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從效用與娛樂的整合觀點探討網路購物之行為(第2年)

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中文摘要：電子商務交易在近幾年成長快速，在 eMarketer 的報告中顯示，無論是交易人數或交易金額均呈現穩定持續的上升。許多過去的研究都曾討論態度對接受新科技及新購物環境的重要性，也證實態度對消費者的決策確實有顯著的影響。但過去的研究著重於網路商店對消費者價值、信任及態度的影響，鮮少將消費者特性及社會因素對網路購物所產生的影響整合成完整的模式進行討論。本計畫嘗試發展消費者網路消費行為的整合模式，整合模式包含理性與感性層面，前置變數涵蓋個人、廠商及社會因素的討論，模型中並整合了價值、信任及態度對消費者網路購物行為的影響。本計畫將以二年時間來完成，第一年是透過質性研究，第二年則透過量化調查研究來完成。

本研究第一年之目的有(1)從個人、公司及社會的角度發展一個整合性的線上購買行為意圖模型，(2)透過後設分析探討過去有關線上購買之文獻。第一年之研究有以下之結論，在深入訪談部份本研究訪問了十九位專家，在後設分析方面本研究蒐集2001-2014年之相關文章共41篇，進行綜合分析，發展成為一個整合性的模型及18個研究假設。在後設分析中，本研究從18個假設中抽出共針對12個研究假設進行驗證，其中10個假設獲得支持，第二年之量化研究是以第一年所推導之研究假設為基礎，以問卷調查法共收集505份問卷進行分析，在10個研究假設中有9個研究假設獲得支持。

整體而言，本研究之結果指出，以理性為基礎之前置變數對於消費者理性態度之形成具有較高的影響力，而以感性為基礎之前置變數對於消費者感性態度之形成具有較高的影響力。同時理性態度與感性態度對於消費者線上購買意圖均有正向的影響力，然而只有少數的態度變數對於消費者線上購買滿意度具有正向的影響。

最後，本研究之結果顯示涉入程度、線上採購經驗及性別均為本研究前置變數與中間變數，及中間變數與結果變數之關係的重要調節變數。本研究所推導之研究架構可以做為進一步認證線上購買文獻之依據，從經營者的角度而言，注重網站設計來吸引線上購買者可能是贏得線上消費者最重要的工作。

中文關鍵詞：信任、價值、認知型態度、情感型態度、再購意願

英文摘要：In recent years, electronic commerce has grown tremendously due to widespread technology development. From a report from eMarketer, both amount of online shoppers and money spent on the web are steadily rising. Many previous studies have discussed the importance of the attitude to accept new technology and new shopping environments and the empirical results have shown that this attitude has influenced the consumers' decision significantly. In the past, studies only considered the roles of e-vendor to evaluate value, attitude and trust of online shopping; the roles of personal characteristics and social influence were still lacking in integrated discussions.

This study aims to investigate the antecedents, mediators, and moderators of online shopping behaviors. This project was conducted in two years. The first-year study was

conducted by qualitative study and meta-analysis study, while the second-year study was conducted by quantitative survey study. Several conclusions can be drawn from this study. First, for the first-year study, in-depth interviews were conducted with 19 experts for qualitative study, while data collected for meta-analysis were 41 articles published from 2000 to 2014. From qualitative study, comprehensive research framework was developed and eighteen hypotheses were proposed. Twelve hypotheses were examined in meta-analysis study. And from twelve hypotheses, ten hypotheses were supported. Second, for the second-year study, survey study with 505 respondents was conducted. From ten hypotheses, nine hypotheses were supported. Specifically, the results show that all the rational antecedents have stronger effect on rational attitude formation than emotional antecedents while emotional antecedents have stronger effect on emotional attitude than rational antecedents. Furthermore, almost all rational attitude and emotional attitude have a positive influence on satisfaction but only several of those attitudes have a positive influence on online purchase intention. Lastly, the results show that involvement, online purchasing experience, and gender are important moderators for the relationship between antecedents, mediators, and outcome of online shopping. Research framework that developed in this study may contribute to online shopping literature for further validation. From managers' point of view, pay more attention to website design may become one of the most important things to win customers from the website.

英文關鍵詞：Trust, Value, Cognition-Based Attitude, Affect-Based Attitude, Repurchasing Intention

A Study of Online Shopping from an Integration of Utilitarian and Hedonic Perspectives

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摘要

電子商務交易在近幾年成長快速，在 eMarketer 的報告中顯示，無論是交易人數或交易金額均呈現穩定持續的上升。許多過去的研究都曾討論態度對接受新科技及新購物環境的重要性，也證實態度對消費者的決策確實有顯著的影響。但過去的研究著重於網路商店對消費者價值、信任及態度的影響，鮮少將消費者特性及社會因素對網路購物所產生的影響整合成完整的模式進行討論。本計畫嘗試發展消費者網路消費行為的整合模式，整合模式包含理性與感性層面，前置變數涵蓋個人、廠商及社會因素的討論，模型中並整合了價值、信任及態度對消費者網路購物行為的影響。本計畫將以二年時間來完成，第一年是透過質性研究，第二年則透過量化調查研究來完成。

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Key words: Trust, Value, Cognition-Based Attitude, Affect-Based Attitude, Repurchasing Intention

I. Introduction

In recent years, electronic commerce has grown tremendously due to widespread technology development. From a report from eMarketer, both the amount of online shoppers and the amount of money spent on the web are rising steadily (Chen, 2012). Online stores have advantages in more rapid delivery, lower prices, and reducing purchasing time by sharing information and searching information using differentiated services (Lee, Chung, & Lee, 2011). Many previous studies have discussed the importance of the attitude to accept new technology and new shopping environments, and the empirical results have shown that this attitude has influenced consumers' decision (Hernandez, Jimenez, & Marti'n, 2009; Kim, & Forstthe, 2008; Enrique, Carla, Joaqui'n , & Silvia, 2008).

Another important influential factor is trust which may enhance customers' online shopping satisfaction (Chiu, Lin, Sun, & Hsu, 2009), because online shopping usually involves higher level of uncertainty than shopping in a tangible store. Online stores should provide a worthy and confident platform by providing of both hedonic value and utilitarian value to online shoppers. Creating customer value is another critical element to an online shopping business's success (Kim, Galliers, Shin, Ryoo, & Kim, 2012). In the past, most studies only considered the roles of e-vendor to evaluate value, attitude, and trust of online shopping (Hernandez, Jimenez, & Marti'n, 2009; Chiu, Lin, Sun, & Hsu, 2009, Kim, Galliers, Shin, Ryoo, & Kim, 2012); the roles of personal characteristics and social influence were still lacking of integrated discussions. Bagozzi, Tybout, Craig, and Sternthal (1979) presented the dual elements of attitude which argued that both cognition-based and affect-based attitude could provide better explanations of online shopping behavior (Chang & Wu, 2012). However, past studies, usually either focused on the rational decision model or experiential models, they rarely have integrated these two aspects together. This article tries to develop an integrated framework of online shopping attitudes that include rational and emotional states and make a more complete discussion on online shopping behaviors.

The customer behavior had considered as Input (I)-Output (O) processes in which consumers are expected to operate rationally (Jacoby, 2002). However, in the mid-1960s, the sophisticated stimulus(S)-organism (O)-response(R) model was proposed and the important internal factors of the individual were taken into consideration in discussing customer behaviors (Jacoby, 2002). Based on the framework of stimulus-organism-responses (S-O-R), stimulus is considered as an influence that arouses the individual including all explicit and implicit signals (Eroglu, Machleit, & Davis, 2001). For online vendors, the personal schema and social factors could all be the influential stimulus to affect customers' decisions (Sherman, Mathu, & Smith, 1997; Chang & Chen, 2008; Mummalaneni, 2005). Therefore, the role of online vendors, personal schemas, and social factors are considered simultaneously in this study.

Based on S-O-R model, the stimuli could elicit emotional and cognitive responses with organisms (Babin, Hardesty, & Suter, 2003; Ha & Im, 2012). Both emotional and cognitive responses could play a vital role in the relationship between the cues of stimulus and behavioral responses (Eroglu, Machleit, & Davis, 2001; Park, Stoel, & Lennon, 2008; Richard, 2005). There are many empirical tests to verify the organism's effects such as, perceived quality of information, pleasure, arousal (Ha, & Im, 2012), perceived risk, perceived benefit, trust (Jai, Burns, & King, 2013; Chang & Chen, 2008), perceived playfulness, and perceived flow (Hsu,

Chang, & Chen, 2012). Yet the integration of cognitive and affective states has rarely been empirically tested. Therefore, the integrated view of the S-O-R model is introduced in this study. Both rational and emotional states, including utilitarian and hedonic value attitude, rational and affective trust attitude and cognition-based and affect-based attitude, are presented in this study to test the mediating effects of the influence of the antecedents of the personal factors, vendor factors, and social factors on online shopping intention.

Based on the above discussions, the stimuli may be composed by different persuasive efforts to affect consumers' behavior (Lee & Kwon, 2008). According to the elaboration likelihood model (Petty & Cacioppo, 1984b), the difference in the individual manner came from his/her prior knowledge and people tend to evaluate high involvement products through the central route, and then evaluate low involvement products through the peripheral route. The model further argued that the elaboration likelihood is decided by an individual's motivation and capability. Individuals in the high elaboration likelihood tend to evaluate through thoughtful and rational consideration, whereas those in the low elaboration likelihood tend to change their attitude through peripheral cues (Lin, Lee, & Horng, 2011). Personal involvement, past experiences, and different characteristics of individuals would affect the issue-related thoughts of consumers. The stimuli would have different levels of influence to the consumers' decision-making.

In addition, the mediating effect of attitude formation is another concern about the online shopping intention. According to S-O-R model, Mehrabian and Russell (1974) argued that the influence of an emotional state is different from the economic benefit. In recent years, researchers have extended the model of S-O-R by introducing the influence of both rational state and emotional state (Eroglu, et.al, 2001; Jai, et al., 2013; Chang & Chen, 2008). In this study, the influences of economic benefits and the emotional state are discussed simultaneously. The mediator of perceived value, trust, and attitude are evaluated from rational aspects and emotional aspects. Therefore, this study is based on the S-O-R model regarding attitude formation as the organism and integrates utilitarian and hedonic value evaluations, rational and emotional trust and cognition and affect based attitude into a comprehensive model

Furthermore, the individual differences play a vital role on the customers' decision making. The central and peripheral routes of the persuasion are often utilized to evaluate the effectiveness of marketing communication and to explain how to influence the customers' purchasing intention (Lee & Kwon, 2008; Kwon & Chung, 2010). The individual differences, such as the level of involvement, the number of online shopping experiences, and personal characteristics are always regarded as moderators to explain the dissimilar purchasing decisions of customers. Therefore, the moderating effect of personal involvement, past experience and gender are introduced in this research.

As a summary, in order to fill the research gaps from the previous studies, this study intends to develop a more comprehensive model to understand the antecedents, mediators, and moderators of online shopping behaviors. The integrated model can provide the whole outlook through the integration of individual, firm, and social perspectives by combining the rational and affective attitudes as mediators and the individual differences as the moderators. This integrated model can provide a more complete explanation about customers' behaviors and help online firms to understand the process of customers' purchasing decisions. The study results can

enhance more understanding of customers' purchasing behaviors and help vendors to develop appropriate marketing strategies for online commerce.

Based on the above research motivations, the objectives of this study are as follows:

1. To develop an integrated behavioral intentions model of online shopping from individual, firms, and social perspectives.
2. To investigate how the rational and emotional states of an individual can impact simultaneously on e-shoppers' behavioral intentions.
3. To examine the mediating role of utilitarian value and hedonic value, rational trust and affective trust, and cognition-based attitude and affect-based attitude for the influences of antecedents on customers' online purchasing behavior.
4. To clarify the moderating effects of involvement, online shopping experience, and gender for the influence of antecedents on customers' online shopping intentions.

II. Literature Review

2.1 Theoretical Background

2.1.1 TRA, TPB and TAM model

Theory of reasoned action (TRA) is one of the most popular theories to investigate the behavior intention. The subject's attitude towards action and normative belief, of which most people expect the subject to perform, could effectively predict the subject's behavior (Ajzen & Fishbein, 1972). Social attitude and personality traits play a vital role to predict human behaviors (Ajzen, 1991). Following TRA, the cognitive self-regulation was introduced by Ajzen (1991) to the theoretical model called the theory of planned behavior (TPB). Based on TPB, the perceived behavioral control, subject norms, and attitude toward the behavior are the three important components to predict behavior intention (Ajzen, 1991).

