quality and value. If they love the brand or see the advantage information, they are likely to share them to their friend.

No marketers in Thailand have targeted the baby boomer's market as this group has the highest purchasing resources available to them. The developers or marketers have to develop the knowledge in new technology to support the needs of baby boomer group, such as online channel. This research provides a benefit to marketers and practitioners to understand factors of baby boomer consumers' online purchasing behaviors via Facebook which provides great opportunity to enter the baby boomer market that will become a major trend in the future.

This research will investigate Thai baby boomer consumers' online purchasing behaviors to provide a better understanding for scholar and guidelines for business practitioners (e.g. guideline of how to create a more attractive content and marketing campaign to satisfy and encourage baby boomer to do online purchasing) and justification for the implementation in business practices. Therefore, the aim of this research is to find influential variables that has an effect on baby boomers' online purchasing intention by developing an empirical testing of an extensive conceptual model, which is combining two conceptual models: Consumer Socialization Framework and Technology Acceptance Model. The methodology of this research is a survey which was conducted after reviewing the existing literatures. To verify the research model hypothesis, a structural equation modeling (SEM) will be applied for the analysis.

Hence, this research examines the causal effects of certain factors have on baby boomers on online purchasing behavior.

1.2 The objective of the study

This study provides a better understanding to scholar. In summary, this project objectives are the following:

1. To investigate baby boomers' behavior of using Facebook for online purchasing.
2. To investigate the influential factors of baby boomer consumers' online purchasing via Facebook.

1.3. Overview of Research

The research is divided into four chapters, described as follows:

Chapter 1 provides the overview of the research, which includes introduction, problem statement, and objectives.

Chapter 2 reviews the literature of antecedence factor that makes purchase intention more effective.

Chapter 3 The research model is presented and related hypotheses are defined.

Chapter 4 identifies the research methodology, mainly explains the method of approach in formulating the mathematical model by using sequential analysis which consisting of 3 steps 1. Exploratory factor analysis, 2. Confirmatory Factor analysis and 3. Structural equation modeling.

Chapter 5 shows the results of the study based on hypotheses.

Chapter 6 provides the discussion on the hypothesized relationship of research model.

Chapter 7 provides the conclusion. This chapter also includes the recommendation and limitations of the study by describing the value gain after conducting this research

Chapter 2
Literature Review

In this chapter, the review of literature is classified into three sections. Section 2.1 explains the meaning of baby boomer. Section 2.2 summarizes the definition of Facebook Characteristic and Section 2.3 introduces Technology Acceptance Model (TAM) with Peer communication.

2.1 Baby Boomer

Baby Boomer refers to people who was born between 1946 and 1964 (Light, 1988). At the end of World War II, many women got married and had children. The children born in this era were often characterized as patient and hard working. They grew up in a technology development era, so they have to learn new technology and expect that technology will allow them to live more conveniently. The size of the market will expand and become a major consumer in the future. Baby Boomers are the big sector of consumers, therefore, Marketers need to understand their lifestyle needs, as well as their attitudes toward the factors that surround them to create an effective marketing strategy that can attract baby boomers. The numbers of baby boomers will continue to increase until the year 2021. Until then, Thailand will enter the aged society completely. While the European Union and countries close to Thailand such as Japan, South Korea, Singapore and China has already entered the elderly society. The upcoming baby boomers are technology learners, wealthy and healthy, unlike the original. Baby boomers accessed the internet in the morning for about 4.5 hours per day using the smartphone. The place where baby boomers used social media the most is at their home. They use internet as the first source of information. Baby boomer are more connected to social media more than ever before. They use social media to search for information and connect with old friends and family. Facebook is the most popular site with 86.5 percent of baby boomers using it (Electronic Transactions Development Agency, 2016). Baby boomers are the affluent consumers with relatively high purchasing power and lots of free time (Litwin, 2009). Thus, online purchasing is convenient for baby boomers who are not able to go outside. By purchasing products online, they can save time and easily search and compare products to find the best price.

2.2 Facebook Characteristic

Facebook is the most popular social network site (Social Bakers, 2012). There are approximately 1.18 billion total users active on Facebook. Thailand, with 46 million Facebook users, is placed on 9th rank of countries with most Facebook users. The largest number of active users is in Bangkok (Kemp et al., 2017). People are using Facebook to reconnect with old friends and family or find new friends online by sharing images, status, or etc. Whereas, Facebook can improve their purchasing experiences by using Facebook feature to help them making better decisions (Burke, 2002). First, real time in instant messaging that facilitates users to engage. It also provide choices to send the message as either private or public message. Second, a Like button to create engagement between users and allow them to give positive feedback to people that they care about. Users can "like" content such as status updates, comments, photos, and links posted by friends, pages, groups, and advertisers (Facebook, 2017). Third, comment and share will appear in the user's friends' news feed. Their friends will see and do the same thing if they interest in it. Duffett, (2015) the study revealed that user had purchased products after they saw their friend share and comment on Facebook. Facebook provide online purchasing channel on market place where is a feature that user can directly purchase products on Facebook. Market place are convenience for baby boom to browse the product in local area and easily to view the detail and contact the merchant.

2.3 The Technology Acceptance Model (TAM) with Peer communication

Technology Acceptance Model (TAM), developed by Davis et al. (1985), was used in broad area to predict intention to use a new technology and explain a question with specific answer, such as behaviors of baby boomer who accept the new technology by using conceptual framework. The TAM was adopted from another popular theory called Theory of Reasoned Action (TRA) (Rauniar, et al., 2013) from social psychology field which explains a person's behaviors through their intentions. The most importance factor in TAM are perceived ease of use and perceived usefulness. It can be used to predict intention to use social network (Braun, 2013). The two particularly beliefs are the primary drivers for explaining and predicting users' acceptance of specific type of system. Both perceived ease of use and perceived usefulness are affecting the baby boomer's attitude when using the new technology and determining behavioral intention, which in turn, leads to actual system use (Davis et al., 1989).

The TAM has also grown from its roots of predicting technology acceptance in workplace. It has been used to predict intention to use in various types of population including students, consumers, older adults and doctors (Braun et al., 2013). For example, studies where elderly users actually use devices are mostly carried out in the framework of human computer interaction and/or usability studies. The fundamental goal of TAM studies is the analysis of these influencing factors on the use of media and the adoption or rejection of technological devices (Dogruel, Joeckel, and Bowman, 2015).

Communication is an exchange of idea or information between two people from one person to another person. Online purchasing channel are lack of product experience the customer cannot touch and feel the product before they purchase. So, peer communication plays an important role in the model to increase product experience that lead to purchase intention such as a product review from friends or reviewer. The customer tries to purchase the products that their peers like to use and also avoid the ones that their peers dislike. The positive and negative information from peers is more reliable than business communication and therefore peer communication becomes a major influencer of purchase intention (Armağan and Çetin, 2013).

Many researchers use TAM to investigate consumers' intention to use online purchasing. Çelik, (2011) studies the relationship between subjective norm, online shopping anxiety and perceived playfulness by using TAM to predict customer's online shopping intentions. The study found that perceived playfulness had a positive effect on the use of the internet for online shopping. This study could be used in developing online marketing strategies and for future research. Law, Kwok, and Ng, (2016) that the mediator of purchasing intention, who are between ages 31 to 60 years old and had strong purchasing power. It proposes a new online purchase intention model by integrating the technology acceptance model with attitude towards ~~to~~ online purchase as mediator. Faqih (2013) investigated the influence of perceived risk and Internet self-efficacy on the consumers' intentions to use online channels for purchasing based on the extend version of TAM and concluded that self-efficacy influences consumers' intentions toward online shopping behaviors. Lastly, Wang et al. (2012), by using social media, investigated Consumer socialization process through peer communication. In the study, they found that social media usage can cause effect to purchase intention. Peer communication directly affects purchase intention in two way: direct and indirect influence.

This study combines Technology Acceptance Model and consumer socialization process and used the combination to investigate the technology acceptance, including Perceived Playfulness, Self-efficacy, Peer communication, Perceived Usefulness, Perceived ease of use, Attitude toward to online purchasing and Purchase Intention.

2.3.1 Perceived playfulness

Perceived playfulness is the degree where a current or potential user believes that the social network site will bring him/her a sense of enjoyment and pleasure (Sledgianowski and Kulviwat, 2009). Hedonic value can influence the behavior of searching for information and desire to purchase. If the baby boomers are satisfied with their online purchasing experience, they will be likely to repeat the process of searching and purchasing online. (Soleimani, Danaei, Jowkar, and Parhizgar, 2016). Hedonic value can be determined in various states of perceive of playfulness, such as flow, enjoyment and cognitive absorption, significant contributing to online shoppers' search experiences, purchasing decisions and e-store patronage intentions (Demangeot and Broderick, 2007)

Consumers who are motivated by utilitarian values online may seek the convenience of saving time and problem solving information process (Anderson, Knight, Pookulangara, and Josiam, 2014). The perceived utilitarian value of a technology has found when baby boomers perceive hedonic value. A social media user is likely to find a service more useful if he or she enjoys it (Rauniar, et al., 2013).

2.3.2 Self-efficacy

Self-efficacy is defined as the extent to which an individual perceives that he or she is capable of engaging effectively as a shopper or buyer in the online environment (Thaichon, 2017). This Self-Efficacy is defined as an individual's judgment of his or her own capability to purchase products on Facebook. It is baby boomers' self-assessment and self-confidence of his or her capabilities to use social media. The higher self-efficacy is, the more effort becomes active (Bandura, 1982). As people grow older, their physical capacities decrease continually. This physical change in the baby boomer consumers leads them to have a hard time learning new technology and low memory capabilities to remembering detail (Milanović, Pantelić, Trajković, Sporiš, Kostić, and James, 2013).

Baby boomers who have high experience with Facebook believe that they can use Facebook easily to find products, evaluate product information, perform product or price comparisons, place order and check it out. On the other hand, baby boomers who have high experience with Facebook will ask someone for help to purchase produce on online (Vijayasarathy, 2004).

2.3.3 Peer communication

Socialization theory suggests that baby boomer consumers develop consumption-related attitudes and behaviors by learning from socialization agents through interactions with them (Chu and Sung, 2015). Peer communication allows customers to interact with other people on social media which different from traditional communication that customers have to spend their time to interact with staffs at the brick and mortar stores. Facebook provides the feature for customers that facilitate to social interaction of customer. They can communicate to other people in the provided platform (Bagozzi and Dholakia, 2002). Customers are likely to be more affected by people whom they have closer relationships. The customer's close social network also often plays a major role in his or her purchase decisions (Nitzan, and Libai, 2011). This type of information is a new kind of word-of-mouth recommendation which were used in traditional markets (Hajli, 2015).

In their recent study, Wang et al. (2012) investigated peer communication through social media. They found that peer communication can be identified in two forms: Normative (direct influence) and Informational (indirect influence). Normative influences push people to conform to group norms and modify their attitudes and behaviors based on peers' expectations (Bearden, Netemeyer, and Teel, 1989). Akhlaq and Ahmed (2011) said that baby boomer consumers' acceptance of social media is affected by social influence from their peers. It proves that positive words from group play an important role in acceptance of those who are closest to customers. On the other hand, informational influences lead consumers to learn about product by finding information from customer. They might search for information from online community who has the same behavior, such as reviewer or blogger. Informational influences have been affecting consumers' decision processes and product evaluations (Wang et al., 2012). The reviews and ratings from online community are effective to trust. However, the fake reviews and ratings might reduce products' credibility. The customers has to consider that the information that they get is authentic. The authenticity of reviews and ratings can influence the sales of product.

2.3.4 Perceived Usefulness

Perceived usefulness was defined by Davis et al. (1989) as “the degree to which a person believes that using a particular system would enhance his or her job performance.” It follows the definition of useful which is “capable of being used advantageous.” Perceived usefulness is the baby boomer consumers’ belief that using online services is beneficial to their job performance (Davis et al. 1989) which is a representation of the perceived outcome of the experience (Niederhauser and Perkmen, 2010). Elderlies who use the social network with positive attitudes and stronger motivation will improve and tend to have more favorable intention towards the system (Wei and Lu, 2014). Hence, it can be expected that when they feel that social media is useful, they will be more likely to intend to use it.

2.3.5 Perceived Ease of Use

Perceived ease of use is referred to “the degree to which a person believes that using a particular system would be free of effort.” It also follows the definition of “ease” which is “freedom from difficulty or great effort” (Davis et al., 1985). The concept of Perceived Ease of Use relates to Zipf’s (1949) principle of least effort which predicted that elderlies who use social network with less effort will be more appreciative to learn about features, make use of the applications, and perform social-media-related activities (Rauniar et al., 2013). This principle of least effort can predict that the baby boomers who use social media with less effort will be more appreciative to learn features, make use of the applications, and perform social-media-related activities, such as commenting on posts, uploading and sharing photograph and videos like a professional. On the other hand, social media is the “easy to use” social network for elderlies since it allows them to interact and understand function of the social network easily. Thus, they will be more likely to intently use it.