The characteristics of new technology will influence the acceptance of users. Davis (1989) provided the valid measurement scales for predicting user acceptance of computers. It is showed that the model can effectively explain user behavior of information technology (IT) usage (Yu, Ha, Choi, & Rho, 2005). Although TAM was initially concentrated on information systems (IS) used in the workplace, the theory was then successfully applied on the studies about the discussion of online shopping behavior (Chiu, Lin, Sun, & Hsu, 2009). Based on the empirical research, theory of technology acceptance model (TAM) showed that there were two main factors which influence the users' attitudes. One is "perceived useful" and another one is "perceived ease of use". The internet is a new shopping channel and the technology acceptance is a vital occasion to influence consumer behavior of internet shopping. Individual's attitudes whether to accept shopping channel or not, can be explained by the consumer behavior models of TAM.

Many empirical studies have showed the evidence that the level of technology acceptance was one of important factors to predict the online purchasing attitude of consumers (Chen, 2012; Cheng et.al, 2012; Ha & Stoel, 2009). Perceived ease of use (PEOU) is defined as the degree to which a person believes that using a specific technology will not require additional effort (Davis, 1989; Hernandez, Jimenez, & Martín, 2009). A technological application which is perceived to be easier to use is easily accepted by users. Perceived usefulness (PU) is defined as the degree to

which a potential user believes that the use of a specific tool will enhance his or her performance (Davis, 1989; Hernandez, Jimenez, & Marti'n, 2009). A technological system in higher perceived usefulness brings much bigger positive use-performance to users.

The decomposed theory of planned behavior (DTPB) included three dimensions of the attitude, subject norms, and perceived behavior control to interpret the behavior intention and usage behavior ((Del Bosque & Crespo, 2011). It is a more complete model to understand the consumer behavior on a new technology environment.

2.1.2 Perceived Risk

Perceive risk was stated by Bauer (1960) as the consequences of consumers' action on things they regarded as uncertainty (Chaudhuri, 2000). Perceived risk is a pervasive criterion in purchasing decision (Tan, 1999). Past studies have tried to test different hypothetical purchasing situations and took different types of risk operated in each situation including financial, performance, physical, psychological, and social risk (Jacoby & Kaplan, 1972). Based on Jacoby and Kaplan (1972) and Chaudhuri (2000) the components of perceived risk can be categorized into functional risk. The functional risk includes the probability of money loss (financial risk), the likelihood that the product can't work properly (performance risk), and the chances that the product may be harmful to you (physical risk). The emotion risk contains the likelihood that the purchasing situation does not fit myself-concept (psychology risk) and the chances that the purchase affects the way others think of you (social risk). Besides, the perceive risks of the security and perception of privacy are also proved to influence the purchasing intentions of customers online significantly (Miyazaki & Fernandez, 2001). Owing to focus on the behavioral aspect of online shopping, this study adopts financial risk, performance risk and privacy/security risk to explain the functional risk; and adopts psychology risk and social risk to describe emotional risk.

2.1.3 Cognition-Affect Model

Attitude measures are always used to predict the behavior of consumers in marketing (Kim & Park, 2005). The research in one-dimensional view of attitude has shifted to multi-dimension views of attitude (Dubé, Cervellon, & Jingyuan, 2003). The multi-dimension views of attitude include affective response, cognitive response, and conative response. Affective components of attitude include emotion, liking, and feeling (Edwards, 1990). Cognitive components of attitude include beliefs, judgments, and thoughts which combined with an attitude object (Edwards, 1990). According to the cognitive-affect hierarchy model (Batra & Ray, 1985), consumers may build hedonic attitude based on emotional and utilitarian attitude based on reasonable beliefs (Argyriou & Melewar, 2011). Morris, Woo, Geason and Kim (2002) stated that only cognitive-based model could not properly measure the emotion association with the source of information and could not accurately predict the behavior intention. The dual elements of cognitive-based and affective-based could provide better predictive power about the relationship between attitude and behavior intention (Chang & Wu, 2012).

According to tripartite model of attitude (Farley & Stasson, 2003), the influence of cognition-based attitude and affective-based attitude and behavioral intention existed. The dual components of cognition-based attitude and affective-based attitude should be considered

together to predict customers' purchasing behavior for the purpose of getting more complete explanation.

2.1.4 Customer Trust Model

Customers' trust is a vital factor to explain why a customer accepts the online stores services (Gefen, Karahanna, & Straub, 2003). Trust is defined as "a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another" (Rousseau et al., 1998). Past researchers have found that the interpersonal trust contains multiple dimensions (Johnson & Grayson, 2005; Rousseau et al., 1998). These dimensions include calculative, cognitive, and affective trust. Calculative trust is in accordance with rational choice. People make trusted choices on products based on economic reasons with considerations of cost and benefits (Williamson, 1993). Cognitive trust is based on competence, honesty and goodwill of target persons (Mayer, 1995), while affective trust is based on personal interaction and personal interest from another person (McAllister, 1995). Affective trust is predicted by feelings, emotions and liking whereas cognitive trust is similar to rational trust (Lee & Selart, 2011). Rational trust model stated the cognitive capability and the degree of conscious calculations of decision makers (Lee & Selart, 2011). Past studies showed that people seldom make choice by pure rational consideration (McKnight, Cummings, & Chervany, 1998). Social orientation toward people should also be taken into consideration (Kramer, 1999).

According to the model of trust (McAllister, 1995), the influence of trust on shopping intention is existed. The dual components of cognitive trust and affective trust should be considered together to predict customers' purchasing behavior for the purpose of getting more complete explanation.

2.1.5 Stimulus-Organism -Response (S-O-R) Model

In the earlier studies, one of the most popular models to investigate customer behavior was input-output (I-O) model. These microeconomic models viewed the economic or financial factors as input elements and purchasing behaviors as output elements to explain customer behaviors (Jacoby, 2002). Customers are expected to conduct rationally but in many situations this is not the case to show the complete explanation. The rationality is often regarded as one of external factors. Except for external factors, the importance of the internal factors such as the influence of psychology is also taken into consideration (Jacoby, 2002).

Mehrabian and Russell (1974) provided the model of Stimulus(S)-Organism (O)-Response (R) (S-O-R) which described the influence of stimulus on emotions and the influence of emotions on behavioral (Ha & Im, 2012). The S-O-R model was applied to explain the behavior response on both traditional and online stores in the past studies and it is found that the environmental stimulus can influence emotional reactions which then further affect purchasing behavior (Eroglu, et al., 2001; Babin, et al., 2003; Eroglu, et al., 2003).

Some researchers extended the S-O-R model by considering both cognitive state and emotional reaction. Not only emotional reactions, but also cognitive reaction within the organism of S-O-R model will influence the customers' responses. Researchers further suggested that the store stimulus such as the color of the store or instrumental quality of online shopping (such as convenience, perceived ease of use, and perceived usefulness) could affect purchasing decisions

(Babin, et al., 2003; Eroglu et al., 2003). Further studies also showed that both emotional and cognitive reactions are significantly influential on the purchasing behaviors of internet shopping (Eroglu, et.al, 2001; Jai, et al., 2013; Chang & Chen, 2008).

2.1.6 Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) is introduced by Petty and Cacioppo (1984) to explain persuasive effects. Based on the ELM, a continuum of message elaboration fastened on high end called central route to persuasion; while on the low end, it is called peripheral route to persuasion (Petty & Cacioppo, 1984a). The central route (more thoughtful) and peripheral route (less thoughtful) of persuasion are used to explain how to create the maximum communication effectiveness (Warden, Wu, & Tsai, 2006).

The attitude change of customers occurs through central route and peripheral route; central route is considered based on high issue-related arguments, and peripheral route is regarded based on some psychological shortcuts (Lin, Lee & Horng, 2011). When people's motivation and capability engage in issue-relevant thinking, the ELM is marked high and it is close to central route (Petty & Cacioppo, 1984b). In contrast with high ELM, the individual decision in low ELM is influenced easily by affective factors and the low ELM is close to peripheral route (Petty & Cacioppo, 1984b).

Based on the ELM, both the situational and characteristic factors would influence individual attitudes that are formed through issue-relative thinking (Cacioppo, et al., 1986). The individual differences in intrinsic motivation and ability incur the different reactions in persuasive appeals. The difference of the individuals including competence (Kwon & Chung, 2010), cognitive style (Lee & Kwon, 2008), and self-efficacy (Kwon & Chung, 2010) will all affect people on how to deal with cogitative, non-cogitative tasks, physical tasks, and mental tasks (Cacioppo, et al., 1986).

2.1.7 Summary

Based on the above discussions, this study adopts the S-O-R framework, in which three types of stimuli are introduced, including personal factors, vendor characteristics and social influence. The organisms are divided into cognitive state and affective state, including utilitarian vs hedonic value, cognition-based vs affect-based attitude, and rational vs affective trust. The responses are observed by consumers' satisfaction and purchase intention. The DTPB model is operated in explanation on the influence of technology acceptance and social factors to purchasing intention. The perceived risk model is used to observe the impact of functional risk an emotional risk on purchasing intention.

Furthermore, this study has identified cognitive variables and affective variable as major dimensions of antecedents that can influence online shopping attitudes and behavior. Value evaluation, trust, cognition-based and affect-based attitudes are proposed as three of the most important mediators that could mediate the influences of above three dimensions of antecedents on online shopping behavior. This study further identifies gender, personal involvement and online shopping experience as three important moderators that could moderate the influence of personal schema, website design and social influence on value, trust and attitude; and moderate the influence of value, trust and attitude on satisfaction and online shopping intention.

III. First-Year Study: Study 1-Qualitative Study

3.1 Research Design

As discussed previously, the development of this research framework is still on the preliminary stage of the research stream and most of the propositions developed in this study are never tested empirically. Thus, in the qualitative study, through the use of an interpretive methodology, the research sought to use the voices and actions of experts in order to construct a theory which has conceptual relevance for the understanding of the proposed relationships.

The method used in the qualitative study was grounded theory (Glaser and Strauss, 1967) adopting the model proposed by Glaser (1978, 1992) which stressed the “emergence” of theory derived directly from data rather than forcing the theory into predefined categories (Glaser, 1992; Stern, 1994). Grounded theory is developed in order to generate theory through the systematic and simultaneous process of data collection and analysis. The theory emphasized the product of continuous interplay between analysis and data collection (e.g., Glaser and Strauss, 1967; Suddaby, 2006). Knowledge is seen as actively constructed, with meanings of existence only relevant to an experiential world. Therefore the focus of the qualitative study is to investigate the integration of antecedents, mediators, and moderators of online shopping behavior.

The qualitative study was carried out with a series of literature review and in-depth interviews with experts (managers in electronic company, heavy consumers, professors, and Ph.D. students) who major in online shopping behavior. These expert interviews processes were iterated until the constructs for the antecedents, mediators, moderators and consequences of online shopping are clearly identified. In this stage, samples were selected openly as wide as a cross section of informants in terms of age, occupation type, past experience, educational background, and so forth. Data were collected through voice recorded interviews and interview notes. After each interview, the records will be turned into written transcripts. Methods of analyzing the data include full transcription of interviews which are then analyzed line by line in order to identify every possible code. Theme analysis by extracting, categorizing and coding was conducted afterwards. Qualitative content analysis is adopted to identify themes which are as meaningful for analysis rather than physical linguistic units. The themes were expressed in single words, phrases, sentences, paragraphs, or entire documents. Qualitative content analysis is adopted to identify themes as meaningful for analysis rather than physical linguistic units. The content analysis for this study was conducted by open coding, axial coding, and selective coding as explained below:

1. Open Coding

Open coding adopts a “line-by-line” analysis to find the important concepts from the respondents. Data were broken down into discrete parts, closely examined, and compared for similarities and differences so that relevant concepts were categorized according to certain salient properties.

2. Axial Coding

After finding specific concepts from the open coding process, then the concepts were reassembled into explanatory categories to make explicit the collected phenomenon under

investigation. This step combines the data together in what seems significant to the understandings of the respondents.

3. Selective coding

Based on the results of the axial coding, this study further identified a central (core) category as a vehicle for the integration of the other major categories thereby developing and refining theoretical claims. The core category should represent the central phenomenon of this study. The antecedents, mediators, moderators, and outcomes of online shopping behavior were identified accordingly.