2.3.6 Attitude toward to online purchasing

Attitude towards online purchasing is defined as customers’ positive or negative feelings on online purchasing and their consideration of it being a good ideal. Attitude is widely used for predicting a person’s behavioral intentions. It also acts as a key mediator that supports the positive relationship between other online behavioral factors and purchase intentions

(Law et al., 2016). Recent studies show that the influence occurring in online social media communities has impacts on baby boomer consumers' product attitude and purchase decision (Chen, Chen, and Xu, 2016). Baby boomer consumers conform to a group of norms to make the purchase decisions. Then, social interaction of individuals influences consumer attitude towards the products, which can be positive or negative. The information on social network must be accurate and trustful. Similarly, the review and rating must be true and factual (E-WOM). Since there are 2 sides of rating and review on the product, customers need to ensure that the rating and review they view really comes from the customer, not form the unethical merchant.

2.3.7 Purchase Intention

Purchase Intention is defined as the perceptions and intentions to accept a friend's product recommendation or review when purchasing a product on a social commerce site (Ng, 2013). Customers are willing and intend to purchase in online transaction. Online transaction can be considered in an exchange of information, and purchasing product (Pavlou, et al., 2003). In today's connected world, we could say that social media are an important technological innovation that directly impacts baby boomer consumers and eventually impacts their perception which regards to intentionally purchasing online (Pookulangara and Koesler, 2011). Social media allows baby-boomer consumers to buy products via online network. They also provide the information about the products that creates positive attitude towards the products. Furthermore, peer communication also provides the information and suggest customers to purchase the products on online (Casaló, Flavián, and Guinalíu, 2010).

Chapter 3
Research Hypothesis

3.1 Research Hypothesis

3.1.1 Perceived playfulness

Moon and Kim (2001) found that perceived playfulness is an intrinsic motivator influenced by the user's experience. The motivation of a user to visit a website is affected by the perceived playfulness when the actual state meets his or her expectation of preference state when they use Facebook. Perceived playfulness which baby boomers enjoy includes finding a good deal, hunting for a good price with more positive playfulness (Anderson et al., 2014) and greater usefulness when they are satisfied. Thus, the following hypothesis can be proposed:

H1. Perceived playfulness will positively affect Perceived Usefulness

3.1.2 Self-efficacy

Perceived self-efficacy concerned with people's beliefs in their capabilities to exercise control over their own functioning and events that affect their lives (Bandura et al., 1982). Self-efficacy can affect baby boomers' behavioral purchase intention. Baby boomers with higher self-efficacy (high assurance in their capabilities when facing difficult tasks may lead to persistence to accomplish tasks) and high experience with Facebook are more likely to purchase products (Gatti, Brivio, and Galimberti, 2017). In contrast, baby boomers with lower self-efficacy and low experience may avoid using it (Compeau and Higgins, 1995). Thus, the following hypothesis can be proposed:

H2. Self-efficacy will positively affect Perceived Ease of Use

3.1.3 Peer Communication

Peer Communication has been used increasingly by baby-boomer consumers to answer many types of questions because consumers can share their experiences or opinions to other consumers via social media. Thus, we suggest that baby boomer consumers have been using peer communication to learn more about products on social media. (Pookulangara et al., 2011). Ahuja and Galvin (2003) argued whether social media facilitates communication and allows users to connect with their friendship. The baby boomer consumers may interest in the product when they obtain more information from peer or searching it on the internet. Ratings and reviews from friends or third parties have effect on customer purchasing decisions with their recommendation of products that directly influence customers who have never made online purchases due to lack of experience. Thus, the following hypothesis can be proposed:

H3. Peer Communication will positively affect Purchasing Intention

3.1.4 Perceived Usefulness and Perceived Ease of Use

Based on literature reviews, the social media system will be useful when it helps baby-boomer consumers keep in touch with their family and friends who might live far apart from them. This usefulness, in turn, leads to baby-boomer consumers' satisfaction as well as intention to purchase. Thus, the following hypothesis can be proposed:

H4. Perceived Usefulness will positively affect Attitude toward purchasing

Based on literature review, we can assume that baby boomers will use and are satisfied by the applications that require less effort and are more user friendly. Furthermore, a clear and simple overview for baby boomer which indicates as an easy-to-use website can enhance the baby boomer's experience (Rauniar et al., 2013). Social media must be designed to be easily used for first-time baby boomer consumers, as well as efficient to get tasks done. Such characteristics will lead to the perceived system usefulness. Additionally, it is commonly known that the system will be useful if it is easy to use. Previous studies also show a strong evidence of a positive relationship between perceived ease of use and perceived usefulness. (Rauniar et al., 2013). Thus, the following hypothesis can be proposed:

H5a. Perceived Ease of Use will positively affect Perceived Usefulness

H5b. Perceived Ease of Use will positively affect Attitude toward to purchasing

3.1.5 Attitude toward to purchasing

Attitude relates to usefulness, ease of use and peer communication and performs as a mediator of online purchasing intention. The more product and service contain accurate information, the more information, such as customer review, information and experience of other on community becomes credible. For example, the information from reputable members through reviewing and rating of the products are likely to have higher level of trust in process than the information from a commercial website (Hajli et al., 2015). When people become familiar and participate on the website by searching for information, reading other review and rating on the products, they will feel confident to purchase the products online. A positive product attitude will increase the probability of the baby boomer conducting a purchase (Bjering, Havro, and Moen, 2015). Thus, the following hypothesis can be proposed:

H6. Attitude toward to purchasing will positively affect Purchasing Intention

3.2 Conceptual Model

According to the literature review a conceptual model; linked component that influence purchase intention. Figure 3.1 shows the conceptual model of this study by using Technology Acceptance Model, while Table 3.1 shows the adopted hypothesizes.

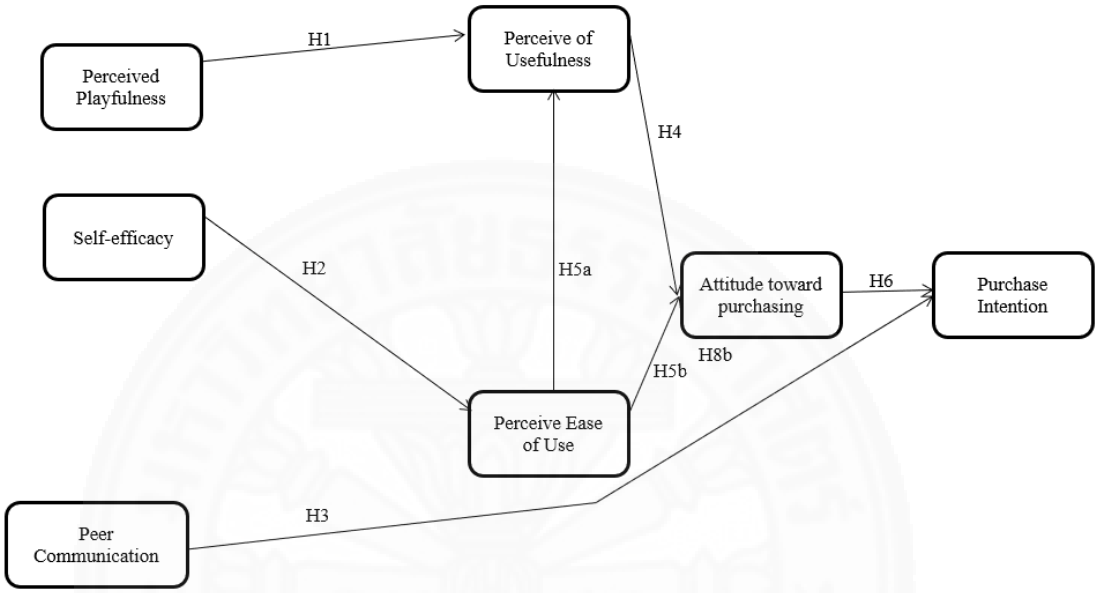

Figure 3.1 Conceptual model

Table 3.1 List of hypotheses

No.	Hypotheses
H1	Perceived playfulness will positively affect Perceived Usefulness
H2	Self-efficacy will positively affect Perceived Ease of Use
H3	Peer Communication will positively affect Purchasing Intention
H4	Perceived Usefulness will positively affect Attitude toward purchasing
H5a	Perceived Ease of Use will positively affect Perceived Usefulness
H5b	Perceived Ease of Use will positively affect Attitude toward to purchasing
H6	Attitude toward to purchasing will positively affect Purchasing Intention

Chapter 4
Methodology

4.1 Data collection

The survey questionnaire was adapted from previous study and translated from English to Thai language.

Schumacker and Lomax (2010) provides a simplified formula to calculate sample size

$$n \geq 5 \, x \, q$$

Where;

n = sample size required

q = number of items in survey

For this study, the sample size is estimated to be n = 5*35 = 170

Data will be collected by sending an electronic (used Google form to create) and hard copy of survey to the baby boomers. The survey was formed with a 5-point Likert scale because it is less confusing and will increase response rate (Babakus and Mangold, 1992; Devlin, Dong, and Brown, 1993; Hayes, 1992). The scale ranged from 1-strongly disagree to 5-strongly agree. The Likert-type scale was selected based on the fact that we want to identify respondent attitude or feeling about the items of each construct. The survey must be done by respondent who are baby boomers and use Facebook to purchase products. This method was selected because it was cost-effective method and convenient.

The questionnaire will be conducted by selecting baby boomers who purchase products via Facebook by creating online survey (google form) sending a link on social media (e.g. Line, Facebook, and Twitter) and hard copy in order to reach a higher response rate.

In this study, the abbreviations for construct are given in Table 4.1.

Constructs	Abbreviations
Perceived Playfulness	PP
Self-efficacy 1	SE1
Self-efficacy 2	SE2
Peer Communication	PC
Perceived Usefulness	PU
Perceived Ease of Use	PEOU
Purchasing Intention	PI

4.2 Normality test

Normality test is a statistical process to test the assumption that fit to the shape of a normal curves. According to West, Frinch and Curran (1995) propose that the value of a skewness is ±2 and ±7 for kurtosis which is considered normal distributed. Critical Ratios is the statistic coefficient dividing by standard error. The value of critical ratios greater than ±1.96 indicate that the normal distribution. For the large samples 200 or more, threshold of ±2.58 can be use (Field, 2009).

Table 4.2 shows that most item value are acceptable in skewness and kurtosis ranges which considered normal distribution except PC1 both values in skewness and kurtosis are not in acceptable ranges. The critical ratios value the items are PP2, SE6, SE, SE8, SE1, PC1, PC3, PC4 and PI3 have value greater than ±2.58, while other items show lower values.

Table 4.2 Assessment of Normality (Kurtosis & Skewness)

Descriptive Statistics							
	N	Skewness			Kurtosis		
	Statistic	Statistic	Std. Error	Critical Rations	Statistic	Std. Error	Critical Rations
PP1	216	-0.09	0.17	-0.52	0.36	0.33	1.09
PP2	216	-0.47	0.17	-2.80	0.63	0.33	1.91
PP3	216	-0.33	0.17	-1.98	0.34	0.33	1.04
PP4	216	-0.24	0.17	-1.42	0.45	0.33	1.36
SE1	216	-0.14	0.17	-0.83	-0.65	0.33	-1.97
SE2	216	-0.23	0.17	-1.37	-0.59	0.33	-1.78
SE3	216	-0.41	0.17	-2.45	-0.44	0.33	-1.34
SE4	216	-0.36	0.17	-2.17	-0.29	0.33	-0.87
SE5	216	-0.35	0.17	-2.13	0.11	0.33	0.32
SE6	216	-0.53	0.17	-3.22	0.30	0.33	0.91
SE7	216	-0.47	0.17	-2.84	0.00	0.33	0.01
SE8	216	-0.55	0.17	-3.33	0.18	0.33	0.54
SE9	216	-0.35	0.17	-2.08	-0.43	0.33	-1.31
SE10	216	-0.45	0.17	-2.73	0.10	0.33	0.32
PC1	216	2.19	0.17	13.19	18.43	0.33	55.85
PC2	216	-0.31	0.17	-1.87	-0.13	0.33	-0.38
PC3	216	-0.51	0.17	-3.07	0.14	0.33	0.43
PC4	216	-0.50	0.17	-2.98	0.09	0.33	0.28
PC5	216	-0.32	0.17	-1.92	0.08	0.33	0.25
PU1	216	-0.36	0.17	-2.17	0.20	0.33	0.59
PU2	216	-0.50	0.17	-2.98	0.40	0.33	1.20
PU3	216	-0.46	0.17	-2.79	0.16	0.33	0.47
PU4	216	-0.13	0.17	-0.77	-0.06	0.33	-0.17
PEOU1	216	-0.37	0.17	-2.20	0.22	0.33	0.68
PEOU2	216	-0.39	0.17	-2.37	-0.15	0.33	-0.45

Table 4.2 Assessment of Normality (Kurtosis & Skewness) (Continued)

Descriptive Statistics							
	N	Skewness			Kurtosis		
	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic
PEOU3	216	-0.20	0.17	-1.19	-0.09	0.33	-0.28
PEOU4	216	-0.35	0.17	-2.09	0.18	0.33	0.54
ATT1	216	-0.15	0.17	-0.90	-0.25	0.33	-0.74
ATT2	216	-0.04	0.17	-0.27	-0.46	0.33	-1.40
ATT3	216	0.16	0.17	0.96	-0.40	0.33	-1.22
PI1	216	-0.22	0.17	-1.30	0.03	0.33	0.08
PI2	216	-0.38	0.17	-2.29	-0.02	0.33	-0.05
PI3	216	-0.69	0.17	-4.16	0.92	0.33	2.77
PI4	216	-0.25	0.17	-1.53	-0.14	0.33	-0.42
Valid N (listwise)	216						

4.5 Data analysis

The data will be analyzed in 3 sequential steps by applying the following statistical method by using statistical package SPSS 24.0 and AMOS 21.0 in each step. First, the exploratory factor analysis (EFA) was used to examine the degree to which item are relating to the same concept by group the item together based on the relationship among each item. Second, the confirmatory factor analysis (CFA) is a special case of factor analysis that was conducted to assess validity and measurement error of all measurement scale in the measurement model. Lastly, Structural Equation Model (SEM) was selected to perform hypothesis testing to describe the relationship among the construct variable

Chapter 5
Results

5.1 Descriptive Statistic

The study collected 216 survey respondents from baby boomer who was born 1946-1964 and had been purchasing online in the last three months. The Demographic of the respondents has been summarized in Table 5.1. The Table shown the gender, age, education, income per month, the total time spent on Facebook in one day and factors influencing decisions and payment method to purchase products online.