For the reliability of data coding, in the coding process, the definition of each construct was explained to the coders before they started coding. All themes were classified by three coders, including the researcher (coder A) and two Ph.D. students represent coder B and coder C, respectively. These three coders are well trained in marketing knowledge and capable of doing content analysis and data coding. The three coders undertook the assessment of the themes and the categories and dimensions from the content of the interviews. In order to measure the reliability of the coding among three coders, this study adopted Holsti's (1961) reliability formula to test the reliability.

According to Holsti (1969), the reliability is calculated by the following formula:

$$\text{Average reciprocal reliability} = \frac{2 \times \text{Sum from both coder } i \text{ and coder } j}{\text{Sum from coder } i + \text{Sum from coder } j}$$

$$\text{Reliability } (\alpha) = \frac{N \times \text{Average reciprocal reliability}}{1 + (N-1) \times \text{Average reciprocal reliability}}$$

N: Number of the coder

Krippendorff (2004) specified that a study should set a minimum cutoff of $\alpha = 0.80$, where only those variables with reliabilities above this are considered to be meaningful and valid. Validity refers to "the extent to which a measuring procedure represents the intended, and only the intended, concept" (Neuendorf, 2002, p.112). Krippendorff (2004) identified three kinds of standards to provide the evidence of the validity of the context analysis.

1. Evidence that justifies the treatment of text, what it is, what it means, and what it represents.
2. Evidence that justifies the deductive inference that a content analysis is making.
3. Evidence that justifies the results, whether a content analysis contributes answers to the research questions of other researchers or is borne out in fact.

Since the results of the in-depth interview were recorded and turned into written transcripts, followed by open coding, axial coding, and selective coding, the dimensionality of the research constructs is confirmed and the inter-relationships of the research constructs are identified. Therefore, it can be concluded that the reliability and the validity of the research constructs are ensured. The content analysis for this study will be conducted by open coding, axial coding and selective coding. Therefore, the qualitative study is carried out with the following research procedure.

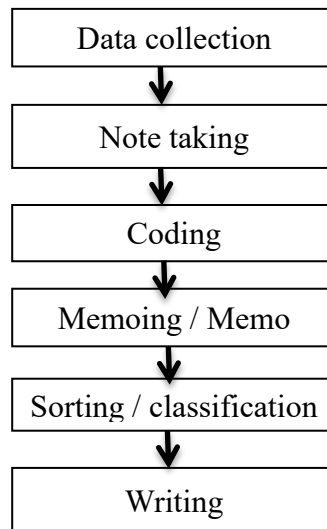


Figure 3-1: The procedures of grounded Theory (Roberts & Pettigrew, 2013)

3.2 Data Collection

Since previous studies regarding antecedents, mediators and moderators to purchasing intention are not complete, so this study tries to start with qualitative study by using expert interviews. The interviews were conducted from September 2014 to December 2014. Finally, 19 experts from experienced online shoppers were selected including information engineers, students, researchers, marketing managers. The details of these informants are shown in Table 3-1.

Table 3-1 Details of these informants

Informant	Title	Affiliation
Informant #1	Associate Professor	Department of Communication
Informant #2	Product Manager	Soft-world International Corp.
Informant #3	Ph.D student	International Business
Informant #4	Director	IMC plan Marketing Company
Informant #5	Master student	Global Business
Informant #6	Ph.D student	International Business
Informant #7	Student	International Business
Informant #8	Engineer	Medical and healthcare department
Informant #9	HR	HR
Informant #10	Ph.D student	NSYSU
Informant #11	Student	Nursing, NCKU
Informant #12	Information Engineer	easytravel.com.tw
Informant #13	Student	NCKU
Informant #14	Lecture	Department of Communication
Informant #15	Doctoral Candidate	NCKU
Informant #16	Housewife	
Informant #17	Researcher	Postdoctoral Fellow

Informant #18	Student	KYU
Informant #19	Business manager	Marketing

3.3 Content Analysis

In this study, data was collected from the interviews. The full transcriptions of interviews were analyzed line by line for identifying every code. Theme analysis by extracting, categorizing, and coding were carried out. The assessment and summary for data are shown in Table 3-2. Based on table 3-2, the major antecedents including website design, personality trait, technology, and social factors are presented. The mediating effects including value evaluation, trust and attitude are considered. Furthermore, the moderator of experience and involvement and electronic word of mouth and behavior intention are discussed.

Table 3-2 Assessment of data coding

Theme	Count	Cases
Hedonic-related website design	18	2/2/21; 2/4/87; 2/4/90; 3/3/64; 8/2/44; 10/2/43; 11/2/45; 12/4/93; 13/3/64; 13/3/68; 13/6/140; 14/5/99; 16/2/41; 16/4/87; 17/1/16; 17/3/49; 17/4/77; 19/4/85;
Utilitarian-related website design	18	2/1/11; 10/2/49; 11/3/48; 13/3/68; 14/4/93; 17/1/16; ; 18/4/713/2/40; 3/3/58; 4/2/39; 7/3/59; 8/2/40; 9/2/32; 11/3/56; 13/3/50; 14/4/76; 16/3/54; 16/4/86
Ease to use	26	1/1/21; 1/4/75;1/4/80; 1/4/89; 5/2/28; 5/3/69; 5/4/73; 5/4/78; 6/3/55;6/4/76; 8/3/58; 10/2/60; 12/3/52; 12/5/101; 13/3/58; 14/2/27; 14/5/114; 15/3/55; 15/5/117; 16/1/18; 16/1/20; 16/3/60; 16/4/86; 17/3/49; 17/3/56; 19/4/89;
Useful	7	1/4/92; 3/4/76; 6/4/89; 7/5/106; 8/4/73; 11/4/71; 19/5/103;
Rational (thinking) -personality types	8	2/5/95; 2/5/101;4/4/72; 10/3/65; 12/2/35; 12/4/82; 14/2/41; 18/2/45;
Emotional (feeling) -personality types	2	2/5/101; 12/2/32;
Emotional stability -personality Traits	5	5/4/104; 10/3/68; 11/4/78; 17/2/25; 19/5/117;
Agreeableness -personality Traits	5	1/5/98; 1/5/107; 5/5/102; 17/2/25; 19/5/112;
Extraversion -personality Traits	3	1/5/98; 5/5/109; 11/4/78;
Consciousness -personality Traits	8	4/4/81; 5/5/105; 7/5/115; 8/4/85; 9/3/64; 16/3/70; 18/2/44; 19/5/119;
Openness-personality Traits	8	1/5/98; 1/5/101; 3/4/84; 5/5/109; 9/3/66; 11/4/78; 17/2/25; 19/5/113;
personality Traits	5	6/5/100;11/2/24; 12/2/29; 12/2/28; 13/6/131;
Family belief-Social norms	16	6/5/104; 7/6/126; 8/4/89;10/4/74; 11/4/83;

		12/2/41; 12/5/103; 14/3/50; 14/3/56; 14/5/119; 15/4/92; 15/6/124; 17/2/33; 17/4/84; ; 18/3/53; 19/6/116;
Peer belief-Social norms	13	1/5/114; 7/6/126; 11/4/83; 12/2/41; 14/3/50; 14/5/119; 15/1/20; 15/4/91; 15/6/124; 16/4/96; 17/2/33; 17/4/87; 19/6/116;
Interaction with cyber user (cyber pal.)- Social interactions	9	1/5/118; 7/5/102; 9/2/25; 14/3/62; 14/3/67; 15/4/92; 17/2/35; 18/2/30; 18/2/38;
Interaction with friends- Social interactions	8	1/5/117; 3/4/92; 12/2/43; 12/5/115; 13/5/119; 14/6/124; 17/4/92; 18/3/50;
Interaction with customer service staff- Social interactions	10	1/4/85; 5/4/86; 7/4/94; 8/3/51; 9/3/53; 10/3/56; 10/4/78; 11/3/65; 12/6/125; 18/3/54;
Convenience-Utilitarian Value	52	1/2/25;1/2/45; 1/3/55; 1/3/59; 2/1/13; 2/2/22; 2/5/105; 3/2/22; 3/2/26; 3/2/43; 3/3/47; 4/3/50; 5/2/28; 5/2/30; 5/2/45; 5/3/51; 5/3/68; 6/2/28; 6/2/34; 6/2/37; 6/3/48; 7/2/29; 9/1/18; 9/2/21; 9/2/30; 9/2/35; 9/3/47; 10/1/15; 10/1/15; 10/2/31; 11/2/31; 12/1/4; 12/1/12; 12/3/46; 12/3/60; 13/5/111; 13/6/131;14/1/4; 14/2/29; 14/2/37; 14/3/70; 14/4/80; 14/7/156; 15/2/34; 15/5/110; 16/2/36; 16/3/49; 16/3/66; 17/3/55; 19/2/25; 19/2/27; 19/2/48;
Saving time-Utilitarian Value	17	1/2/24;1/3/49;1/3/58; 3/4/76; 5/2/28; 5/4/91; 7/2/21; 7/3/57; 8/3/57; 11/2/33; 11/2/38; 12/1/12; 14/2/27; 14/4/80; 14/7/156; 16/3/66; 18/2/27;
Security-Utilitarian Value	32	1/2/26;1/2/29; 1/2/42; 1/5/74; 2/1/13; 3/1/20; 5/2/43; 6/2/44; 6/3/50; 7/2/28; 7/2/31; 7/3/48; 7/3/54; 8/2/38; 9/2/28; 9/2/35; 9/3/47; 10/1/18; 10/1/20; 10/2/29; 12/2/35; 12/5/102; 14/7/169; 16/4/86; 16/6/126; 17/1/15; 17/2/46; 19/2/30; 19/2/46; 19/5/99; 10/2/36; 12/2/21;
Privacy-Utilitarian Value	5	1/2/37;1/2/42; 4/3/51; 7/3/46; 17/2/39;
Refund mechanism -Utilitarian Value	8	1/2/34; 3/2/33; 6/2/41; 7/2/36; 8/2/31; 14/1/6; 16/1/21; 19/4/73;
Speed(fast)-Utilitarian Value	6	6/2/34; 12/1/4; 12/6/131; 16/5/112; 17/5/106; 19/2/25;
Complete product types and physical appearance-Utilitarian Value	28	1/4/76; 2/3/48; 2/4/78; 3/3/52; 3/3/58; 3/3/47; 3/3/59; 4/1/20; 4/2/28; 4/2/34; 8/3/50; 12/20; 12/5/101; 14/1/13; 14/1/15; 14/5/109;15/1/7; 15/2/34; 15/3/70; 15/4/79;16/1/5; 16/4/86; 18/2/32; 19/3/55; 19/4/72; 19/4/76; 19/4/81;
Competitive prices (cheaper)- Utilitarian Value	37	1/4/77; 2/2/43; 2/3/48; 2/3/56; 2/3/60; 3/2/26; 3/2/43; 3/3/47; 3/3/59; 4/1/12; 4/1/14; 4/1/18; 4/2/35; 4/4/95; 6/2/21; 7/2/28; 7/3/50; 10/1/15;