Table 5.1 The Demographic of The Respondents

Items	Category	Frequency	Percent
Gender	Male	95	44.0%
	Female	121	56.0%
Age	54-59 years	147	68.0%
	60-65 years	59	27.0%
	66-72 years	10	5.0%
Education	Upper secondary education	20	9.3%
	Technical diploma/Associate degree	42	19.4%
	Bachelor's degree	99	45.8%
	Master's degree	55	25.5%
Income per month	15,001 – 20,000 Baht	31	14.4%
	20,001 – 30,000 Baht	17	7.9%
	30,001 – 40,000 Baht	9	4.2%
	40,001 – 50,000 Baht	30	13.9%
	50,001 – 70,000 Baht	36	16.7%
	70,001 – 90,000 Baht	7	3.2%
	Over 90,000 Baht	86	39.8%
The total time you spent on Facebook in one day	1-3 hrs.	77	35.6%
	4-6 hrs.	67	31.0%
	More than 7 hrs.	72	33.3%

5.2 Measurement Model

There are two analysis steps that was conducted for the model. First, exploratory factor analysis (EFA) using principle component axis (PCA) analysis with varimax rotation was the most widely used technique and easily interpretable results. Second, confirmatory factor analysis using AMOS with the maximum likelihood to examine the hypothesis constuct validity.

5.2.1 Exploratory Factor analysis (EFA)

Kaiser–Meyer– Olkin (KMO) and Bartlett's test of sphericity was used to ensure that the sample size is adequate. In Table 5.2 KMO value is greater than 0.6 which is adequate (Tabachnick, Fidell, and Osterlind, 2001). Table showed KMO is 0.895 which indicates that the data is sufficient for model and All of the factor in Cronbach's Alpha are greater than the recommended threshold of 0.7. In Table 5.3 the rotation component matrix shown the seven factors ware extracted in data. Due to the survey question in self-efficacy it asking about baby boomer learn how to purchase online by themselves or someone help them that make self-efficacy are separated into 2 groups. Lower loading is less than 0.3 on unrelated factors should be remove from the scale which are PP4, PC1, ATT1, ATT2, and ATT3.

Table 5.2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.895
Bartlett's Test of Sphericity	Approx. Chi-Square	3858.505
	df.	406
	Sig.	.000

Table 5.3 Rotated Component Matrix

Rotated Factor Matrix[a]							
	Factor						
	1	2	3	4	5	6	7
SE9	.782						
SE7	.759						
SE5	.741						
SE8	.716						
SE6	.712						
SE10	.618						
SE2		.872					
SE1		.868					
SE3		.787					
SE4		.692					
PU2			.774				
PU4			.681				
PU3			.636				
PU1			.616				
PI3				.807			
PI4				.780			
PI2				.724			
PI1				.586			
PC4					.829		
PC3					.826		
PC2					.729		
PC5					.666		
PEOU3						.688	
PEOU4						.673	
PEOU2						.569	
PEOU1						.521	
PP2							.793
PP1							.766
PP3							.702
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.							
a. Rotation converged in 7 iterations.							

5.2.2 Confirmatory Factor analysis (CFA)

The next step of analysis was tested using confirmatory factor analysis (CFA) by AMOS 21.0 to examine the construct validity and reliability including Perceived Playfulness, Self-efficacy 1, Self-efficacy 2, Peer Communication, Perceived Usefulness, Perceived Ease of Use, Purchasing Intention.

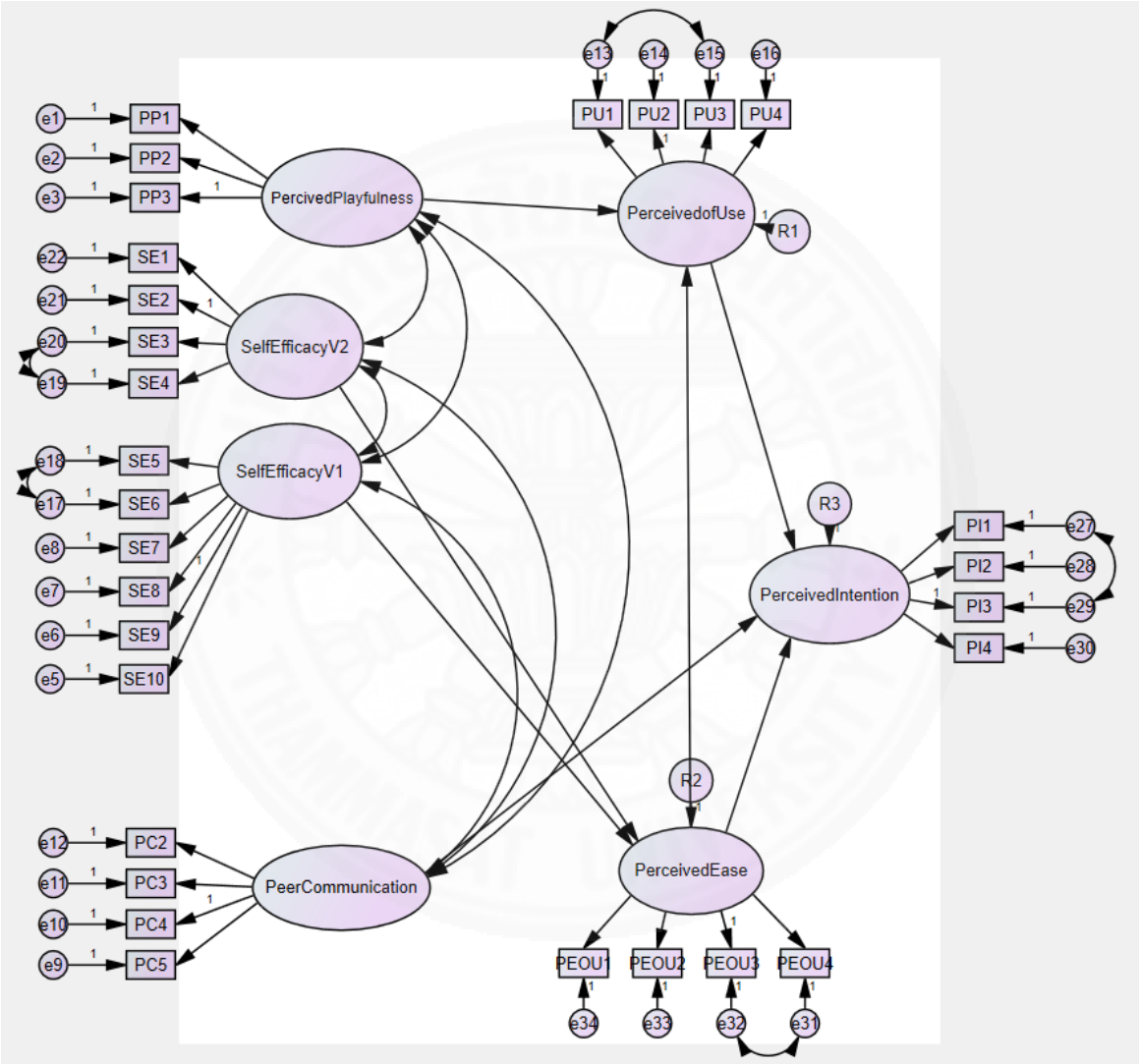

Figure 5.1 Confirmatory Factor Analysis (with standardized estimates)

The CFA shows that the indicator reliability (square multiple correlation), the factor reliability (FR) or composite reliability is the average variance extracted for each factor (AVE) is used in the calculations. Fornell and Larcker (1981) said that convergent validity of the measurement model could be obtained by having AVE greater than 0.5 and composite reliability (CR) was applied to test the reliability (Wasko and Faraj, 2005). Therefore, the value of AVE should be lower than CR and greater than 0.5 is indicates good reliability. Cronbach's alpha measures the reliability score which must be greater than 0.7 (Nunnally, 1978). The result of AVE in perceived of usefulness and perceived ease of use are lower than 0.5 is acceptable. Fornell et al. (1981) which stated that if AVE is lower than 0.5 but CR is higher than 0.7, the convergent validity of the construct is still adequate.

Table5.4 Reliability Calculation

	Results CFA				Reliability Calculation		
Factor	Indicator	Factor Loading	Squared Multiple Correlation	Error Variance	Cronbach's Alpha	AVE	CR
Perceived Playfulness	PP1	0.793	0.629	0.371	0.762	0.569	0.798
	PP2	0.766	0.587	0.413			
	PP3	0.702	0.493	0.507			
Self-Efficacy V2	SE1	0.872	0.760	0.240	0.89	0.653	0.882
	SE2	0.868	0.753	0.247			
	SE3	0.787	0.619	0.381			
	SE4	0.692	0.479	0.521			
Self-Efficacy V1	SE5	0.782	0.612	0.388	0.826	0.523	0.867
	SE6	0.759	0.576	0.424			
	SE7	0.741	0.549	0.451			
	SE8	0.716	0.513	0.487			
	SE9	0.712	0.507	0.493			
	SE10	0.618	0.382	0.618			
Peer Communication	PC2	0.829	0.687	0.313	0.853	0.586	0.849
	PC3	0.826	0.682	0.318			
	PC4	0.729	0.531	0.469			
	PC5	0.666	0.444	0.556			
Perceived of Usefulness	PU1	0.774	0.599	0.401	0.820	0.462	0.773
	PU2	0.681	0.464	0.536			
	PU3	0.636	0.404	0.596			
	PU4	0.616	0.379	0.621			
Perceived Ease of Use	PEOU1	0.688	0.473	0.527	0.806	0.380	0.708
	PEOU2	0.673	0.453	0.547			
	PEOU3	0.569	0.324	0.676			
	PEOU4	0.521	0.271	0.729			
Purchasing Intention	PI1	0.807	0.651	0.349	0.873	0.532	0.816
	PI2	0.78	0.608	0.392			
	PI3	0.724	0.524	0.476			
	PI4	0.586	0.343	0.657			

5.3 Structural Model

5.3.1 Hypothesis Testing

The structural equation modelling (SEM) was used to perform hypothesis testing to build the structural model using maximum likelihood estimation.

In this study base on a sample of 216 respondents and a seven construct model with thirty-four variables. The result of the model has been analysis by goodness of fit criteria such as Byrne (1989) asserted that the ratio of χ^2/df should be less than 3.00 in order to imply the very good fit, Goodness of Fit Index (GFI), and Adjust Goodness of Fit Index (AGFI) should be above the threshold value of 0.8 to indicate a good model fit (Seyal, Rahman, and Rahim, 2002). Normal Fit Index (NFI), value should greater than 0.9 (Arbuckle, 2012) but To el al., (2008), the recommended that the value of NFI above 0.8 can be considered a fairly good fit. According to Hair et al. (2014), Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) it should be greater than 0.9. The Root Mean Square Residual (RMSR), and Root Mean Square Error of Approximation (RMSEA) should be lower than 0.08 and considered a good fit. The result of the Model Fit was in the acceptable range and the hypothesized relationship of research model was conducted and the result was shown in Table 5.5 and Figure 5.2.

Table 5.5 Good Fit Criteria

Fit Indices	Recommended Value	Source	Actual Value	Model Fit
$\chi^2/\text{d.f.}$	≤3.00	Byrne (1989)	1.811	Good fit
GFI	≥0.80	Seyal, Rahman, and Rahim (2002)	0.835	Good fit
AGFI	≥0.80	Seyal, Rahman, and Rahim (2002)	0.800	Good fit
NFI	≥0.80	To, Liao, Chiang, Shih, and Chang (2008)	0.840	Fairly good fit
	≥0.90	Arbuckle (2012)		
TLI	≥0.90	Hair et al. (2014))	0.910	Good fit
CFI	≥0.90	Hair et al. (2014)	0.920	Good fit
SRMR	≤0.08	Hair et al. (2014)	0.073	Good fit
RMSEA	≤0.08	Hair et al. (2014)	0.061	Good fit

The Structural Equation Model is used to examine direction of relationship. Figures 5.2 and Table 5.6 shows the total of seven hypotheses based on a number of literature reviews. The best fit measurement model shows the correlation between key factors in Table 5.6. The strong correlation is explaining the correlation coefficient more than |0.5|, a moderate correlation explains the correlation coefficient between |0.30|-|0.50|, and a weak correlation explains the correlation coefficient of less than |0.30|. The hypotheses show the effects are highly significant ($p < 0.001$) are H1, H2a, H2b, H4, H5a, and H5b cannot be rejected. the correlation coefficient in H1, H2a, H4, H5b are explains a moderate correlation and H5a is explains a strong correlation. Conclusion the result in H1, H2a, H2b, H4, H5a, H5b are supported in the model. Although H3 show p-value of 0.070 thus, the correlation coefficient is 0.112 explains a weak correlation the result is not supported in the model.

Table 5.6 The Result of Hypothesis Testing Result

Model Fit		
χ^2 = 650.195	CFI = 0.920	SRMR = 0.073
$\chi^2/\text{d.f.}$ = 1.811	TLI = 0.910	RMSEA = 0.061
d.f. = 359		

Hypotheses	Relation			Estimates	P	Result	Level
H1	Perceived Playfulness (PP)	→ (+)	Perceived Usefulness (PU)	0.329	***	Supported	Moderate
H2a	Self-efficacy 1 (SE1)	→ (+)	Perceived Ease of Use (PEOU)	0.461	***	Supported	Moderate
H2b	Self-efficacy 2 (SE2)	→ (+)	Perceived Ease of Use (PEOU)	0.289	***	Supported	Weak
H3	Peer Communication (PC)	→ (+)	Purchase Intention (PI)	0.112	0.070	Not Supported	Weak
H4	Perceived Usefulness (PU)	→ (+)	Purchase Intention (PI)	0.358	***	Supported	Moderate
H5a	Perceived Ease of Use (PEOU)	→ (+)	Perceived Usefulness (PU)	0.669	***	Supported	Strong
H5b	Perceived Ease of Use (PEOU)	→ (+)	Purchase Intention (PI)	0.388	***	Supported	Moderate

*** $p < 0.001$

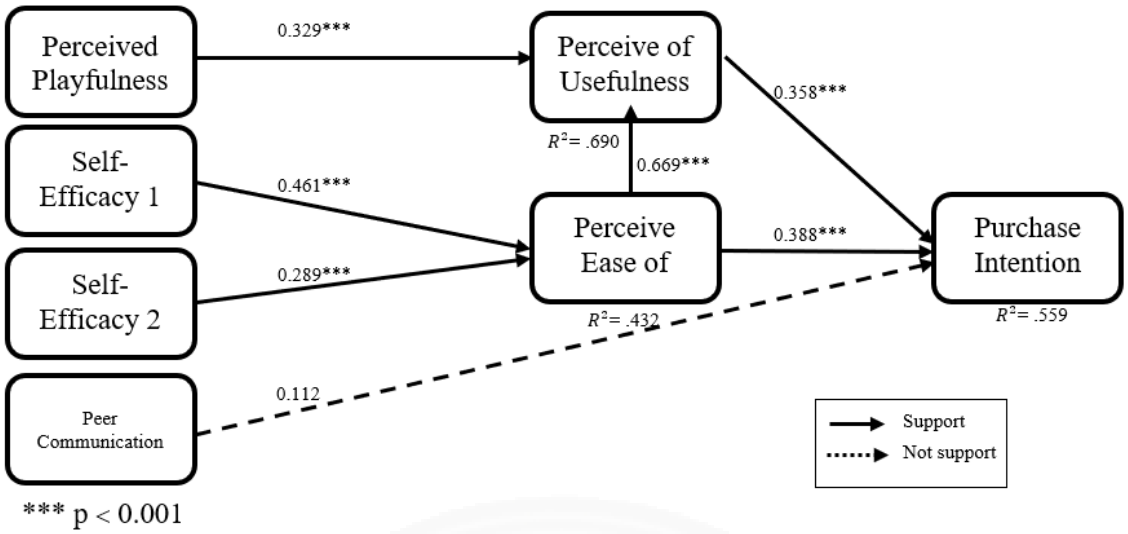

Figure 5.2 Direct Causal effects (Standardized estimates)

Chapter 6
Discussion

This chapter provides the discussion on the hypothesized relationship of research model. There are two parts in this chapter, including discusion of the study and key contributions.

6.1 Discussion

First, H1 hypothesized that perceived playfulness positively affect perceived usefulness. Baby boomers perceive playfulness when they enjoy shopping on Facebook, which leads them to do not realize that the time has passed and encourage them to explore more. Therefore, they are finally led to purchasing intention. When baby boomers enjoy finding variety of products, hunting for low price and special offers on online channel, they tend to be affected, which resulted in purchasing intention. The result shown that perceive playfulness has high significant on perceive usefulness. Thus, it can be concluded that H1 is supported and have positive effect on perceive usefulness.

Second, H2 hypothesized that self-efficacy1 and self-efficacy2 have positive effect on perceived ease of use (H2a, H2b). According to the survey question that was adapted from Venkatesh and Davis (2000), after the analysis of the result of self-efficacy has been separated into two group, consisted of 1. Ability to accomplish a task by themselves and 2. Ability to compete the task by asking someone for help. It is shown that self-efficacy has high significant on perceived ease of use. Since baby boomers are getting older, they have to live with new technology and learn how to use it to make life efficient~~ly~~ and easier to connect with their families and friends. There are two group of baby boomers: (1) Baby boomers who have high experience with online purchasing and use Facebook to skillfully purchase products and (2) Baby boomers who have low experience and feel less comfortable with online purchasing which will affect their purchase intention. Thus, it can be concluded that H2a and H2b are supported and have positive affect on perceived ease of use.

Third, H3 hypothesized that peer communication positively affect purchase intention. This study used peer communication from Consumer Socialization process instead of subjective norm in the original TAM. The results found that peer communication does not support purchasing intention. Recommendation from friends and information received from experienced users (families, friends or others they have not met, such as influencer, blogger, etc.) influence baby boomers' decision to visit online stores and purchase products on Facebook. Therefore, they need to trust the information. Robinson and Smith, (2002) investigated that trust between people will cause peoples to be more willing to accept recommendations from other recommenders (Lu, Zhao and Wang, 2010). When people desire to purchase products, they will talk to and search information from peers to gain more experience that meet their requirement and make purchase decisions. The lower risk in Facebook and high self-confidence make customers feel safe and secure to purchase products online. The research suggest that trust is the important factor in conceptual model because of unsafe online environment. Since online purchasing does not happen in face to face, consumers are unable to access and evaluate real products before purchasing it (Ng, et al., 2013).

Forth, H4 hypothesized that perceived usefulness positively affect purchase intention. Since online information plays an important role in baby boomers' purchase decisions. Baby boomers are able to use and understand the feature of Facebook and obtain the benefits through Facebook. They perceive that Facebook enhances their effectiveness in accomplishing shopping tasks and is the best way to purchase the products. Consequently, effectiveness of Facebook leads to purchase intention. The results showed that perceive usefulness has high significant on purchase intention. Thus, it can be concluded that H4 is supported and have positive effect on purchase intention.

Fifth, H5 hypothesized that perceived ease of use positively affect perceive usefulness (H5a) and perceive ease of use positively affect purchase intention (H5b). Baby boomers perceive that purchasing through Facebook is convenient and useful when baby boomers put less effort in it. For instance, if the description of the product is precise and accurate, and finding a merchant that sells the product, it will encourage the baby boomers to want to use Facebook for their online shopping. The result shows that perceived ease of use has a high significant on perceived usefulness and purchased intention. Thus, it can be concluded that H5a and H5b is supported and have positive effect on perceived usefulness and purchase intention.

Lastly, the hypothesized of attitude towards purchasing will positively affect purchasing intention. In the findings of the result in EFA analysis, we remove all of the factors in attitude towards purchasing because the factor loading is less than 0.3. The study of Venkatesh et al., (2000) showed that attitude towards purchasing can be removed from the model due to its weak role as a mediator between the construct and purchase intention (Mun, Jackson, Park, and Probst, 2006). Perceived usefulness can have an independent effect on purchase intention and perceived ease of use has an effect on perceived usefulness

5.2 Key Contributions

This research studied baby boomers who have grown up in the digital age. The outcomes of this study will provide the following:

1. By empirical assessing the impact of certain internal and external factors have on online purchase intention; practitioners will be able to understand baby boomer customers' behavior and interest. As a result, they can create a more attractive content and marketing campaign to catch baby boomer customers' interest (e.g. invite friends to get discount, create a playful content).
2. Practitioners can revise their content and campaign to create a desired image in baby boomers' mind (create a trusty or playful looking image in baby boomers' perception).

Chapter 7
Conclusion

7.1 Conclusion

This study investigated Facebook usage behaviors of Thai baby boomer consumers to develop a conceptual model, to study the baby boomers' behavior of purchasing products on Facebook. Thus, we revised Technology Acceptance Model (TAM) with consumer socialize process in order to explain baby boomers' acceptance and behavior of purchasing products online. The perceived usefulness and perceived ease of use were determined to be the antecedent of the key TAM construct (Venkatesh et al., 1996). We conducted questionnaire survey and collected 216 respondents from baby boomers between 54 to 71 years old by using online survey (Google form) and hard copy. The survey methods were conducted in this study, using Structural Equation Modeling (SEM) technique. In additional, SEM was selected to perform hypothesis testing. Thus, the relationship in the structural model were more accurate~~ly~~ than the other multivariate method.

The results showed that 84.38 percent of baby boomer have been purchasing product on Facebook. Facebook is not only an online community, but also an online shopping channel. Online shopping channel is convenient as it provides 24-hour of product ordering with special offers for online site and lower price when compared with traditional stores. Such features cause baby boomer consumer to enjoy purchasing product online. Easy and convenient to use are important factors that make baby boomers adopt new technology. In addition, high experience with Facebook will increase new opportunity of purchase intention. Low experience with Facebook leads to lacking of knowledge and fear of purchasing products online. Moreover, peer communication can influence baby boomers through posting and sharing features on Facebook. The more credible information, such as review and rating is, the more purchase intention intensifies. The first and second most used payment method by baby boomers are online banking service and online payment by credit card, respectively. Only a small group of people prefer to use offline payment with cash when the products are delivered because they not trust or familiar with online payment.

On the other hand, 15.62 percent of baby boomer have never purchased things on Facebook because of the lacking of touch and feel of merchandise, the lacking of shopping experience and frauds in online shopping.

The study recommends practitioners to develop and implement online marketing and user friendliness for baby boomers as they have good experience with online purchasing and they will have a strong purchase intention. In contrast, for baby boomers who have low experience with social media and online purchasing, the organizations should provide training class for them as they will have a high purchase intention in the future.

This study confirmed that, perceived playfulness, self-efficacy, perceive usefulness, perceived ease of use are the influential factors of baby boomer consumers' online purchasing

7.2 Limitation

This research was conducted in Thailand, where the baby boomer generation have less experience with online purchasing. A limited number of surveys was distributed with 84.38 percent return rate from respondents who purchased products online and 15.63 percent of respondents who never purchased products online and were asked more questions. A larger sample would have provided better results. Furthermore, the limitation in this study is the lack of diversity in terms of samples. The samples were collected from a single social media (Facebook) and mostly with an age range of 54-59 years of age, which was insufficient to represent the population and the cooperation of the respondents. Moreover, while there are two groups of people in baby boomer generation, who were working baby boomers and retired baby boomers, who were rare to find. This study only reached the age population of ages 54 to 72. Note that the respondents may not truthfully answer the survey questions.

7.3 Further study

In this study, intention, adoption as a basic to empirically explore the factors affecting the online consumer purchasing process (Chan, Cheung, Kwong, Limayem, and Zhu, 2003). Future researchers can be done to explore other influential factors and study baby boomers' opinion about their trust in online purchasing. Moreover, future researchers should investigate whether each generation may carry a different result indifferent purchase intention behavior.

References

Ahuja, M. K., & Galvin, J. E. (2003). Socialization in virtual groups. *Journal of Management*, 29(2), 161-185.

Akhlaq, A., & Ahmed, E. (2011). Intention Towards Online Shopping: A Pakistan Based Study. *UK Academy for Information Systems Conference Proceedings 2011*. Oxford, UK

Arbuckle, J. L. (2010). *IBM SPSS Amos 19 user's guide*. Crawfordville, FL: Amos Development Corporation, 635.