		10/2/36; 11/2/38; 12/1/12; 12/3/60; 12/4/83; 12/5/111; 12/6/131; 14/1/22; 14/5/100; 16/2/22; 17/1/13; 17/2/40; 17/3/61; 17/3/65; 18/2/27; ; 18/2/45; 19/3/57; 19/4/73; 19/4/83;
Discount and coupon Value	13	2/3/59; 9/1/10; 13/3/60; 13/5/107; 14/1/13; 14/1/14; 14/1/22; 14/3/63; 14/3/64; 14/4/75; 14/6/146; 14/7/150; 16/2/23;
Quality Value	17	3/2/26; 3/2/28; 3/2/35; 3/2/43; 3/2/45; 5/1/8; 5/3/51; 7/2/28; 9/1/18; 9/2/35; 9/3/47; 10/2/36; 11/2/38; 14/1/16; 14/6/141; 16/5/112; 17/1/4; ; 18/2/46;
After service-Value	5	2/2/23; 2/2/41; 3/3/70; 14/6/139; 17/5/100;
Information Value	5	4/4/79; 5/4/71; 10/2/49; 15/5/117; 16/4/86;
Happiness (fun) value	10	12/4/78; 12/6/140; 13/1/11; 14/3/54; 14/4/88; 14/7/159; 16/5/117; 16/5/121; 17/3/65; 17/5/110;
Interesting (attractive) value	12	5/2/21; 5/4/94; 10/2/36; 13/2/24; 13/2/30; 13/5/99; 14/5/108; 16/2/43; 16/3/64; 16/4/87; 17/1/19; ; 18/3/67;
Enjoyable value	5	5/2/28; 5/5/114; 14/4/89; 14/7/166; 16/2/43;
Entertainment value	7	2/4/73; 2/4/86; 4/4/87; 5/3/63; 13/4/97; 13/5/104; 17/3/64;
Trust	16	1/2/40; 5/2/39; 6/1/9; 7/2/36; 7/5/101; 10/1/18; 12/6/125; 13/6/135; 15/4/94; 16/5/107; 17/5/101; 10/2/22; 10/2/26; 12/5/119; 15/5/99; 18/1/17;
Attitude	7	1/3/64; 12/6/141; 16/6/124;; 5/3/59; 6/3/53; 19/3/58; 1/3/68;
Electronic Word of mouth	3	10/2/26; 18/2/39; 15/6/133;
Satisfaction	6	1/1/6; 15/5/112; 16/5/117; 17/1/4; 17/5/111; 18/1/6;
Experience	20	1/1/2; 2/1/2; 3/1/2; 3/1/4; 3/1/7; 4/1/5; 4/1/10; 6/1/5; 7/1/4; 8/1/4; 9/1/4; 10/1/4; 11/4/74; 13/1/5; 13/5/116; 14/6/134; 15/3/47; 15/3/55; 17/1/2; 19/1/4;
Involvement(important decision)	4	12/1/10; 16/1/13; 17/1/10; 18/1/20

Note: Informant/Page/Line

3.4 Reliability and Validity

The themes were classified by three coders, including the researcher (coder A) and two Ph.D. students presented the coder B and Coder C. The detail information is shown in Table 3-3. In order to measure the reliability of each code, the study adopted Holsti's (1961) reliability formula to test it.

Table 3-3 The main categories of reciprocal agreement

Theme	Coder A	Coder B	Coder C
Hedonic-related website design	18	15	16
utilitarian-related website design	18	14	15
Ease to use	26	28	25
Useful	7	7	7
Rational (thinking) -personality types	8	8	7
Emotional (feeling) -personality types	2	2	2
Emotional stability -personality Traits	5	6	5
Agreeableness -personality Traits	5	6	6
Extraversion -personality Traits	3	4	4
Consciousness -personality Traits	8	9	8
Openness-personality Traits	8	9	8
personality Traits	5	3	4
Family belief-Social norms	16	13	14
Peer belief-Social norms	13	17	15
Interaction with cyber users-Social interactions	9	8	10
Interaction with friends- Social interactions	8	9	7
Interaction with customer service staff- Social interactions	10	8	8
Convenience-Utilitarian Value	52	56	49
Saving time-Utilitarian Value	17	15	15
Security-Utilitarian Value	32	36	32
Privacy-Utilitarian Value	5	6	5
Refund mechanism -Utilitarian Value	8	9	6
Speed(fast)-Utilitarian Value	6	5	5
Complete product types and physical appearance-Utilitarian Value	28	27	24
Competitive prices (cheaper)-Utilitarian Value	37	39	31
Discount and coupon -Utilitarian Value	13	16	12
Quality -Utilitarian Value	17	18	15
After service-Utilitarian Value	5	6	5
Information -Utilitarian Value	5	4	4
Happiness (fun) -Hedonic value	10	12	9
Interesting (attractive) -Hedonic value	12	10	11
Enjoyable -Hedonic value	5	6	5
Entertainment-Hedonic value	7	5	6
Trust	16	15	14
Attitude	7	9	7
Electronic Word of mouth	3	5	3
Satisfaction	6	6	6
Experience	20	20	20
Involvement(important decision)	4	4	4
Total	466	495	447

In order to measure the reliability of each codes, the result of reliability is 0.988 which is greater than the cutoff of $\alpha=0.80$ (Krippendorff, 2004). Reciprocal agreement and Holsti's agreement are shown in Table 3-4 and Table 3-5.

Table 3-4 Reciprocal Agreement

	Coder A	Coder B	Coder C
Coder B	466	-	-
Coder C	447	447	-

Reciprocal Reliability from:

$$\text{Coder A,B}=(2*466)/(466+495)=0.969$$

$$\text{Coder B,C}=(2*447)/(495+447)=0.949$$

$$\text{Coder A,C}=(2*447)/(466+447)=0.979$$

$$\text{Average Reciprocal Reliability}=(0.969+0.949+0.979)/3=0.965$$

Table 3-5 Holsti's Agreement

	Coder A	Coder B	Coder C
Coder B	0.969	-	-
Coder C	0.979	0.949	-

$$\text{Reliability}=\frac{3*0.965}{1+(3-1)*0.965} = 0.988$$

Validity refers from Neuendorf (2002, p.223) as following: “*the extent to which a measuring procedure presents the intended, and only the intended, concept*”. And follow the three kinds of standards provided by Krippendorff (2004) to provide the evidence of validity of the context analysis.

Since the results of the in-depth interview are written and recorded, followed the steps of open coding, axial coding and selective coding, the dimensionality of research constructs is confirmed and the relationships among research constructs are identified. Based on the discussion above, the reliability and validity of this research are ensured.

3.5 Hypothesis Development

3.5.1 Inter-relationship among the vendor characteristics and value attitude, trust attitude and cognitive-affective based attitude

A website is a vital environment for online stores. Websites are effective tools to enhance customers' trust, arouse perceived value, affect consumers' reactions, and influence purchasing intention (Eroglu, Machleit & Davis, 2001; Eroglu, Machleit, & Davis, 2003). For online vendors, the website design has to fit the brand image and business goal. According to Eroglu, Machleit and Davis, (2003), online environmental cues can be divided into two categories; one is a high-tasked related online environmental cue and a low-tasked related online environmental cue. These two categories of websites attract different types of customers. For example, Informant #13 stated the importance of homepage design and the homepage should attract her and then she would have intention to shop.

I think the ads will significantly induce the purchase. As long as I found attractive ads, normally just because it's pretty and delicate, I will certainly want to click into the ads and pay a visit.

I need to be able to easily find the product categories I want. It's also important to clearly list the promotional products or the discount rules in order for me to shop what I want according to those promotions.

Some informants focused on the other benefits for online vendor to provide. For example, informant #12 thought the functions that make her easy to finish the shopping process are most important.

The most important features are product details, intro, ease of finding information; security, and payment options are next. Fun factor of the website may extend the time I spend on the website, perhaps increasing the possibility of my making a purchase on the website.

Trust is a vital connection between vendors and customers. Well-designed websites not only can provide the better performance of accuracy, easily searching, and achievement of task-goal; but also provide better performance of entertainment, pleasure exciting, and fun. Both of them could enhance the consumers' trust toward the website (Kim, Kim, & Park, 2010). Informant #16 think honesty of online vendors enhanced the willingness to shop online; and informant #12 said trust on online vendor is a key factor to make her repurchase.

Honesty, it is very important, and online store should possess the requirement. And I think the honesty is most important and it makes me no doubt to shop online. I think it is important to build up customers' trust through interaction. I agree. Repurchasing intention is based on the good relationship.

I think good interaction can enhance trust on the website, and good purchasing experience will build up loyalty. I am used to buy products on this website and then persist.

The attitude could be divided into cognition-based attitude and affect-based attitude (Edwards, 1990). The different designs of websites would have various impacts on the cognition-based attitude and affect-based attitude. Informant #1 thought a fancier homepage could stimulate the motivation and Informant #5 said it could enhance shopping intentions.

A fancier website enhances me to buy online. This could be a good marketing promotion and will create some sort of incentive.

I think I would love fancier websites. This will definitely sharpen my decision.

Informant #5 regarded the website design is similar as bricks and mortar. Only when it was well dressed, it could make customers gaze.

The website design is one of the attractive factors to me. The website design of online store is similar as the design of bricks and mortar. It is the first looking. It should make customers joyful and then customers pay interest on the products.

Some Informants thought clear layouts were more important, and focused on the functions that online vendors provided. For example, informant #19 and informant #17.

Clear layouts are more important. If the beautiful websites are with bad quality, customers will never come again.

The key factors that make me shop online are the mechanism of safety and website design. If payment system is very complex and unsafe, I will give up shopping on this internet store. If the website design does not fit the brand or are difficult to search, I have no patience to stay for a long time. I think the beautiful design can attract me to stay longer and stimulate me to shop. Although some products on internet stores are much cheaper, I still worry about these questionable products.

Based on the discussion above, this study presents the website designs of online vendor can influence two kinds of value attitude, trust attitude, and cognitive-affective based attitude differently. Therefore, the following hypotheses are developed.

H1a: The functional-related website has more positive effect on the utilitarian value than the hedonic value of internet shopping.

H2a: The enjoyment-related website has more positive effect on the hedonic value than utilitarian value of internet shopping.

H1b: The functional -related website has more positive effect on the rational trust than affective trust of internet shopping.

H2b: The enjoyment-related website has more positive effect of the affective trust than rational trust on internet shopping.

H1c: The functional-related website has more positive effect on the cognition-based attitude than affect-based attitude of internet shopping.

H2c: The enjoyment-related website has more positive effect on the affect-based attitude than cognition-based attitude of internet shopping.

H3: Both of the functional-related website and enjoyment-related website have positive effect on electronic word of mouth.

3.5.2 Inter-relationship among the Individual factors and value attitude, trust attitude and cognitive-affective based attitude

Personality is a structure of emotional, rational, behavioral, and mental traits that portrayed an individual character (Nassiri-Mofakham, Nematbakhsh, Ghasem-Aghae, & Baraani-Dastjerdi, 2009). Personality traits are regarded as a vital theory to predict consumers' behavior in different occasions (Avery, 2003; Hung and Yang, 2010). In previous studies, personality traits, the big five factors, significantly influence the hedonic value motivation and utilitarian value motivation (Hung, and Yang, 2010; Tsao, and Chang, 2010). As informant #16 stated, the consciousness affect value measurement.

Consciousness. It can affect the value measurement and purchasing decision.

Informant #16 and informant #18 stated they tended to take rational consideration. Before shopping online, they spend much time to search information and compare prices.

I usually choose one specific product first then do the comparison. Because a lot of information can be found online so I can do as much as comparison as well as collect information online. It can also reduce shopping physically in store. For my personality, I am more consciousness especially on collecting product information.

I think I am conscious. I only bought products what I need. And I think I am a rational person. I spend much time on comparing the prices and product quality.

Personality traits were often used to predict the consumers' behavior. The rational trust is focused on the economic reasons with considerations of cost and benefits; and the emotional trust is focused on personal interaction and personal interest from another people. Informant #1, informant #9 and informant #19 thought the personality traits influenced them to trust the online vendors or not and respectively stated as follows.

Agreeableness could also be influence because agreeable person maybe more kindness, honest, and trust for others. Therefore, they may more trust on website purchasing.

Yes, openness allows me to take a risk of bad-quality goods.

Personalities which can influence me on website purchasing: Agreeableness-to trust the professional and honesty of the vender.

According to Chang and Wu (2012), peoples' attitude can be divided into cognition-based attitude and affect-based attitude. And in previous studies, personality traits were used to explain and predict people's willingness of online shopping decision (Bosnjak, Galesic, and Tuten, 2007). Informant #3 and informant #17 thought the personality traits impacted their attitudes to use the online platform and their shopping decisions.

For example openness, it makes me can accept new way to buy something (through online purchasing not conventional store).

I think agreeableness, openness, and emotional stability. I think personality influence me to make shopping decisions more or less. I can bear the risk of payment through the internet because of emotional stability. Owing to the personality of openness, I try to use the new purchasing platform, but I did not buy expensive product in consideration of safety of payment. I seldom tell the experience of fail trade, so I think I am with high agreeableness.

Based on the discussion above, this study presents the personality traits of five factors model can influence two kinds of value attitude, trust attitude, and cognitive-affective based attitude differently. Therefore, the following hypotheses are developed.

H4a: The personality trait of conscientiousness has more positive effect on the utilitarian value than hedonic value of internet shopping.

H5a: The personality trait of openness to new experience has more positive effect on hedonic value than the utilitarian value of internet shopping.