Armağan, E., & Çetin, A. (2013). Peer communication and impacts on purchasing decision: an application on teenagers. *International Journal of Social Sciences and Humanity Studies*, 5(2), 60-72.

Anderson, K. C., Knight, D. K., Pookulangara, S., & Josiam, B. (2014). Influence of hedonic and utilitarian motivations on retailer loyalty and purchase intention: a facebook perspective. *Journal of Retailing and Consumer Services*, 21(5), 773-779.

Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health Services Research*, 26(6), 767

Bagozzi, R. P., & Dholakia, U. M. (2002). Intentional social action in virtual communities. *Journal of Interactive Marketing*, 16(2), 2-21.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.

Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15(4), 473-481.

Bjering, E., Havro, L. J., & Moen, Ø. (2015). An empirical investigation of self-selection bias and factors influencing review helpfulness. *International Journal of Business and Management*, 10(7), 16.

Braun, M. T. (2013). Obstacles to social networking website use among older adults. *Computers in Human Behavior*, 29(3), 673-680.

Burke, R. R. (2002). Technology and the customer interface: what consumers want in the physical and virtual store. *Journal of the academy of Marketing Science*, 30(4), 411-432

Byrne, B. M. (2012). *A primer of LISREL: Basic applications and programming for confirmatory factor analytic models*. Springer Science & Business Media.

Casaló, L. V., Flavián, C., & Guinalíu, M. (2010). Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions. *Tourism Management*, 31(6), 898-911.

Çelik, H. (2011). Influence of social norms, perceived playfulness and online shopping anxiety on customers' adoption of online retail shopping: An empirical study in the Turkish context. *International Journal of Retail & Distribution Management*, 39(6), 390-413.

Chan, G., Cheung, C., Kwong, T., Limayem, M., & Zhu, L. (2003). Online consumer behavior: a review and agenda for future research. *BLED 2003 Proceedings*, 43.

Chen, Y., Chen, H., & Xu, L. (2016). Social Media and eBusiness: Cultural Impacts on the Influence Process in Consumer Communities. *In IOP Conference Series: Materials Science and Engineering* 142(1), 01213. Yurga, Russian Federation, IOP Publishing.

Chu, S. C., & Sung, Y. (2015). Using a consumer socialization framework to understand electronic word-of-mouth (eWOM) group membership among brand followers on Twitter. *Electronic Commerce Research and Applications*, 14(4), 251-260.

Compeau, D. R., & Higgins, C. A. (1995). Application of social cognitive theory to training for computer skills. *Information Systems Research*, 6(2), 118-143.

Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results (Doctoral dissertation, Massachusetts Institute of Technology).

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319–340.

De Gregorio, F., & Sung, Y. (2010). Understanding attitudes toward and behaviors in response to product placement. *Journal of Advertising*, 39(1), 83-96.

Demangeot, C., & Broderick, A. J. (2007). Conceptualising consumer behaviour in online shopping environments. *International Journal of Retail & Distribution Management*, 35(11), 878-894.

Devlin, S. J., Dong, H. K., & Brown, M. (1993). Selecting a scale for measuring quality. *Marketing Research*, 5(3).

Dogruel, L., Joeckel, S., & Bowman, N. D. (2015). Choosing the right app: An exploratory perspective on heuristic decision processes for smartphone app selection. *Mobile Media & Communication*, 3(1), 125-144.

Duffett, R. G. (2015). Facebook advertising's influence on intention-to-purchase and purchase amongst Millennials. *Internet Research*, 25(4), 498-526.

Electronic Transactions Development Agency, E. (2016, September 24). *Thailand internet user profile 2016*. Retrieved May 30, 2017, from https://www.etda.or.th/publishing-detail/thailand-internet-user-profile-2016-th.html

Electronic Transactions Development Agency, E. (2017, September 27). *Thailand internet user profile 2017*. Retrieved April 20, 2018, from https://www.etda.or.th/publishing-detail/thailand-internet-user-profile-2017.html

F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.

Facebook Help Center. (n.d.). *How Marketplace Works.* Retrieved May 16, 2017, from https://www.facebook.com/help/?helpref=hc_global_nav

Faqih, K. M. (2013). Exploring the influence of perceived risk and internet self-efficacy on consumer online shopping intentions: Perspective of technology acceptance model. *International Management Review*, 9(1), 67.

Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.

Gatti, F. M., Brivio, E., & Galimberti, C. (2017). "The future is ours too": A training process to enable the learning perception and increase self-efficacy in the use of tablets in the elderly. *Educational Gerontology*, 43(4), 209-224.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Exploratory factor analysis. Multivariate data analysis*, 7th Pearson new international ed. Harlow: Pearson.

Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. International *Journal of Information Management*, 35(2), 183–191.

Hayes, B. E. (1992). *Measuring customer satisfaction: Development and use of questionnaire*. Milwaukee, WI: ASQC Quality.

Jirapapai, K., & Nomphet, H. (2018, April 10). *Thai aging population: present and future*. Retrieved July 12, 2018, from http://www.nso.go.th/sites/2014/Pages/Press_Release/2561/N10-04-61-1.aspx

Kamel Boulos, M. N., & Wheeler, S. (2007). The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health care education1. *Health Information & Libraries Journal*, 24(1), 2-23.

Kemp, S. (2017, February 16). *Digital in southeast asia in 2017 - we are social*. Retrieved July 12, 2018, from https://wearesocial.com/special-reports/digital-southeast-asia-2017

Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of Marketing*, 74(2), 71-89.

Law, M., Kwok, R. C. W., & Ng, M. (2016). An extended online purchase intention model for middle-aged online users. *Electronic Commerce Research and Applications*, 20, 132-146.

Lee, Y., Kozar, K. A., & Larsen, K. R. (2003). The technology acceptance model: Past, present, and future. *Communications of the Association for Information Systems*, 12(1), 50.

Light, B. (1988). *Baby boomers.* New York: Norton

Litwin, H. (2009). Understanding aging in a middle Eastern context: the share-Israel survey of persons aged 50 and older. *Journal of Cross-Cultural Gerontology*, 24(1), 49

Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*, 9(4), 346-360

Milanović, Z., Pantelić, S., Trajković, N., Sporiš, G., Kostić, R., & James, N. (2013). Age-related decrease in physical activity and functional fitness among elderly men and women. *Clinical Interventions in Aging*, 8, 549-556

.

Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38(4), 217-230.

Mun, Y. Y., Jackson, J. D., Park, J. S., & Probst, J. C. (2006). Understanding information technology acceptance by individual professionals: Toward an integrative view. *Information & Management*, 43(3), 350-363.

Ng, C. S. P. (2013). Intention to purchase on social commerce websites across cultures: A cross-regional study. *Information & Management*, 50(8), 609-620.

Niederhauser, D. S., & Perkmen, S. (2010). Beyond self-efficacy: Measuring pre-service teachers' instructional technology outcome expectations. *Computers in Human Behavior*, 26(3), 436-442.

Nielsen, R. W. (2016). Growth of the world population in the past 12,000 years and its link to the economic growth. *Journal of Economics Bibliography*, 3(1), 1-12.

Nitzan, I., & Libai, B. (2011). Social effects on customer retention. *Journal of Marketing*, 75(6), 24-38.

Nunnally, J. C., & Bernstein, I. H. (1967). *Psychometric theory* (Vol. 226). New York: McGraw-Hill.

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101-134.

Pookulangara, S., & Koesler, K. (2011). Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions. *Journal of Retailing and Consumer Services*, 18(4), 348-354.

PWC. (2016, April 18) *Thailand leading world in using social media to shop*. Retrieved May 15, 2017, from http://www.pwc.com/th/en/press-room/press-release/2016/news-release-18-04-2016.html

Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6-30.

Robinson, R., & Smith, C. (2002). Psychosocial and demographic variables associated with consumer intention to purchase sustainably produced foods as defined by the Midwest Food Alliance. *Journal of Nutrition Education and Behavior*, 34(6), 316-325.

Schumacker, R.E., & Lomax, R.G. (2010) *A beginner's guide to structural equation modelling*, 3rd edition, New York: Routledge.

Seyal, A. H., Rahman, M. N. A., & Rahim, M. M. (2002). Determinants of academic use of the Internet: a structural equation model. *Behaviour & Information Technology*, 21(1), 71-86.

Sledgianowski, D., & Kulviwat, S. (2009). Using social network sites: The effects of playfulness, critical mass and trust in a hedonic context. *Journal of Computer Information Systems*, 49(4), 74-83.

Socialbakers (n.d.). *Most popular Facebook pages in Thailand*. Retrieved May 30, 2017, from https://www.socialbakers.com/statistics/facebook/pages/total/thailand/

Soleimani, M., Danaei, H., Jowkar, A., & Parhizgar, M. M. (2016). The Effect of Perceived Hedonic Value and Social Commerce Constructs on Social Commerce Intention. *Journal of Administrative Management, Education and Training*, 12, 391-407.

Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate satisfices*. Needham Heights, MA: Allyn g~ Bacon.

Thaichon, P. (2017). Consumer socialization process: The role of age in children's online shopping behavior. *Journal of Retailing and Consumer Services*, 34, 38-47.

To, P. L., Liao, C., Chiang, J. C., Shih, M. L., & Chang, C. Y. (2008). An empirical investigation of the factors affecting the adoption of Instant Messaging in organizations. *Computer Standards & Interfaces*, 30(3), 148-156.

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20(5), 454-463.

Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision Sciences*, 27(3), 451-481.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.

Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: the case for an augmented technology acceptance model. *Information & Management*, 41(6), 747-762.

Wang, X., Yu, C., & Wei, Y. (2012). Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of Interactive Marketing*, 26(4), 198-208.

Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1(2), 1-14.

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 35-57.

Wei, P. S., & Lu, H. P. (2014). Why do people play mobile social games? An examination of network externalities and of uses and gratifications. *Internet Research*, 24(3), 313-331.

West, S.G., Finch, J.F. and Curran, P.J. (1995) *Structural equation models with non-normal variables*: Problems and remedies. In: Hoyle, R.H., Ed.

Zipf, G. (1949), *Human behavior and the principle of least effort: an introduction to human ecology*, Addison-Wesley, New York, NY.

Appendices

Appendix A

Survey Questionnaire (English Version)

Perceived Playfulness	
When shopping at social media. I do not realize the passing time (when using social media, I do not realize the passing time)	Çelik, H. (2011)
I enjoy shopping at social media. (I enjoy using social media)	
Shopping at social media makes me want to explore (using social media makes me want to explore)	
Shopping at social media makes me imaginative (using social media makes me imaginative)	

Self-efficacy	
I could complete the job using social media if there was no one around to tell me what to do as I go	Venkatesh et al., 2000
I could complete the job using social media if I had never used social media like it before	
I could complete the job using social media if I had only Facebook manuals for reference	
I could complete the job using social media if I had seen someone else using it before trying it myself	
I could complete the job using social media if I could call someone for help if I got stuck	
I could complete the job using social media if someone else had helped me get started	
I could complete the job using social media if I had a lot of time to complete the job for which Facebook was provided.	
I could complete the job using social media if I had just the built-in help facility for assistance.	
I could complete the job using social media if someone showed me how to do it first	
I could complete the job using social media if I had used similar social media before this one to do the same job	

Peer communication	
I talked with my peers about the product on social media.	Wang et al., (2012)
I talked with my peers about purchasing the product on social media.	
I asked my peers for advice about the product	
I obtained the product information from my peers	
My peers encourage me to buy the product	

Perceived Usefulness	
I find social media useful for accomplishing my shopping tasks (using this social media helps me get better decisions)	Çelik, H. et al., (2011)
Using social media improves my performance in accomplishing my shopping tasks. (using this social media improves the performance of my tasks)	
Using social media enables me to accomplish my shopping tasks faster. (Using this social media enables me accomplish tasks more quickly)	
Using social media enhances my effectiveness in accomplishing my shopping tasks. (using this social media increases my task productivity or improves my quality	

Perceived Ease of Use	
I find social media easy to accomplish my shopping tasks. (the social media is easy to use)	Çelik, H. et al., (2011)
It is easy to become skillful at using social media to accomplish my shopping tasks. (it is easy to become skillful at using the social media)	
I find social media flexible to interact with when accomplishing my shopping tasks. (learning to operate the social media is easy)	
It is easy to learn how to use social media to accomplish my shopping tasks. (learning to operate the social media is easy)	

Attitude toward to purchasing	
I like the idea of using the internet to shop from this site	Hsu, Chuang, and Hsu, (2014).
Using the internet to shop from this site is a good idea Purchasing goods	
Purchasing goods from this site is a wise decision	

Online Purchasing Intention	
I think it is very good to use social media for my shopping tasks instead of traditional methods. (I think it would be very good to use the internet for may shopping activities in addition to traditional method)	Çelik, H. et al., (2011)
It is very desirables to use social media for instead of traditional methods. (in my opinion, it would be very desirable to use the internet for my shopping activities to traditional method)	
It is much better for me to social media for my shopping tasks instead of traditional methods. (it would be much better for me to use the internet for my shopping activities in addition to traditional methods)	
Using social media for my shopping tasks instead of traditional methods is a good idea (using the internet my shopping activities is a good idea)	