H4b: The personality trait of conscientiousness has more positive effect on the rational trust than affective trust of internet shopping.

H5b: The personality trait of openness to new experience has more positive effect on affective trust than the rational trust of internet shopping.

H4c: The personality trait of conscientiousness has more positive effect on the cognition-based attitude than affect-based attitude of internet shopping.

H5c: The personality trait of openness to new experience has more positive effect on affect-based attitude than cognition-based attitude of internet shopping.

H6: Both personality traits have positive effect on electronic word of mouth.

3.5.3 Inter-relationship among the Social factors and value attitude, trust attitude and cognitive-affective based attitude

In this study, the social factors of online shopping are divided into social norms and social interaction. Social norms are identified as the social pressure that influences the individual behavior intention (Ajzen, 1991); social interaction is focused on the interpersonal interaction that could provide shopping enjoyment and enhance hedonic motivation (Toa, Liaob, & Linc, 2007). Both of the social factors could affect consumers' shopping intention. For example, informant #17 thought her friends share the discount information and recommended good commerce websites to her.

My friends also shop online often. If there are good products and price, they will recommend. Sometimes, my friends shop on the internet store that I didn't visit on, they will recommend to me.

Informant #18 presented she often shopped with her families and discussed with the sellers of online vendors.

My families supported. I often shop online with my mother but do not interact with cyber users. When I want to buy certain product, I will discuss with sellers and get more detail information of products in order to avoid purchasing wrong product and wasting much time.

Customers' trust is a vital factor why a customer accepts the service of online stores (Gefen, Karahanna, & Straub, 2003). Trust could come from the brand trustiness or customers' word of mouth. Informant #2 only shopped on the virtual environment with better firewalls.

My family considers it is unsafe. They doubt fraudulent usage of credit card and hackers. I often use the computers on my workplace to shop online under consideration of safety and convenience because the corporate firewall has better protection. I often choose pay-at-pickup service and do not use pay online by credit card. The peer group who has become mothers likes to shop online very much.

Informant #6 families did not like to shop online because they often heard about frauds and could not touch the products.

My family doesn't like to use online shopping. They think that it's unreasonable to purchase if we cannot see and touch the product. Also about the payment, in their opinion it must be unsecure to pay and send money for online shopping. So, they have negative comments about it.

The relationship between affect-based attitude, cognition-based attitude and the behavior intention can be explained by the tripartite model (Chang & Wu, 2012). The opinions from families and friends deeply impact the attitudes of customers. The friends of Informant #3 influence her attitude from their positive comments.

They have positive comments because so far the quality of the products that I bought from online shopping was good.

And Informant #12 often shopped on the online vendors where their families and friends visited.

I will shop on the websites used by family and friends. My web-behavior may be influenced by online shopping.... I may consult previous users/reviewers for input on a particular product, or a specific vendor.

Based on the discussion above, this study presents the social factors can influence two kinds of value attitude, trust attitude, and cognitive-affective based attitude differently. Therefore, the following hypotheses are developed.

H7a: The social norms have more positive effect on the utilitarian value than hedonic value of internet shopping.

H8a: The social interaction has more positive effect on the hedonic value than utilitarian value of internet shopping.

H7b: The social norms have more positive effect on the rational trust than affective trust of internet shopping.

H8b: The social interaction has more positive effect on the affective trust than rational trust of internet shopping.

H7c: The social norms have more positive effect on the cognition-based attitude than affect-based attitude of internet shopping.

H8c: The social interaction has more positive effect on the affect-based attitude than cognition-based attitude of internet shopping.

H9: Both social factors have positive effect on electronic word of mouth.

3.5.4 Inter-relationship among the Technology factors and value attitude, trust attitude and cognitive-affective based attitude

A technological application perceived easier to use and perceived useful is to be easily accepted by users. A technological system in higher ease of use and perceived usefulness could bring positive use-performance to users. Informant #1 presented that the technology of online vendors is ease to use and help him find products he wanted and Informant #10 though it could save much time.

I think the design will be easy and to operate will also be easy.

The website is very useful for me, especially when I decide to buy a certain product I can buy them from website repeatedly. I can also choose my product from many products shown in the website.

It is very useful. It saves me a lot of time.

Customers' trust might build based on the economic reasons with considerations of cost and benefits or based on personal interaction and personal interest from another people. Informant #1 and 14 trust the online vendors based on the functions provided by the vendors. And respectively stated as follows:

For example, payment mechanisms. If they have adopted some SOP or security level or some of the security certification to ensure privacy, if the company can describe about the privacy rules, etc.

I would try to understand the process of shopping and the convenience of payment. For example, it would be easier if credit card payment is available then I don't need to transfer money through ATM.

Functions satisfied me. I can purchase what I need without going out.

Informant #5 thought ease to contact with the sellers would enhance their willing to shop.

As I write down my queries via the website and fill in my emails, mobilephone, they will usually answer through emails (most of time). Using facebook I may get faster and two way communications with more ease.

The internet is a new shopping channel and the technology acceptance is a vital occasion to influence consumer behavior of internet shopping. Individual attitudes towards new shopping channel or not depend on consumer behavior models (Ajzen & Fishbein, 1980; Enrique, Carla, Joaquín, & Silvia, 2008). Informant #13 presented the technology is mature and Informant #12 thought online shopping was popular and there was no need to worry the technology problems. And respectively stated as follows:

I think the technology is mature now.

Online shopping is very popular now, and when people around you shop online, that increases your willingness to shop online. It is easier for me to shop at common/popular websites, and I am more cautious with those that are new or never-heard-of. Some websites are messy, or text-based, that decreases my confidence in the website, and thus my willingness to purchase something. I will also review the payment methods available, and whether the website is secured thru an https portal

Based on the discussion above, this study presents technology acceptancy can influence two kinds of value attitude, trust attitude, and cognitive-affective based attitude differently. Therefore, the following hypotheses are developed.

H10a: The technology acceptance of perceived usefulness has more positive effect more on the utilitarian value than hedonic value of internet shopping.

H11a: The technology acceptance of perceived ease of use has more positive effect more on the hedonic value than utilitarian value of internet shopping.

H10b: The technology acceptance of perceived usefulness has more positive effect more on the rational trust than affective trust of internet shopping.

H11b: The technology acceptance of perceived ease of use has more positive effect more on the affective trust than rational trust of internet shopping.

H10c: The technology acceptance of perceived usefulness has more positive effect more on the cognition-based attitude than affect-based attitude of internet shopping.

H11c: The technology acceptance of perceived ease of use has more positive effect more on the affect-based attitude than cognition-based attitude of internet shopping.

H12: Both of the technology acceptance factors have positive effect on electronic word of mouth.

3.5.5 The mediating effects of value attitude, trust attitude and cognitive-affective based attitude

From the consumer behavior perspective, it is important to enhance consumer perceived value because delivering customer value can encourage a favorable behavioral intentions (Wang, 2010). Most informants were focus on perceived value. They thought perceived values were vital factors to stimulate them to shop online. For example, informant #8 and informant #10 respectively stated that the relationship between perceived value and purchasing intention.

My intention to purchase on line is to save time and money. Current website purchasing platforms are easy to operate

Product attractiveness, price, quality of the products, website credence

Trust is a good way to enhance the perceived certainty form expectations of others' behavior and reduced the fear of being treated unfair (Awad & Ragowsky, 2008). Online vendors could build consumers' trust based on good interaction and brand trustiness. For example, Informant #16 thought customers' trust can enhance the willingness to sop.

I think it is important to build up customers' trust through interaction. I agree. Repurchasing intention is based on the good relationship.

Informant #15 stated he only trust online vendor of good reputation. Positive and famous brand of online vendors could easily trusted by customers.

I only trusted the websites with good reputation.

It's every common to do online shopping. But everyone has different level of trust on websites. There are more people like me. Take my mom for example, she doesn't know how to use computer, but she asks me to buy when she sees something that she wants on DM. For those expensive products, I would choose credible websites like Apple to prevent fraud. I am not willing to shop on small-scale websites especially for those expensive products.

Previous studies have confirmed that attitude toward online shopping will significantly impact online shopping intention (Singh, Fassott, Chao, & Hoffmann, 2006; Hernandez, Jimenez, & Martı'n, 2009). Informant #1 thought if the online vendors could provide good functions on the transaction process, he tended to shop online.

If time, convenience, security, and purchasing process, are all ok, I will try to operate. If security is high, purchase process is convenience, and then my purchase attitude will be promoted.

And informant #3 he tended to shop online because the product quality and prices could be accepted.

Because when the product quality is good, price is not too expensive, and I can buy anytime anywhere I am, I am really willing to buy.

Based on the discussion above, this study presents the relationships among perceived value attitude, electronic word of mouth and purchasing intention, relationships among perceived trust attitudes, electronic word of mouth and purchasing intention and relationships among perceived cognitive-and-affective based attitudes and electronic word of mouth and purchasing intention. Therefore, the following hypotheses are developed.

H13a: Utilitarian value has positive effects on electronic word of mouth.

H14a: Hedonic value has positive effects on electronic word of mouth.

H13b: Rational trust has e positive effects on electronic word of mouth.

H14b: Affective trust has positive effects on electronic word of mouth.

H13c: Cognition-based attitude has positive effects on electronic word of mouth.

H14c: Affect-based attitude has positive effects on electronic word of mouth.

3.5.6 The moderating effects of involvement, experience and personality types

From a motivational perspective, involvement reflects the level of arousal and interest stimulated by an object (Dholakia, 2001; Herrero & Martín, 2012). The highly involved shoppers tend to pursue the process of central route (Petty, Cacioppo, & Schumann, 1983). The different types of website design could arouse the customers' interests based on its own characteristics. Informant #16 said that the website design is a vitally attractive factor and influence her to visit this online vendor or not.

The website design is one of the attractive factors to me. The website design of online store is similar as the design of bricks and mortar. It is the first looking. It should make customers joyful and then customers pay interest on the products.

Informant #5 and informant #13 respectively presented browsing the website is interesting and make the purchasing process joyful.

Purchase something from the website takes more interest and hope but less time. Purchase on conventional store would be like something utilitarian, not very enjoyable and takes more time to see, to touch, to try on and compare deals.

During the browsing, you will naturally find interesting shopping websites. You will then find attractive clothes. To me, the whole purchasing process just happened naturally.

Customers with more online shopping experience get more IT knowledge and are more familiar with the online purchasing process (Hernandez, Jimenez, & Martí'n, 2009). They tend to accept and use the new platform. Ajzen (2002) provided that with repeated performance, individuals' attitudes are apt to more stable and easier to predict future intention (Kim, Malhotra, and Narasimhan, 2005). Most experienced customers could find out the products and information which they needed easily. Informant #17 got information from peers, families and cyber users and got accurate products on online vendors.

I often bought the products that my family and peer recommend. Sometimes, to get more accurate product information or customers' experience after use, I take part in forum and discuss with online users. I often bought the products through the recommendation of my familiar internet friends.

Informant #4 had much experience on online shopping and always could find out the products which fit his needs.

I shopped on YAHOO Shopping Center, PChome, Luten. However, the function and capability are different from each website. I often purchase clothes on YAHOO Shopping Center. I usually make purchase right away when I see the style that I like on YAHOO Shopping Center. In terms of the brand, take TOKICHOI for example, products are more up-to-date than the physical store. The description of size is very clear as well. According to the regular consumers' experiences,

they continue shopping on the same site or switch to different sites due to the previous purchase. Basically, consumers purchase 3C products through the auction system. For the auction system, you can choose the cheaper product or you can even buy the used product. I also looked for the gift related application from marketing cases through auctions. Competitive prices can be found on auctions. I will purchase 3C products as gifts, and use online auctions as the tool. The 3C products' prices in auction are nearly ten percent cheaper than the shopping center. The part of the auction is that "the same goods can be found at much cheaper price." Based on the other shopping experiences, I have multiple resources for comparison. For example, the open auction platform such as Luten has a wide range of product category, they even have the product that you can't find on regular shopping site, such as fireworks...etc. You can find it on Luten auction platform.

Myers Briggs model of personality is often used to test individual personality types. This study focused on "how do you make decision?". If the decision is on the basis of logic and objective considerations, it is called "Thinking". If the decision on the basis of personal values, it is called "Feeling". The individuals are divided into "Thinking" type or "Feeling" type. The different personality types would show the different types of decision making. Informant #2 thought the personality types influence customers on different phrases of purchasing process.