Appendix B

Survey Questionnaire (Thai Version)

แบบสำรวจพฤติกรรมการซื้อของออนไลน์ของกลุ่มBaby Boomers บนFacebook

<u>คำชี้แจง</u> แบบสอบถามนี้จัดทำโดยนักศึกษาปริญญาโทภาควิชาเทคโนโลยีการจัดการ สถาบันเทคโนโลยีนานาชาติสิรินธร มหาวิทยาลัยธรรมศาสตร์เพื่อศึกษาพฤติกรรมการซื้อของออนไลน์ของกลุ่มBaby Boomers (ผู้ที่เกิดระหว่างปีพ.ศ. 2489-2507 หรือ อายุ 54-72 ปี) อาศัยอยู่ในประเทศไทย กรุณาตอบแบบสอบถามทุกข้อโดยตอบตามความเป็นจริงที่สุดคำตอบแต่ละข้อถือเป็นสิทธิเฉพาะบุคคลและขอรับรองว่าคำตอบของท่านจะถูกเก็บเป็นความลับเพื่อนำมาใช้ในการวิเคราะห์ทางสถิติในลักษณะรวมเพื่อนำข้อมูลที่ได้มาวิเคราะห์ผลและนำไปใช้เพื่อประโยชน์ทางการศึกษาเท่านั้นขอขอบพระคุณที่เสียสละเวลาให้ความร่วมมือตอบแบบสอบถามชุดนี้

ส่วนที่1: ข้อมูลพื้นฐาน

1.1 เพศ ☐ ชาย ☐ หญิง 1.2 อายุ _____ปี

1.3 ในรอบ 3 เดือน ที่ผ่านมา ท่านเคยซื้อสินค้า/บริการออนไลน์หรือไม่

☐ ไม่ได้สัมผัส/ไม่ได้ลอง ก่อนซื้อ	☐ ไม่มีสินค้าที่ต้องการ	☐ ไม่ได้เจอผู้ขายโดยตรง
☐ ชอบเดินช้อปปิ้ง	☐ กลัวโดนหลอก	☐ เคยได้ยินข่าว/สิ่งที่ไม่ดีเกี่ยวกับการชอปปิ้งออนไลน์
☐ ราคาสินค้าแพงกว่าซื้อผ่านหน้าร้าน	☐ ค่าใช้จ่ายในการซื้อสินค้า/บริการออนไลน์สูง เช่น ค่าขนส่ง, ค่าธรรมเนียม เป็นต้น	☐ ไม่สามารถชำระเงินทางออนไลน์ได้
☐ การซื้อสินค้าออนไลน์เป็นเรื่องยากเกินไป	☐ ไม่มีบริการจัดส่งสินค้า/บริการที่ต้องการไปยังที่อยู่ของฉัน	☐ ไม่สามารถเชื่อมต่ออินเทอร์เน็ตได้เมื่อต้องการใช้งาน
☐ อื่นๆ_____		

☐ เคย (ข้ามไปตอบข้อ 1.4) ☐ไม่เคย (กรุณาตอบข้อถัดไปเลือกตอบได้มากกว่า1ข้อ และจบแบบสอบถาม)

1.4 ระดับการศึกษาสูงสุดของท่านหรือท่านกำลังศึกษาอยู่ในระดับใด	1.5 รายได้เฉลี่ยต่อเดือนของ
☐ มัธยมปลาย ☐ ปวช./ปวส./ปวท./อนุปริญญา ☐ ปริญญาตรี ☐ ปริญญาโท ☐ ปริญญาเอก	☐ 15,001 – 20,000 บาท ☐20,001 – 30,000 บาท ☐30,001 – 40,000 บาท ☐ 40,001 – 50,000 บาท ☐50,001 – 70,000 บาท ☐70,001 – 90,000 บาท ☐ มากกว่า 90,000 บาท
1.6 ในช่วง 7 วัน ที่ผ่านมา ระยะเวลารวมที่ท่านใช้อินเทอร์เน็ตต่อวัน	1.7 ปัจจัยใดต่อไปนี้มีอิทธิพลต่อ การตัดสินใจเข้าเยี่ยมชมเว็บไซต์ ขายของออนไลน์ของท่าน (เลือกตอบได้มากกว่า 1ข้อ)
☐1-3 ชั่วโมง ☐4-6 ชั่วโมง ☐มากกว่า 7 ชั่วโมง	☐โฆษณาจากทีวี, วิทยุ, หนังสือพิมพ์, Billboard, แผ่นพับ, งานแสดงสินค้า ☐โฆษณาจากเว็บไซต์/สื่อออนไลน์ต่างๆ ☐เป็นเว็บไซต์ที่อยู่ในอันดับต้นๆ ของการค้นหาผ่าน Search Engine ☐ข้อมูลที่ได้จากรีวิว/ความคิดเห็นของผู้เคยใช้สินค้า ☐ความเห็นจาก Blogger, Net Idol, ดารา นักร้อง, เซเล็บ เป็นต้น ☐คำแนะนาจากเพื่อนว่าดี/มีการบอกต่อๆ กันมา

1.8 ในรอบ 3 เดือน ที่ผ่านมา ปัจจัยใดต่อไปนี้มีอิทธิพลต่อ การตัดสินใจซื้อสินค้า/บริการออนไลน์ ของท่าน (เลือกตอบได้มากกว่า 1 ข้อ)

- ☐ การนำเสนอข้อมูลของสินค้า/บริการของเว็บไซต์นั้นๆ
- ☐ มีการออกแบบเว็บไซต์ให้รองรับอุปกรณ์ที่แตกต่างกัน เช่น Mobile site
- ☐ เว็บไซต์มีสินค้าหลากหลาย
- ☐ สินค้า/บริการนั้นๆ มีราคาถูกกว่าซื้อผ่านร้านค้า
- ☐ ผู้ขายสินค้า/บริการเป็นผู้มีชื่อเสียง/มีความน่าเชื่อถือ
- ☐ ประหยัดเวลาและการเดินทาง สั่งซื้อได้ตลอด 24 ชม.
- ☐ มีบริการจัดส่งฟรี หากซื้อเกินยอดสั่งซื้อขั้นต่ำ
- ☐ คุณภาพและมาตรฐานการบรรจุหีบห่อสินค้า
- ☐ มีบริการ Call center ทำหน้าที่ดูแลลูกค้า
- ☐ เว็บไซต์ค้นหาสินค้าได้ง่าย
- ☐ รูปภาพของสินค้าชัดเจน น่าสนใจ
- ☐ เป็นสินค้าที่มีจาหน่ายเฉพาะทางออนไลน์
- ☐ มีโปรโมชั่นที่ถูกใจ
- ☐ มั่นใจในระบบการสั่งซื้อและระบบการชำระเงิน
- ☐ มีบริการจัดส่งสินค้าที่สะดวกรวดเร็ว
- ☐ มีบริการชำระเงินกับพนักงานจัดส่งสินค้า
- ☐ มีการรับประกันความพอใจ "ไม่พอใจ ยินดีคืนเงิน"
- ☐ อื่นๆ_____

1.9 ท่านชำระเงินค่าสินค้า/บริการที่ซื้อออนไลน์ ด้วยวิธีการใด (เลือกตอบได้มากกว่า 1 ข้อ)

- ☐ นัดเจอผู้ขาย
- ☐ โอนเงินผ่านเคาน์เตอร์ธนาคาร
- ☐ Cenpay,TrueShop เป็นต้น
- ☐ บัตรเดบิต
- ☐ TPN เป็นต้น
- ☐ ชำระด้วยกระเป๋าเงินอิเล็กทรอนิกส์ (e-Wallet) เช่น mPay, PAYSBUY, True money, LinePay, Airpay,
- ☐ PayPal เป็นต้น
- ☐ บัตรพรีเพด
- ☐ บัตรของขวัญหรือบัตรกำนัล
- ☐ โอนเงินผ่านตู้ ATM
- ☐ ชำระด้วยเงินสดเก็บเงินปลายทาง (Cash on Delivery)
- ☐ จุดรับชำระเงิน เช่น Tesco Lotus, Big C, 7-11, FamilyMart,
- ☐ บัตรเครดิต เช่น VISA, Master card, UnionPay, JCB, AMEX,
- ☐ บัตรเติมเงิน เช่น AIS, DTAC , True Topup card เป็นต้น
- ☐ โอนเงินผ่านเว็บไซต์ธนาคาร (Internet Banking)
- ☐ โอนเงินผ่านแอปพลิเคชันธนาคาร (Mobile Banking)
- ☐ สื่อกลางในการแลกเปลี่ยนแบบดิจิทัล (Cryptocurrencies) เช่น Bitcoin
- ☐ อื่นๆ_____

ส่วนที่2: การรับรู้ถึงความเพลิดเพลินที่ได้รับ	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
เวลาที่ซื้อสินค้าผ่านสื่อสังคมออนไลน์ ฉันไม่ได้ตระหนักถึงเวลาที่ผ่านพ้นไป					
ฉันเพลิดเพลินกับการซื้อสินค้าผ่านสื่อสังคมออนไลน์					
การซื้อสินค้าผ่านสื่อสังคมออนไลน์ ทำให้ฉันที่ความต้องการซื้อมากขึ้น					
การซื้อสินค้าผ่านสื่อสังคมออนไลน์ ทำให้ฉันมีจิตนาการมากขึ้น					

ส่วนที่3: การรับรู้ความสามารถของตนเอง	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันสามารถใช้Facebookด้วยตนเองได้แม้ว่าไม่มีใครมาบอกฉันเลยว่าจะต้องทำอย่างไร					
ฉันสามารถใช้Facebookด้วยตนเองได้แม้ว่าฉันจะไม่เคยใช้สื่อสังคมออนไลน์ที่เหมือนกันมาก่อนเลย					
ฉันสามารถใช้Facebookด้วยตนเองได้แม้ว่าฉันจะมีแค่คู่มือการใช้Facebookเป็นตัวช่วยในการใช้งาน					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้าฉันเคยเห็นใครคนอื่นใช้มันก่อนที่ฉันจะลองใช้มันด้วยตัวเอง					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้าฉันสามารถขอให้ใครสักคนมาช่วยเหลือฉันในตอนที่ฉันมีปัญหา					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้ามีใครสักคนช่วยฉันตอนเริ่มหัดใช้งาน					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้าฉันมีเวลามากพอในการใช้ Facebook					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้าฉันมีตัวช่วยเหลือการใช้งานบน Facebook					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้ามีใครบางคนแสดงให้ฉันเห็นถึงวิธีการใช้Facebookก่อน					
ฉันสามารถใช้Facebookด้วยตนเองได้ถ้าฉันเคยใช้สื่อสังคมออนไลน์ที่คล้ายคลึงกันมาก่อนหน้านี้					

ส่วนที่ 4: การสื่อสารระหว่างบุคคลในระดับเดียวกัน	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันได้พูดคุยกับเพื่อนของฉันเกี่ยวกับผลิตภัณฑ์บนสื่อสังคมออนไลน์					
ฉันได้พูดคุยกับเพื่อนของฉันเกี่ยวกับการซื้อผลิตภัณฑ์บนสื่อสังคมออนไลน์					
ฉันได้ถามเพื่อนของฉันถึงคำแนะนำเกี่ยวกับผลิตภัณฑ์บนสื่อสังคมออนไลน์					
ฉันได้รับข้อมูลของผลิตภัณฑ์มาจากเพื่อนของฉัน					
เพื่อนของฉันส่งเสริมฉันให้ซื้อผลิตภัณฑ์บนสื่อสังคมออนไลน์					

ส่วนที่ 5: การรับรู้ถึงประโยชน์ที่ได้รับ	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันพบว่าสื่อสังคมออนไลน์เป็นประโยชน์สำหรับการซื้อสินค้าหรือบริการของฉันทำให้ฉันตัดสินใจได้ดีขึ้น					
การใช้สื่อสังคมออนไลน์ช่วยเพิ่มประสิทธิภาพในการซื้อสินค้าหรือบริการของฉัน					
การใช้สื่อสังคมออนไลน์ทำให้ฉันสามารถทำการซื้อสินค้าหรือบริการได้เร็วขึ้น					
การใช้สื่อสังคมออนไลน์ช่วยทำให้ฉันสามารถซื้อสินค้าและบริการได้สำเร็จและมีประสิทธิภาพ					

ส่วนที่ 6: การรับรู้ถึงความง่ายในการใช้งาน	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันพบว่าสื่อสังคมออนไลน์นั้นง่ายต่อการซื้อสินค้าหรือบริการของฉัน					
ฉันพบว่ามันเป็นเรื่องง่ายที่จะใช้สื่อสังคมออนไลน์ในการซื้อสินค้าได้อย่างชำนาญ					
ฉันพบว่าสื่อสังคมออนไลน์นั้น มีความยืดหยุ่นในการโต้ตอบกับการซื้อสินค้าหรือบริการของฉัน					
ฉันพบว่าการเรียนรู้วิธีการใช้สื่อสังคมออนไลน์เป็นเรื่องง่ายในการซื้อสินค้าหรือบริการของฉัน					