Basically, the purpose is to purchase product and apply feeling appealing to achieve. So decision is based on thinking consideration and to achieve the feeling purpose.

And informant #12 said the personality type of feeling impact her decision and some of her friends differed from her.

I'm more on the emotional side. I think it does impact my decisions. I suppose, people who are a bit more emotional can easily act on their impulse, buying something because they like it. On the other hand, a person that is more rational will consider the security of the websites, think about their need for the product, some will want to actually see the products before they make a purchase online. I have a very rational friend, when it comes to apparels, he/she always goes to the shop and try things one before he/she makes a purchase.

Based on the discussion above, this study presents the moderating effects of involvement, experience and personality types. Therefore, the following hypotheses are developed.

H15: The positive influence of functional-related website design on utilitarian value will be strengthened when the consumer has lower than higher personal involvements.

H16: The positive influence of hedonic-related website design on hedonic value will be strengthened when the consumer has lower than higher personal involvements.

H17: The level of online shopping experience positively moderates the effect of antecedents on attitudes to shop online.

H18: The personality types of thinking and feeling moderate the effect of antecedents on attitudes to shop online.

3.6 The Conceptual Framework

According to the purpose of this study and literature review, the main questions of this study are: (1) Do the antecedent factors of individual level, firm level, and social level influence the attitude formation and the intention of shopping online?; (2) Do the rational attitude and emotional attitude influence the customers' intention of shopping online?; (3) Do the mediating effects of the value attitude, trust, and cognition-and-affect based attitudes exist?; (4) Does involvement serve as moderating role for the influence of vendor characteristics and customers' attitudes?; (5) Does experience serve as moderating role for the influence of customers' attitudes and behavioral intention?; (6) Does gender serve as a moderating role between: (a) the relationship of vendor characteristics and customers' attitudes, and (b) between the relationship of customers' attitudes and behavioral intention?

A proposed research framework of this study is shown in Figure 3-2.

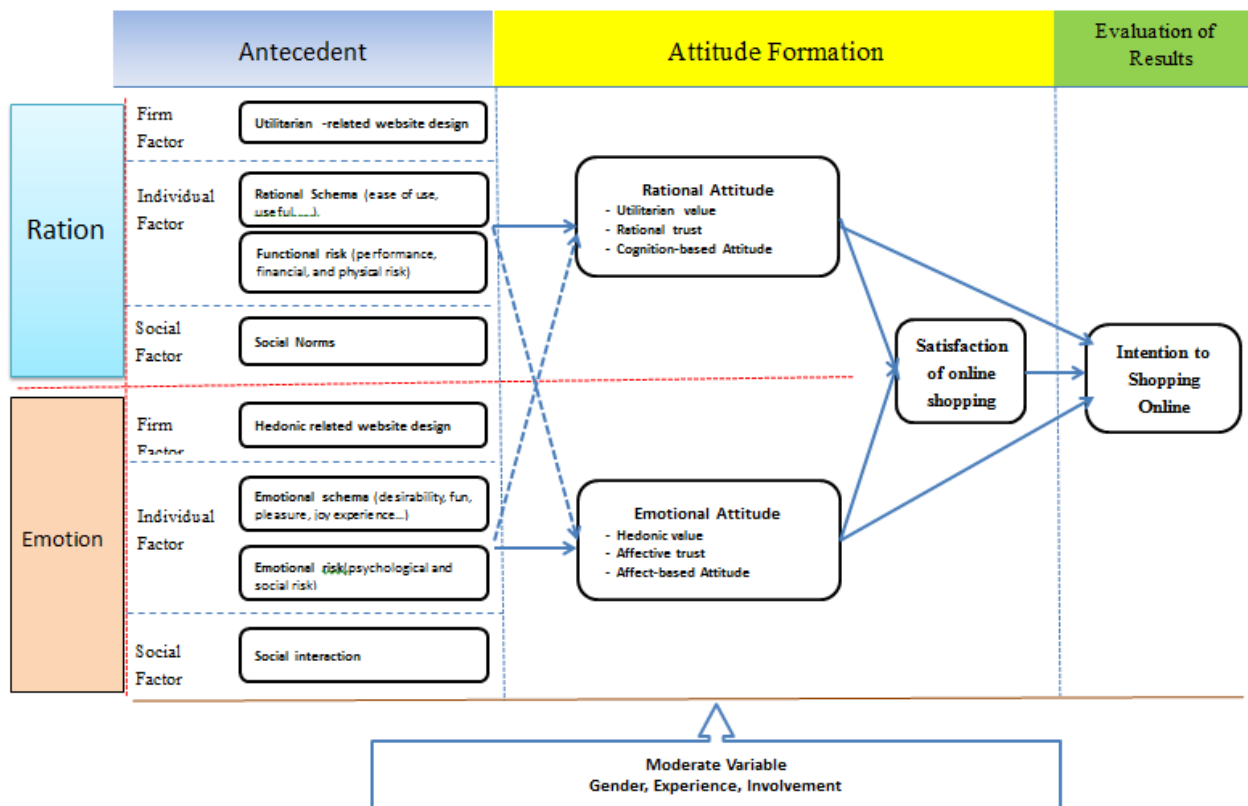


Figure 3-2. Proposed Model

IV. First-Year Study: Study 2-Meta-Analysis

4.1 Research Design

The second stage of first year study is meta-analysis. The aim of this meta-analysis study is to test some of the hypotheses from the proposed research framework based on the study results of previous studies. Meta-analysis is important because some primary studies lack of sufficient power (i.e., sample size) to achieve statistically significant results and nearly all studies lack of the power for a precise estimate of effect size (Lipsey and Wilson, 2001). By combining into a single estimate the findings of multiple independent studies that bear on the same relationship, while correcting for the distorting effects of artifacts that may produce the illusion of conflicting findings, meta-analysis arrives at more accurate conclusions than those presented in any one primary studies (Hunter and Schmidt, 2004).

The results of the qualitative study and meta-analysis aim to develop a more comprehensive research framework for the purpose of further empirical validation. Based on the literature review and the conceptual model in this study, meta-analysis was adopted to integrate the results of previous studies and confirm the interrelationship between the constructs. This method of meta-analysis provides a systemic and comprehensive framework which combines and integrates similar variable and then examines the relationship between these similar variables from the previous empirical studies (Liu, Wei, & Chen, 2010). It is a helpful method to settle conflicting results among previous studies and conclude data from accumulated research in a particular domain (Petter & McLean, 2009). In this study, meta-analysis was used to evaluate the relationship between each construct about the behavior of online shopping.

4.2 Sampling and Data collection procedure

4.2.1 Collection of source studies

A literature search in scientific database was utilized in order to find previous studies relative to this study. This study employed various methods in the literature search (Palmatier, Dant, Grewal, and Evans, 2006), including (a) a search of several electronic databases including PsycINFO, ABI-Inform, Academic Search Elite, Business Source Elite, WilsonBusiness, and Dissertation Abstracts International; (b) a search of the Social Sciences Citation Index, using the seminal articles for online shopping behavior; and (c) manual self-search journals that contain research on online shopping behavior. Every construct with the online shopping is viewed as keywords and searched in the database journals. This study collected 41 articles published in 1990 - 2012 and tried to include as many studies as possible in the examination of this model. The following articles were excluded for the reasons: (a) the article is purely theoretical or a literature review; (b) the article does not report empirical data; (c) the examination of this article is not related to our hypotheses; (d) the article does not provide enough data to perform meta-analysis (Petter, and McLean, 2009).

This study evaluated each related research for measures of relationship between online shopping intention, its antecedents, and attitude formation and moderating effects. There are two

criteria for the inclusion of the article to the meta-analysis (a) the related studies which presented the correction coefficient (r) or the standardized regression coefficient (β); (b) the related studies present the t test or F-ratios with df in numerator which can further be converted to r coefficients (Lipsey & Wilson, 2001; Peterson & Brown's, 2005).

4.2.2 Coding studies

All identified studies were obtained the following informations: total sample size, the number of items used to measure each construct, correction for each hypothesis and reliability of each variable (Peterson & Brown's, 2005). All selected articles were examined in terms of the following relevant variables: authors, year, journal, method, design, subjects, context, intention valence, and scenarios (Matos & Rossi, 2008).

4.3 Data Analytical Techniques

This study chose the correlation coefficients (r) as the primary effect size metric because the correlation coefficients (r) is a scale-free measure and it is often adopted in the studies of marketing researches (Matos, and Rossi, 2008). Following Peterson and Brown (2005), a meta-analysis should include the maximum number of effect sizes and the process can make the results more generalizable (Matos & Rossi, 2008). This study also incorporates those studies which only provide standardized regression coefficients (β) and estimate correlation from the β coefficient following the formula suggested by Peterson and Brown (2005). The formula is $r = .98\beta + .05\lambda$, where $\lambda = 1$ when β is non-negative, and $\lambda = 0$ when β is negative.

Based on the common guideline from Lipsey and Wilson (2001), this study used the developed database of selected studies to integrate the effective size. Original correction will first be converted to Fisher's Z statistic before it adjusts variance and reliability weight. In addition to the point estimates, this study will also report the 90% confidence interval (CI). The CI is based on the uncorrected standard error of the mean effect size and estimates the variability in the mean effect size. The CRI is based on the corrected standard deviation and provides an estimate of the variability of the individual effect sizes across studies (Whitener, 1990). A 90% CI around a point estimate excluding zero suggests that the point estimate would be greater (or lesser, as the case may be) than zero in 95% of the cases if the estimation procedures were repeated many times. Lastly, the Q statistic distributed as chi-square was viewed as the indication of homogeneity of the effect size (Lipsey & Wilson, 2001). When the null hypothesis of homogeneity is rejected, it means the difference in effect sizes is attributed to the factors except for sampling error (Matos & Rossi, 2008).

4.4 Descriptive Analysis of Collected Data

Every construct with the online shopping intention in the research model was used as a keyword in this search of the journals in these databases such as PsycINFO, the Web of Science, EBSCO, ABI-Inform, Academic Search Elite, Business Source Elite, WilsonBusiness, and Dissertation Abstracts International. This study collected the articles which published from 2000 to 2014; and the articles were selected were then examined with regard to the following variables:

author(s), year, journal, method, design, subjects, context, intention valence, and scenarios (Matos & Rossi, 2008). This study examines 12 pairs of relationships based on the conceptual model, and most of the correlation coefficients of these pairwise comparisons are significant in the collected studies. The descriptive statistics of these articles are shown in Table 4-1, including number of studies, the range of correlation, number of significant correlations, and range of the sample sizes.

Table 4-1 Descriptive statistics

Pairwise relationship	No. of studies	Range of correlation		Correlation			Cumulative sample size	Average sample size
		Lower	Upper	Significant	Non-significant (%)	Significant (%)		
Personal innovativeness – Attitude	6	0.013	0.32	5	1	75	2631	507
Individual playfulness - Attitude	7	0.14	0.417	7	0	100	3089	441
Perceived useful - Attitude	18	-0.02	0.88	17	1	94	4792	266
Perceived useful -Trust	4	0.296	0.6	3	1	75	1938	485
Perceived ease of use - Attitude	14	0.087	0.51	8	6	57	3629	241
Perceived ease of use - Trust	4	0.04	0.385	3	1	75	1884	471
Perceived risk -Attitude	4	-0.12	-0.31	4	0	100	1308	327
Perceived risk –Trust	3	-0.23	-0.5	3	3	100	1456	485
Trust-Attitude	3	0.201	0.868	3	3	100	78	257
Attitude - Satisfaction	3	0.413	0.557	3	0	100	838	279
Attitude – Intention	16	0.213	0.86	16	0	100	6566	410
Satisfaction - Intention	6	0.263	0.780	6	0	100	1416	236

4.5 Inclusion and Criteria and Coding

Meta-analysis was adopted in this study to assess some of the contradictory empirical findings with regard to online shopping that have been produced over the last decade or so. The results of previous studies may be different due to different sample characteristics, sample sizes or research contexts (Martin, & Herrero, 2012; Keisidou, et al., 2011; Oh, et al. 2009; Huang, & Huang, 2005; Pi & Sangruang, 2011). According to Lipsey and Wilson (2001), a meta-analysis can provide more comprehensive findings than a single study, because the combination of results from the various different settings may average out the errors in each of the individual works. To evaluate the effect size, two criteria (1) correction coefficient (r) or standardized regression coefficients (β) should be presented (2) if r and β were not available, then t , z and p value could be used. By using Comprehensive Meta-Analysis (CMA) software, these values can be transformed to correlation coefficient. The studies in meta-analysis were included in table 4-2.

Table 4-2 Studies included in the meta-analytic review

Abdul-muhmin, 29, (A-ST; ST-I), 2010
Ahn, Ryu & Han, 8, (PY-A), 2007
Awad & Ragowsky, 13 (PEOU-T; PU-T), 2008
Benamati, Fuller, Serva & Baroudi, 5, (PEOU-T), 2010
Bigne-Alcaniz, Ruiz-Mafe, Alda's-Manzano & Sanz-Blas, 16, (PU-A; PEOU-A), 2008
Chang & Chen, 16, (PR -T), 2008
Chiu, et al., 20, (ST-I), 2009
Crespo, Bosque & Sánchez, 26, (PU-A; PR -A; A-I), 2009
Crespo & Bosque, 2, (PI-A), 2008
Dinev & Hart, 9, (PR -T), 2006
Enrique, Carla, Joaquín & Silvia, 16, (PEOU-A; PU-A; A-I), 2008
Eroglu, Machleit & Davis, 18, (A-I), 2003
Gefen, Karahanna & Straub, 27, (PEOU-T), 2003
Ha, Janda & Muthaly, 17, (A-I), 2010
Ha & Stoel, 24, (PU-A; A-I), 2009
Hassanein, & Head, 3, (PU-A), 2007
Hernández, Jiménez & José Martí'n, 16, (PU-A; PEOU-A), 2011
Hernandez, Jimenez & Martí'n, 17, (A-I; PEOU-A), 2009
Hsu, et al., 11, (A-ST), 2006
Hu, Sun, Zhang, Zhang, Luo & Huang, 10, (PU-A; A-I; PEOU-A; PR -A), 2009
Huang & Huang, 25, (PY-A), 2005
Huang, Yu & Huang, 28, (PY-A), 2010
Iconaru, 31, (ST-I), 2011
Järveläinen, 15, (A-I), 2007
Jayawardhena, 12, (A-I), 2004
Kim & Forsythe, 17, (PU-A; A-I; PEOU-A) 2009
Kim, 4, (PU-A; PEOU-A), 2012
Kim & Forstthe, 14, (PU-A; A-I; PEOU-A), 2008
Lee, Kim & Fiore, 1, (PR-A), 2010
Lee, Shi, Cheung, Lim & Sia, 21, (PU-A; A-I; PEOU-A), 2011
Liao, Liu & Chen, 3, (PR -T), 2011

Limayem, Khalifa & Frini, 6, (PI-A), 2000
 Liu, Tucker, Koh & Kappelman, 7, (PU-A; PEOU-A), 2003
 Marti´nez-Lo´pez, Luna & Marti´nez, 12, (PU-A; PU-Trust), 2005
 Morosan & Jeong, 10, (PY-A), 2008
 Mpinganjira, 30, (ST-I), 2014
 Oh, Kim, Lee, Shim & Park, 18, (PY-A), 2009
 Pappas, et al., 22, (ST-I), 2014
 Pi & Sangruang, 19, (PR -A), 2011
 Shih, 8, (PU-A; PEOU-A), 2004
 Singh, Fassott, Chao & Hoffmann, 23, (A-I; PU-A; PEOU-A), 2006

^aCodes in parentheses: PI=personality innovativeness, PY=individual Playfulness, PEOU=perceived ease of use, PU=perceived usefulness, PR=perceived risk, T=Trust, ST=Satisfaction, A=Attitude, I=Intention.

^bJournals are footnoted in the following alphabetical order: (1) Clothing & Textiles Research Journal (2) Computers in Human Behavior.(3) Electronic Commerce Research and Applications (4) Electronic Commerce Research (5) IEEE Transactions on Engineering Management (6) IEEE Transactions on Systems Man And Cybernetics Part A-Systems And Humans (7) Industrial Management & Data Systems (8) Information & Management (9) Information Systems Research (10) International Journal of Hospitality Management (11) International Journal of Human-Computer Studies (12) Internet Research (13) Journal of Computer Information System (14) Journal of Interactive Marketing (15) Journal of Organizational Computing and Electronic Commerce (16) Online Information Review (17)European Journal of Marketing (18)Psychology & Marketing (19)Social Behavior and Personality (20) Behaviour & Information Technology (21)Information & Management (22) International Journal of Retail & Distribution Management (23) International Marketing Review (24) Journal of Business Research (25) Journal of Computer Information Systems (26) Journal of Risk Research (27) MIS Quarterly (28) Service Business (29) Journal of International Consumer Marketing (30) Management: Journal of Contemporary Management (31) Review of Economic and Business Studies

4.6 Effect Size

Table 4-3 shows the results of the meta-analysis, including the simple mean of correlation (r), 95% confidence interval (CI), and the results of the heterogeneity test (Q). First, the relationships between the various antecedents and attitude are discussed, as follows. With regard to the relationship between personal innovativeness and attitude, the meta-analysis shows that, in six studies with a total of 3,043 samples, the simple mean correlation is significant ($r=0.281$, $Q=47.959$, $p<0.000$). For the relationship between individual playfulness and attitude, the results show that, in seven studies with 3,089 samples, the simple mean correlation is significant ($r=0.209$, $Q=14.251$, $p=0.027$). For the relationship between perceived ease of use and attitude, the results show that, in 14 studies with 3,629 samples, the simple mean correlation is significant ($r=0.152$, $Q=53.322$, $p<0.000$). With regard to the relationship between perceived usefulness and attitude, the meta-analysis shows that, in 18 studies with 4,792 samples, the simple mean correlation is significant ($r=0.495$, $Q=428.480$, $p<0.000$). For the relationship between perceived risk and attitude, the results show that, in four studies with 1,308 samples, the simple mean correlation is significant ($r=-0.186$, $Q=6.478$, $p=0.091$). With regard to the relationship between trust and attitude, the meta-analysis shows that, in three studies with 566 samples, the simple mean correlation is significant ($r=0.611$, $Q=155.65$, $p<0.000$).

Second, the relationships between the antecedents and trust are discussed as follows. For the relationship between perceived ease of use and trust, the meta-analysis shows that, in four

studies with 1,884 samples, the simple mean correlation is significant ($r=0.272$, $Q=31.584$, $p<0.000$). With regard to the relationship between perceived usefulness and trust, the results show that, in four studies with 1,938 samples, the simple mean correlation is significant ($r=0.399$, $Q=53.205$, $p<0.000$). For the relationship between perceived risk and trust, the meta-analysis shows that, in three studies with 1,456 samples, the simple mean correlation is significant ($r=-0.421$, $Q=23.758$, $p<0.000$).

Next, the relationships between attitude, satisfaction, and online shopping intention (intention hereafter) are discussed as follows. For the relationship between attitude and satisfaction, the results show that, in 3 studies with 838 samples, the simple mean correlation is significant ($r=0.471$, $Q=5.254$, $p<0.072$). With regard to the relationship between attitude and intention, the results show that, in 16 studies with 6,566 samples, the simple mean correlation is significant ($r=0.514$, $Q=266.355$, $p<0.000$). For the relationship between satisfaction and intention, the meta-analysis shows that, in six studies with 1,416 samples, the simple mean correlation is significant ($r=0.545$, $Q=101.628$, $p<0.000$).

Since almost all the Tobin's Q-values in the homogeneity test are higher than the chi-square values and $p<0.05$, the results show that the null hypothesis of homogeneity is rejected and the difference in the effect size is attributed to the factors of interest, rather than sampling error.

Table 4-3 Correlation analysis

Hyp.	Pairwise relationship	Effect size and 95% confidence level			Heterogeneity	
		r	95% CI		Q-value	p-value
H ₁	Personal innovativeness - Attitude	0.281	0.245	0.316	47.959	0.000
H ₂	Individual playfulness - Attitude	0.209	0.175	0.243	14.251	0.027
H ₃	Perceived ease of use - Attitude	0.152	0.120	0.184	53.322	0.000
H ₄	Perceived usefulness - Attitude	0.495	0.473	0.516	428.480	0.000
H ₅	Perceived risk - Attitude	-0.186	-0.238	-0.133	6.478	0.091
H ₆	Perceived ease of use - Trust	0.272	0.229	0.313	31.584	0.000
H ₇	Perceived usefulness - Trust	0.399	0.361	0.436	53.205	0.000
H ₈	Perceived risk - Trust	-0.421	-0.463	-0.378	23.758	0.000
H ₉	Trust - Attitude	0.611	0.557	0.661	155.65	0.000
H ₁₀	Attitude - Satisfaction	0.471	0.416	0.522	5.254	0.072
H ₁₁	Satisfaction – Intention	0.545	0.507	0.581	101.628	0.000
H ₁₂	Attitude - Intention	0.514	0.496	0.532	266.355	0.000

4.7 Structural Equation Model for Meta-Analysis

In order to assess the fitness of the research model, structure equation modelling (SEM) with LISREL 9.1 was carried out to analyze the relationships among the research constructs, and

the results are shown in Figure 3. The correlation coefficient matrix and the median of sample size were used as the inputs to test the research model.

The following statistics were used to evaluate the goodness-of-fit of the model. With the Root Mean Square Residual (RMSR), suggested by Segars and Grover (1993), a cut-off point of 0.1 indicates a reasonable fit model. With regard to the goodness-of-fit index (GFI), as proposed by Jöreskog and Sörbom (1989), the threshold is 0.9 for an acceptable model fit. The research model was tested using structural equation modeling carried out in LISREL 9.1. The goodness-of-fit statistics obtained from the meta-analysis show that the research model has quite good fit, based on the following statistics: chi-square=1860.082, Df=14, $p < 0.05$; GFI=0.879; and SRMR=0.0929.

Figure 3 shows the estimates of the path coefficients based on the structural equation model of online shopping behavior. Of the 12 pairs of relationship in the research model, 10 pairs are significant and two pairs are not at the 95% confidence level. The effects of perceived ease of use on attitude ($\beta=0.016$, $P > 0.05$) and perceived risk on attitude ($\beta=0.024$, $P > 0.05$) are not significant. H_3 and H_5 are thus not supported. The other effects are all significant, with the details as follows. The effects of personal innovativeness on attitude ($\beta=0.281$, $p < 0.05$), individual playfulness on attitude ($\beta=0.209$, $p < 0.05$), perceived ease of use on trust ($\beta=0.272$, $p < 0.05$) are all significant. In addition, the effects of perceived usefulness on attitude ($\beta=0.296$, $p < 0.05$) and trust ($\beta=0.399$, $p < 0.05$) are significant. The effects of perceived risk on trust ($\beta=-0.421$, $p < 0.05$). The effects of trust on attitude ($\beta=0.498$, $p < 0.05$) is significant. The effects of attitude on satisfaction ($\beta=0.471$, $p < 0.05$) and intention ($\beta=0.331$, $p < 0.05$) are also significant. Furthermore, the effects of satisfaction on intention ($\beta=0.389$, $p < 0.05$) is significant. As noted above, based on these results 10 of the 12 hypotheses are supported.

4.8 Discussion

The research model of online shopping behavior proposed in this work integrates the personality traits model, perceived risk model and TAM model. The results from the correlation analysis show that the effect size of all pairs is significant at the 95% confidence interval. The results of structural equation modeling thus show that the proposed model has quite a good fit with the data obtained in the meta-analysis.

Technology acceptance is an important factor in persuading customers to engage in online shopping, and this is affected by perceived ease of use and perceived usefulness, as noted in a large number of studies (Chiu, et al, 2009; Koufaris, 2002; McCloskey, 2004; Wakefield, et al, 2011; Crespo, et al., 2009; Cheng, et al, 2012). However, the results of earlier works are inconclusive with regard to the relationship between perceived ease of use and attitude, with some finding it to be significant (Shih, 2004; Singh, et al, 2006; Enrique, et al, 2008), and others different (Kim, & Forsythe, 2008; Kim, 2012; Lee, Shia, et al, 2011). Based on the results of structural equation modeling as found in this study, the effects of perceived usefulness on attitude (PU-A) is significant, while that of perceived ease of use on attitude (PEOU-A) is not significant. The effects of perceived usefulness on attitude (PU-A) was found to be significantly positive in past studies (Koufaris, 2002; Chiu, Lin, Sun, & Hsu, 2009; Kim, & Forsythe, 2008; Hansen, 2008).