ส่วนที่ 7: ทัศนคติต่อการซื้อสินค้าออนไลน์	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันชอบความคิดของการใช้อินเทอร์เน็ตในการซื้อสินค้าหรือบริการผ่านเว็บไซต์					
การใช้อินเทอร์เน็ตในการซื้อสินค้าหรือบริการผ่านเว็บไซต์นี้เป็นความคิดที่ดี					
การซื้อสินค้าหรือบริการผ่านเว็บไซต์นั้นเป็นการตัดสินใจที่ชาญฉลาด					

ส่วนที่ 8: ความตั้งใจที่จะซื้อสินค้าออนไลน์ การซื้อสินค้าหรือบริการด้วยวิธีการดั้งเดิมคือ การซื้อขายผ่านทางหน้าร้านค้าเป็นช่องทางเดียวลูกค้าต้องไปซื้อของที่ร้านอย่างเดียว	**ไม่เห็นด้วยอย่างยิ่ง**	**ไม่เห็นด้วย**	**เฉยๆ**	**เห็นด้วย**	**เห็นด้วยอย่างยิ่ง**
ฉันคิดว่ามันจะดีมากที่จะใช้สื่อสังคมออนไลน์สำหรับการซื้อสินค้าหรือบริการนอกเหนือจากวิธีการดั้งเดิม					
ฉันคิดว่าเป็นที่น่าพอใจมากที่จะใช้สื่อทางสังคมออนไลน์สำหรับการซื้อสินค้าหรือบริการแทนวิธีการดั้งเดิม					
ฉันคิดว่าเป็นการดีมากสำหรับฉันที่ใช้สื่อสังคมออนไลน์ของการซื้อสินค้าหรือบริการแทนที่จะใช้วิธีการดั้งเดิม					
การใช้สื่อสังคมออนไลน์ในการซื้อสินค้าหรือบริการแทนที่จะใช้วิธีการแบบเดิมนั้น เป็นความคิดที่ดี					

Appendix C

Output of Factor analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.895
Bartlett's Test of Sphericity	Approx. Chi-Square	3858.505
	df.	406
	Sig.	.000

Communalities

Communalities		
	Initial	Extraction
PP1	1.000	.678
PP2	1.000	.773
PP3	1.000	.604
SE1	1.000	.845
SE2	1.000	.854
SE3	1.000	.735
SE4	1.000	.676
SE5	1.000	.635
SE6	1.000	.682
SE7	1.000	.720
SE8	1.000	.688
SE9	1.000	.685
SE10	1.000	.623
PC2	1.000	.707
PC3	1.000	.780
PC4	1.000	.801
PC5	1.000	.619
PU1	1.000	.677
PU2	1.000	.788
PU3	1.000	.650

Communalities (Continued)		
PU4	1.000	.668
PEOU1	1.000	.698
PEOU2	1.000	.679
PEOU3	1.000	.623
PEOU4	1.000	.679
PI1	1.000	.670
PI2	1.000	.788
PI3	1.000	.806
PI4	1.000	.763

Extraction Method: Principal Component Analysis.

Total Variance Explained

Total Variance Explained									
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.658	36.751	36.751	10.658	36.751	36.751	3.820	13.172	13.172
2	2.608	8.993	45.744	2.608	8.993	45.744	3.289	11.343	24.515
3	2.015	6.948	52.692	2.015	6.948	52.692	3.045	10.499	35.014
4	1.694	5.841	58.532	1.694	5.841	58.532	2.880	9.933	44.947
5	1.520	5.242	63.775	1.520	5.242	63.775	2.878	9.926	54.872
6	1.087	3.747	67.522	1.087	3.747	67.522	2.393	8.253	63.125
7	1.012	3.491	71.013	1.012	3.491	71.013	2.287	7.888	71.013
Extraction Method: Maximum Likelihood.									

Rotated Component Matrix

Rotated Factor Matrix[a]							
	Factor						
	1	2	3	4	5	6	7
SE9	.782						
SE7	.759						
SE5	.741						
SE8	.716						
SE6	.712						
SE10	.618						
SE2		.872					
SE1		.868					
SE3		.787					
SE4		.692					
PU2			.774				
PU4			.681				
PU3			.636				
PU1			.616				
PI3				.807			
PI4				.780			
PI2				.724			
PI1				.586			
PC4					.829		
PC3					.826		
PC2					.729		
PC5					.666		
PEOU3						.688	
PEOU4						.673	
PEOU2						.569	
PEOU1						.521	
PP2							.793
PP1							.766
PP3							.702
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.							
a. Rotation converged in 7 iterations.							

Appendix D

Output of Confirmatory Factor Analysis

Reliability Statistics (Cronbach's Alpha)

Factor	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
PP	.762	.763	4
SE	.890	.891	10
PC	.826	.832	5
PU	.853	.853	4
PEOU	.820	.822	4
ATT	.806	.806	3
PI	.873	.873	4

Inter-Item Correlation Matrix

	PP1	PP2	PP3	PP4
PP1	1.000	.574	.418	.263
PP2	.574	1.000	.581	.363
PP3	.418	.581	1.000	.476
PP4	.263	.363	.476	1.000

	SE1	SE2	SE3	SE4	SE5	SE6	SE7	SE8	SE9	SE10
SE1	1.000	.874	.696	.595	.309	.115	.426	.372	.273	.397
SE2	.874	1.000	.722	.583	.254	.128	.388	.370	.273	.386
SE3	.696	.722	1.000	.593	.251	.263	.407	.406	.330	.361
SE4	.595	.583	.593	1.000	.428	.247	.468	.441	.375	.468
SE5	.309	.254	.251	.428	1.000	.595	.549	.471	.574	.447
SE6	.115	.128	.263	.247	.595	1.000	.507	.392	.476	.329
SE7	.426	.388	.407	.468	.549	.507	1.000	.706	.595	.589
SE8	.372	.370	.406	.441	.471	.392	.706	1.000	.601	.616
SE9	.273	.273	.330	.375	.574	.476	.595	.601	1.000	.541
SE10	.397	.386	.361	.468	.447	.329	.589	.616	.541	1.000

	PC1	PC2	PC3	PC4	PC5
PC1	1.000	.427	.306	.387	.411
PC2	.427	1.000	.642	.594	.448
PC3	.306	.642	1.000	.696	.488
PC4	.387	.594	.696	1.000	.573
PC5	.411	.448	.488	.573	1.000

	PU1	PU2	PU3	PU4
PU1	1.000	.663	.490	.588
PU2	.663	1.000	.658	.630
PU3	.490	.658	1.000	.526
PU4	.588	.630	.526	1.000

	PEOU1	PEOU2	PEOU3	PEOU4
PEOU1	1.000	.641	.513	.520
PEOU2	.641	1.000	.418	.531
PEOU3	.513	.418	1.000	.587
PEOU4	.520	.531	.587	1.000

	ATT1	ATT2	ATT3
ATT1	1.000	.654	.581
ATT2	.654	1.000	.505
ATT3	.581	.505	1.000

	PI1	PI2	PI3	PI4
PI1	1.000	.612	.505	.552
PI2	.612	1.000	.745	.677
PI3	.505	.745	1.000	.698
PI4	.552	.677	.698	1.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	83	817.217	413	.000	1.979
Saturated model	496	.000	0		
Independence model	31	4288.137	465	.000	9.222

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.048	.809	.771	.674
Saturated model	.000	1.000		
Independence model	.262	.212	.160	.199

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.809	.785	.896	.881	.894
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.888	.719	.794
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	404.217	326.777	489.438
Saturated model	.000	.000	.000
Independence model	3823.137	3617.210	4036.378

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	3.801	1.880	1.520	2.276
Saturated model	.000	.000	.000	.000
Independence model	19.945	17.782	16.824	18.774

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.067	.061	.074	.000
Independence model	.196	.190	.201	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	983.217	1012.244	1263.365	1346.365
Saturated model	992.000	1165.464	2666.138	3162.138
Independence model	4350.137	4360.978	4454.770	4485.770

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	4.573	4.213	4.969	4.708
Saturated model	4.614	4.614	4.614	5.421
Independence model	20.233	19.275	21.225	20.284

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	122	128
Independence model	26	28

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
PP1	<---	PercivedPlayfulness	.805	.093	8.634	***
PP2	<---	PercivedPlayfulness	1.000			
PP3	<---	PercivedPlayfulness	.874	.090	9.733	***
PP4	<---	PercivedPlayfulness	.668	.092	7.302	***
SE8	<---	SelfEfficacyV1	1.023	.088	11.588	***
SE7	<---	SelfEfficacyV1	1.092	.091	12.064	***
PC5	<---	PeerCommunication	.731	.073	9.952	***
PC4	<---	PeerCommunication	1.000			
PC3	<---	PeerCommunication	.945	.074	12.775	***
PC2	<---	PeerCommunication	.860	.073	11.830	***
PU4	<---	PerceivedofUse	.803	.066	12.159	***
PU3	<---	PerceivedofUse	.864	.073	11.843	***
PU2	<---	PerceivedofUse	1.000			
PU1	<---	PerceivedofUse	.875	.068	12.854	***
SE6	<---	SelfEfficacyV1	.757	.092	8.277	***
SE5	<---	SelfEfficacyV1	.846	.087	9.716	***
PC1	<---	PeerCommunication	.664	.095	7.004	***
PI4	<---	PerceivedIntention	1.061	.080	13.267	***
PI3	<---	PerceivedIntention	1.000			
PI1	<---	PerceivedIntention	.823	.076	10.777	***
PEOU4	<---	PerceivedEase	1.139	.127	8.997	***
PEOU3	<---	PerceivedEase	1.000			
PEOU2	<---	PerceivedEase	1.328	.145	9.132	***
PEOU1	<---	PerceivedEase	1.317	.135	9.758	***
SE10	<---	SelfEfficacyV1	.967	.093	10.345	***
SE9	<---	SelfEfficacyV1	1.000			
SE1	<---	SelfEfficacyV2	.964	.043	22.436	***
SE2	<---	SelfEfficacyV2	1.000			
SE3	<---	SelfEfficacyV2	.802	.052	15.389	***
SE4	<---	SelfEfficacyV2	.624	.054	11.535	***
PI2	<---	PerceivedIntention	1.147	.074	15.434	***

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
PP1	<---	PercivedPlayfulness	.633
PP2	<---	PercivedPlayfulness	.809
PP3	<---	PercivedPlayfulness	.721
PP4	<---	PercivedPlayfulness	.537
SE8	<---	SelfEfficacyV1	.804
SE7	<---	SelfEfficacyV1	.837
PC5	<---	PeerCommunication	.656
PC4	<---	PeerCommunication	.831
PC3	<---	PeerCommunication	.807
PC2	<---	PeerCommunication	.755
PU4	<---	PerceivedofUse	.747
PU3	<---	PerceivedofUse	.732
PU2	<---	PerceivedofUse	.838
PU1	<---	PerceivedofUse	.778
SE6	<---	SelfEfficacyV1	.583
SE5	<---	SelfEfficacyV1	.680
PC1	<---	PeerCommunication	.484
PI4	<---	PerceivedIntention	.791
PI3	<---	PerceivedIntention	.831
PI1	<---	PerceivedIntention	.678
PEOU4	<---	PerceivedEase	.723
PEOU3	<---	PerceivedEase	.657
PEOU2	<---	PerceivedEase	.737
PEOU1	<---	PerceivedEase	.804
SE10	<---	SelfEfficacyV1	.721
SE9	<---	SelfEfficacyV1	.743
SE1	<---	SelfEfficacyV2	.926
SE2	<---	SelfEfficacyV2	.934
SE3	<---	SelfEfficacyV2	.776
SE4	<---	SelfEfficacyV2	.655
PI2	<---	PerceivedIntention	.887

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
PercivedPlayfulness	<-->	SelfEfficacyV2	.257	.057	4.550	***
PercivedPlayfulness	<-->	SelfEfficacyV1	.198	.042	4.704	***
PercivedPlayfulness	<-->	PeerCommunication	.241	.049	4.930	***
PercivedPlayfulness	<-->	PerceivedofUse	.309	.049	6.300	***
PercivedPlayfulness	<-->	PerceivedEase	.187	.036	5.136	***
PercivedPlayfulness	<-->	PerceivedIntention	.222	.041	5.464	***
SelfEfficacyV1	<-->	SelfEfficacyV2	.331	.058	5.724	***
PeerCommunication	<-->	SelfEfficacyV2	.259	.061	4.219	***
PerceivedofUse	<-->	SelfEfficacyV2	.310	.059	5.265	***
PerceivedEase	<-->	SelfEfficacyV2	.264	.048	5.475	***
PerceivedIntention	<-->	SelfEfficacyV2	.274	.052	5.292	***
SelfEfficacyV1	<-->	PeerCommunication	.239	.047	5.059	***
SelfEfficacyV1	<-->	PerceivedofUse	.256	.045	5.634	***
SelfEfficacyV1	<-->	PerceivedEase	.203	.037	5.493	***
SelfEfficacyV1	<-->	PerceivedIntention	.176	.037	4.708	***
PeerCommunication	<-->	PerceivedofUse	.326	.053	6.144	***
PeerCommunication	<-->	PerceivedEase	.205	.040	5.126	***
PeerCommunication	<-->	PerceivedIntention	.242	.045	5.428	***
PerceivedofUse	<-->	PerceivedEase	.300	.045	6.677	***
PerceivedofUse	<-->	PerceivedIntention	.341	.047	7.246	***
PerceivedIntention	<-->	PerceivedEase	.245	.038	6.428	***

Correlations: (Group number 1 - Default model)

			Estimate
PercivedPlayfulness	<-->	SelfEfficacyV2	.388
PercivedPlayfulness	<-->	SelfEfficacyV1	.434
PercivedPlayfulness	<-->	PeerCommunication	.453
PercivedPlayfulness	<-->	PerceivedofUse	.630
PercivedPlayfulness	<-->	PerceivedEase	.529
PercivedPlayfulness	<-->	PerceivedIntention	.511
SelfEfficacyV1	<-->	SelfEfficacyV2	.508
PeerCommunication	<-->	SelfEfficacyV2	.341
PerceivedofUse	<-->	SelfEfficacyV2	.442
PerceivedEase	<-->	SelfEfficacyV2	.521
PerceivedIntention	<-->	SelfEfficacyV2	.440
SelfEfficacyV1	<-->	PeerCommunication	.458
SelfEfficacyV1	<-->	PerceivedofUse	.530
SelfEfficacyV1	<-->	PerceivedEase	.582
SelfEfficacyV1	<-->	PerceivedIntention	.410
PeerCommunication	<-->	PerceivedofUse	.580
PeerCommunication	<-->	PerceivedEase	.504
PeerCommunication	<-->	PerceivedIntention	.484
PerceivedofUse	<-->	PerceivedEase	.801
PerceivedofUse	<-->	PerceivedIntention	.739
PerceivedIntention	<-->	PerceivedEase	.737

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P
PercivedPlayfulness	.464	.072	6.415	***
SelfEfficacyV1	.449	.073	6.126	***
PeerCommunication	.610	.086	7.085	***
PerceivedofUse	.519	.071	7.293	***
PerceivedIntention	.409	.056	7.251	***
PerceivedEase	.270	.053	5.127	***
SelfEfficacyV2	.948	.107	8.881	***
e1	.449	.051	8.835	***
e2	.245	.041	6.009	***
e3	.328	.042	7.820	***
e4	.511	.054	9.456	***
e5	.387	.043	9.032	***
e6	.363	.041	8.842	***
e7	.257	.032	8.096	***
e8	.229	.031	7.462	***
e9	.431	.047	9.235	***
e10	.273	.039	6.932	***
e11	.293	.039	7.499	***
e12	.340	.041	8.342	***
e13	.266	.030	8.815	***
e14	.335	.037	8.947	***
e15	.221	.030	7.424	***
e16	.259	.031	8.468	***
e17	.499	.051	9.738	***
e18	.374	.040	9.314	***
e19	.491	.050	9.858	***
e20	.404	.043	9.325	***
e21	.140	.027	5.087	***
e22	.146	.026	5.539	***
e23	.881	.089	9.915	***
e27	.275	.032	8.511	***
e28	.183	.023	7.859	***
e29	.146	.023	6.284	***
e30	.325	.034	9.446	***
e31	.320	.037	8.717	***
e32	.357	.039	9.235	***
e33	.402	.047	8.575	***
e34	.256	.034	7.563	***

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
PEOU1	.647
PEOU2	.543
PEOU3	.431
PEOU4	.523
PI1	.460
PI2	.786
PI3	.691
PI4	.626
PC1	.234
SE1	.858
SE2	.872
SE3	.602
SE4	.429
SE5	.462
SE6	.340
PU1	.605
PU2	.702
PU3	.536
PU4	.558
PC2	.571
PC3	.650
PC4	.691
PC5	.430
SE7	.700
SE8	.646
SE9	.553
SE10	.520
PP4	.288
PP3	.519
PP2	.654
PP1	.401

Appendix E

Output of Hypothesis Testing

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	76	650.195	359	.000	1.811
Saturated model	435	.000	0		
Independence model	29	4056.619	406	.000	9.992

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.056	.835	.800	.689
Saturated model	.000	1.000		
Independence model	.268	.214	.157	.199

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.840	.819	.921	.910	.920
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.884	.743	.814
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	291.195	223.707	366.518
Saturated model	.000	.000	.000
Independence model	3650.619	3449.990	3858.574

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	3.024	1.354	1.040	1.705
Saturated model	.000	.000	.000	.000
Independence model	18.868	16.980	16.046	17.947

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.061	.054	.069	.007
Independence model	.205	.199	.210	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	802.195	826.844	1058.717	1134.717
Saturated model	870.000	1011.081	2338.246	2773.246
Independence model	4114.619	4124.024	4212.502	4241.502

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	3.731	3.417	4.081	3.846
Saturated model	4.047	4.047	4.047	4.703
Independence model	19.138	18.205	20.105	19.182

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	134	141
Independence model	25	26

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
PerceivedEase	<---	SelfEfficacyV1	.340	.068	5.007	***
PerceivedEase	<---	SelfEfficacyV2	.144	.039	3.650	***
PerceivedofUse	<---	PercivedPlayfulness	.408	.082	4.950	***
PerceivedofUse	<---	PerceivedEase	.949	.129	7.360	***
PerceivedIntention	<---	PerceivedofUse	.332	.099	3.345	***
PerceivedIntention	<---	PerceivedEase	.512	.149	3.427	***
PerceivedIntention	<---	PeerCommunication	.092	.051	1.812	.070
PP1	<---	PercivedPlayfulness	1.010	.125	8.064	***
PP2	<---	PercivedPlayfulness	1.294	.144	9.017	***
PP3	<---	PercivedPlayfulness	1.000			
SE8	<---	SelfEfficacyV1	1.051	.091	11.520	***
SE7	<---	SelfEfficacyV1	1.105	.094	11.802	***
PC5	<---	PeerCommunication	.712	.074	9.563	***
PC4	<---	PeerCommunication	1.000			
PC3	<---	PeerCommunication	.969	.076	12.838	***
PC2	<---	PeerCommunication	.852	.074	11.543	***
PU1	<---	PerceivedofUse	.924	.073	12.682	***
PU2	<---	PerceivedofUse	1.000			
PU3	<---	PerceivedofUse	.921	.078	11.806	***
PU4	<---	PerceivedofUse	.798	.069	11.561	***
SE6	<---	SelfEfficacyV1	.713	.094	7.574	***
SE5	<---	SelfEfficacyV1	.817	.090	9.112	***
PI1	<---	PerceivedIntention	.839	.082	10.182	***
PI2	<---	PerceivedIntention	1.100	.073	15.064	***
PI4	<---	PerceivedIntention	1.033	.078	13.198	***
PEOU4	<---	PerceivedEase	1.155	.121	9.572	***
PEOU3	<---	PerceivedEase	1.000			
PEOU2	<---	PerceivedEase	1.445	.169	8.528	***
PEOU1	<---	PerceivedEase	1.430	.159	8.976	***
SE10	<---	SelfEfficacyV1	.997	.096	10.373	***
SE9	<---	SelfEfficacyV1	1.000			
SE1	<---	SelfEfficacyV2	.960	.043	22.361	***
SE2	<---	SelfEfficacyV2	1.000			
SE3	<---	SelfEfficacyV2	.787	.052	15.035	***
SE4	<---	SelfEfficacyV2	.605	.055	11.082	***
PI3	<---	PerceivedIntention	1.000			

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
PerceivedEase	<---	SelfEfficacyV1	.461
PerceivedEase	<---	SelfEfficacyV2	.289
PerceivedofUse	<---	PercivedPlayfulness	.329
PerceivedofUse	<---	PerceivedEase	.669
PerceivedIntention	<---	PerceivedofUse	.358
PerceivedIntention	<---	PerceivedEase	.388
PerceivedIntention	<---	PeerCommunication	.112
PP1	<---	PercivedPlayfulness	.651
PP2	<---	PercivedPlayfulness	.858
PP3	<---	PercivedPlayfulness	.676
SE8	<---	SelfEfficacyV1	.815
SE7	<---	SelfEfficacyV1	.836
PC5	<---	PeerCommunication	.639
PC4	<---	PeerCommunication	.831
PC3	<---	PeerCommunication	.827
PC2	<---	PeerCommunication	.748
PU1	<---	PerceivedofUse	.802
PU2	<---	PerceivedofUse	.819
PU3	<---	PerceivedofUse	.762
PU4	<---	PerceivedofUse	.722
SE6	<---	SelfEfficacyV1	.542
SE5	<---	SelfEfficacyV1	.648
PI1	<---	PerceivedIntention	.702
PI2	<---	PerceivedIntention	.868
PI4	<---	PerceivedIntention	.784
PEOU4	<---	PerceivedEase	.687
PEOU3	<---	PerceivedEase	.616
PEOU2	<---	PerceivedEase	.751
PEOU1	<---	PerceivedEase	.819
SE10	<---	SelfEfficacyV1	.734
SE9	<---	SelfEfficacyV1	.734
SE1	<---	SelfEfficacyV2	.927
SE2	<---	SelfEfficacyV2	.939
SE3	<---	SelfEfficacyV2	.766
SE4	<---	SelfEfficacyV2	.639
PI3	<---	PerceivedIntention	.848

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
SelfEfficacyV1	<-->	PeerCommunication	.239	.047	5.074	***
SelfEfficacyV1	<-->	SelfEfficacyV2	.330	.058	5.712	***
PeerCommunication	<-->	SelfEfficacyV2	.266	.062	4.295	***
PercivedPlayfulness	<-->	SelfEfficacyV2	.204	.048	4.249	***
PercivedPlayfulness	<-->	SelfEfficacyV1	.158	.036	4.437	***
PercivedPlayfulness	<-->	PeerCommunication	.180	.041	4.386	***
e31	<-->	e32	.107	.031	3.438	***
e27	<-->	e29	-.060	.020	-2.985	.003
e19	<-->	e20	.098	.035	2.777	.005
e17	<-->	e18	.177	.037	4.783	***
e13	<-->	e15	-.092	.024	-3.841	***

Correlations: (Group number 1 - Default model)

			Estimate
SelfEfficacyV1	<-->	PeerCommunication	.463
SelfEfficacyV1	<-->	SelfEfficacyV2	.510
PeerCommunication	<-->	SelfEfficacyV2	.348
PercivedPlayfulness	<-->	SelfEfficacyV2	.374
PercivedPlayfulness	<-->	SelfEfficacyV1	.427
PercivedPlayfulness	<-->	PeerCommunication	.413
e31	<-->	e32	.287
e27	<-->	e29	-.274
e19	<-->	e20	.211
e17	<-->	e18	.381
e13	<-->	e15	-.356

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P
PercivedPlayfulness	.312	.061	5.070	***
SelfEfficacyV1	.437	.073	6.007	***
PeerCommunication	.609	.087	7.021	***
SelfEfficacyV2	.958	.107	8.935	***
R2	.135	.030	4.442	***
R1	.148	.029	5.170	***
R3	.182	.029	6.374	***
e1	.432	.050	8.569	***
e2	.187	.045	4.168	***
e3	.370	.045	8.263	***
e5	.372	.042	8.884	***
e6	.375	.042	8.886	***
e7	.244	.031	7.833	***
e8	.230	.031	7.394	***
e9	.448	.048	9.278	***
e10	.274	.041	6.697	***
e11	.265	.039	6.798	***
e12	.349	.042	8.321	***
e13	.226	.030	7.471	***
e14	.235	.029	7.971	***
e15	.294	.037	8.022	***
e16	.279	.031	9.160	***
e17	.534	.054	9.819	***
e18	.404	.043	9.445	***
e19	.509	.052	9.872	***
e20	.419	.045	9.377	***
e21	.129	.028	4.557	***
e22	.144	.027	5.275	***
e27	.299	.034	8.793	***
e28	.163	.024	6.896	***
e29	.161	.023	6.917	***
e30	.275	.032	8.685	***
e31	.354	.040	8.843	***
e32	.389	.042	9.287	***
e33	.384	.047	8.244	***
e34	.239	.034	7.008	***

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
PerceivedEase	.432
PerceivedofUse	.690
PerceivedIntention	.559
PEOU1	.671
PEOU2	.564
PEOU3	.379
PEOU4	.473
PI4	.615
PI3	.719
PI2	.754
PI1	.493
SE1	.859
SE2	.881
SE3	.586
SE4	.408
SE5	.419
SE6	.294
PU4	.522
PU3	.580
PU2	.671
PU1	.644
PC2	.559
PC3	.684
PC4	.690
PC5	.408
SE7	.699
SE8	.664
SE9	.539
SE10	.539
PP3	.457
PP2	.736
PP1	.424