Previous studies show that perceived risk has a significantly negative influence on trust and the intention to shop online (Liao, et al., 2011; Dinev, & Hart, 2006; Cheng, et al., 2012; Chang & Chen, 2008). Based on the results of the perceived risk model, the effects of perceived risk on both trust (PR-T) is significant. The effect of trust on attitude also shows significant and positive effect. Furthermore, attitude has a positive effect on both satisfaction and intention. These results are in line with previous studies (e.g., Abdul-muhmin, 2010; Shu, et al., 2006). In addition, satisfaction has a positive effect on intention. This result also is in line with previous studies (e.g., Abdul-muhmin, 2010; Mpinganjira, 2014; Pappas, et al., 2014).

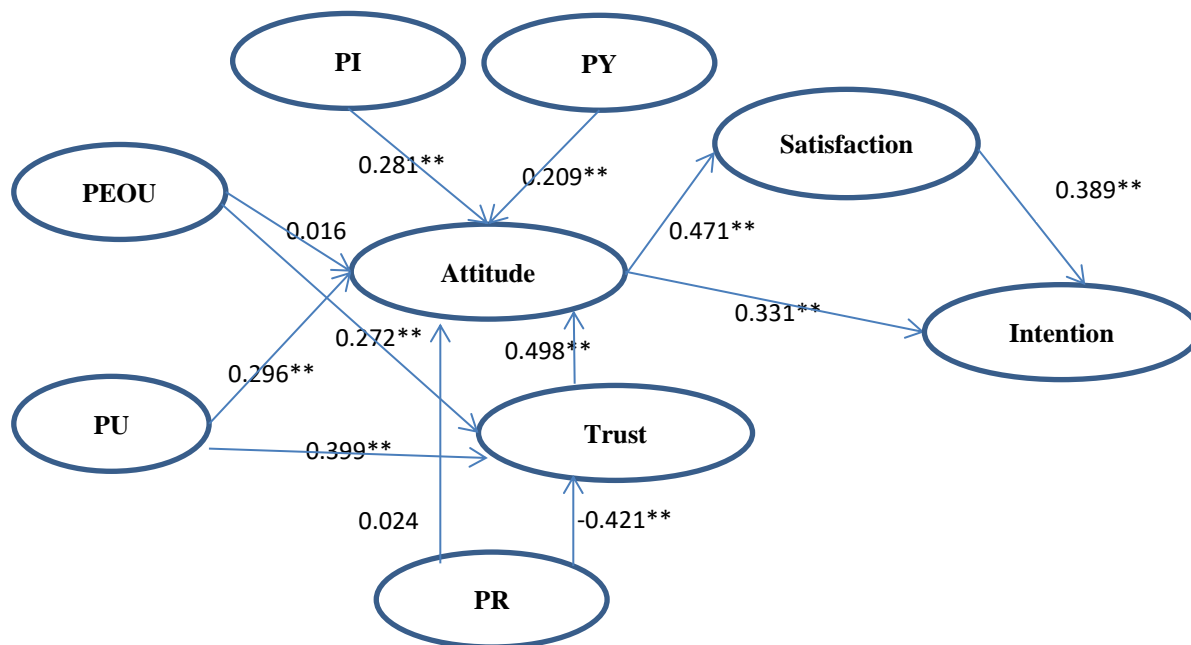


Figure 4-1. Results of the Structural Equation Modeling

V. Second-Year Study: Empirical Study

5.1 Research Framework

A comprehensive research framework is shown in Figure 3-2. This study aims to develop a more comprehensive model to understand the antecedents, mediators, and moderators of online shopping behaviors. The integrated model can provide the whole outlook through the integration of individual, firm, and social perspectives by combining the rational and affective attitudes as mediators and the individual differences as the moderators. This integrated model can provide a more complete explanation about customers' behaviors and help online firms to understand the process of customers' purchasing decisions. It is expected that the results of this study can enhance more understanding of customers' purchasing behaviors and help vendors to develop appropriate marketing strategies for online commerce.

5.2 Constructs Measurement

Survey questionnaire items were designed based on the review of literature, qualitative study and meta-analysis. The measurement items for the following ten constructs were developed. Constructs measurements are as follow:

Table5-1 Construct Measurements

Construct	Factor	Items	Source
Vendor Characteristics	Utilitarian - related website	<ol style="list-style-type: none"> 1.The site does not waste my time 2.I can go to exactly what I want quickly 3.The organization and layout of the web site facilities searching for products 4.The site gives me enough information sot that I can identify the item to the same degree as if I am in the store 	Ha & Stoel. (2012) Lavie d& Tractinsky. (2004)
	Hedonic-related website	<ol style="list-style-type: none"> 1. The website is innovative. . 2. The website design is innovative. . 3. The website is creative. . 4. I feel happy when I use the website. 5. I feel cheerful when I use the website. 6. I feel sociable when I use the website 	Ha & Stoel. (2012) Lavie & Tractinsky. (2004)
Personal Schema	Rational Schema	<ol style="list-style-type: none"> 1. The online store makes it easy to purchase merchandises. 2. The online store makes it efficient to purchase merchandises. 3. The online store provides a convenient way to purchase merchandises. 4. It is useful to purchase merchandises using the online store. 	Lee, Chung, & Lee. (2011)
	Emotional Schema	<ol style="list-style-type: none"> 1. It is good to buy merchandises using the online store. 2. It provides lots of fun to buy merchandises using the online store. 3. It provides lots of pleasure to buy merchandises 	Lee, Chung, & Lee. (2011)

		<p>using the online store.</p> <p>4. It provides lots of joy to buy merchandises using the online store.</p>	
Perceived Risk	Perceived functional risk	<p>1. I think that online shopping would probably lead to a performance loss for me because the product would be inconsistent with my expectations.</p> <p>2. As far as I'm concerned, if this performance loss happened to me, it would be very important.</p> <p>3. I think that online shopping would probably lead to a financial loss for me because of such things as its poor warranty, high delivery costs, or high transaction costs when I transfer money to the seller.</p> <p>4. As far as I'm concerned, if this financial loss happened to me, it would be very important</p> <p>5. I think that online shopping would probably lead to a security or privacy loss for me because my personal information (e.g., credit card) would be disclosed.</p> <p>6. As far as I'm concerned, if this security or privacy loss happened to me, it would be very important.</p>	Jacoby & Kaplan. (1972) Peter & Tarpey. (1975)
	Perceived emotional risk	<p>1. I think that online shopping would probably lead to a psychological loss for me because it would not fit in well with my self-image.</p> <p>2. As far as I'm concerned, if this psychological loss happened to me, it would be very important</p> <p>3. I think that online shopping would probably lead to a social loss for me because my friends and relatives would think less of me.</p> <p>4. As far as I'm concerned, if this social loss happened to me, it would be very important.</p>	Jacoby & Kaplan.(1972) Peter & Tarpey.(1975)
Social factors	Social Norms	<p>1. People in my organization have recommended me to do online shopping.</p> <p>2. My peers have recommended me to do online shopping.</p> <p>3. My immediate friends have recommended me to do online shopping.</p>	Fishbein & Ajzen. (1975) Pahnila & Warsta. (2010).
	Social Interaction	<p>1. I like to exchange information with friends online.</p> <p>2. I like to share experiences with others online.</p> <p>3. I like to develop friendships with other internet shoppers</p> <p>4. I like to extend personal relationship online.</p>	Toa, Liao, & Linc. (2007)
Value Attitude	Perceived Utilitarian Value	<p>1. I tend to visit Internet shopping sites only when I have something I need to buy</p> <p>2. When Internet shopping online, I tend to look</p>	Overby & Lee. (2006) Bridges &

		<ul style="list-style-type: none"> 3. Internet shopping enables quick shopping 4. Internet shopping enables easy shopping 	Florsheim. (2004) Ryoo & Kim, (2012).
	Perceived Hedonic Value	<ul style="list-style-type: none"> 1. To me, Internet shopping is very pleasant/fun 2. Internet shopping makes me feel as though I have escaped from daily life 3. I lose track of time when I shop online 4. I get excited when I choose from products offered in Internet shopping sites 	Overby & Lee. (2006) Bridges & Florsheim. (2004) Ryoo & Kim (2012).
Trust Attitude	Rational Trust	<ul style="list-style-type: none"> 1. The online vendor (or the process of online shopping) has nothing to gain by being dishonest in its interactions with me. 2. The online vendor (or the process of online shopping) has nothing to gain by not caring about me. 3. The online vendor (or the process of online shopping) has nothing to gain by not being knowledgeable when helping me. 	Gefen, Karahanna, & Straub. (2003)
	Affective Trust	<ul style="list-style-type: none"> 1. I would feel a sense of personal loss if I could no longer use online vendor 2. If I share my problems with my online vendor, I feel he or she would respond caringly. 3. Online vendor displays a warm and caring attitude towards me. 4. I can talk freely with my online vendor about my problems at work and know that he or she will want to listen. 5. Online vendor is only interested in selling me products.(reversed) 	McAllister. (1995). Johnson & Grayson. (2005)
Cognition- and Affect based Attitude	Cognition-based Attitude	<ul style="list-style-type: none"> 1. I think that purchasing on this website is beneficial to me. 2. I think that purchasing on this website is a wise action. 3. I think that purchasing on this website is safe. 	Kraft, Rise, Sutton, & Røysamb. (2005) Chang & Wu. (2012).
	Affect - based Attitude	<ul style="list-style-type: none"> 1. I think that purchasing on this website is pleasant. 2. I think that purchasing on this website is nice. 3. I think that purchasing on this website is enjoyable. 4. I think that purchasing on this website is gratifying. 	Kraft, Rise, Sutton, & Røysamb. (2005) Chang & Wu. (2012)
Satisfaction		<ul style="list-style-type: none"> 1. Satisfied with purchases at this website. 2. If I had to purchase again, I would still feel Satisfied 3. Purchasing from this website was a wise decision 	Oliver. (1980) Anderson & Srinivasan. (2003). Chang &

			Wang. (2011)
Repurchasing Intention		<ol style="list-style-type: none"> 1. I expect to purchase on this website over the next two weeks. 2. I am very likely to purchase on this website over the next two weeks. 3. I intend to purchase on this website over the next two weeks. 4. I plan to purchase on this website over the next two weeks. 	Kraft, Rise, Sutton, & Røysamb. (2005) Chang & Wu. (2012).
Involvement		<ol style="list-style-type: none"> 1. When purchasing via the Internet, the purchasing decision is important to me. 2. When purchasing via the Internet, the decision is very relevant to me. 3. When purchasing via the Internet, the purchasing decision means a lot to me. 4. When purchasing via the Internet, the consequence of the decision matters to me. 5. When purchasing via the Internet, I put a lot of effort into making a decision. 6. When purchasing via the Internet, I have a high level of interest in the purchase process. 7. When purchasing via the Internet, I have a lot of fun in the purchase process. 8. When purchasing via the Internet, I am excited about the purchase process. 9. When purchasing via the Internet, the purchase process appeals to me. 10. When purchasing via the Internet, I feel cool in the purchase process. 	McQuarrie & Munson. (1992) Chang & Wu. (2012).

5.3 Data Collection Procedure

Data were collected via e-mail invitation and web-based questionnaire from convenient samples. The samples will consist of undergraduate students and company employees. Web-based questionnaire is a convenient way and conducive to get widespread data. It is beneficial to contain entire samples of internet users. Calder, Phillips, and Tybout (1981) suggested that when the research goal is an application of theory, any respondent group could help the theory's predictions. Therefore, convenience sampling is one way to achieve this study goal about the research of online shopping behavior.

5.4 Results

5.4.1 Respondents Characteristics

Questionnaires were distributed to 600 respondents. The characteristics of respondents are gathered and shown in Table 5-2. This study also conducts an online questionnaire, and invites the participants to fill out the internet questionnaire through e-mail and FB invitation. Totally, 505 valid respondents were used for further analyses. In total, 273 respondents were male (54.1%) and 232 were female (45.9%). Most respondents were aged less than 25 (89.5) and their occupations are students (87.7%). 420(83.2%) respondents had the experiences on shopping online, and most of respondents (69.5%) shop online less than twice every month.

Table5-2 Demographics and Descriptive Information of samples for this research

Demographic Variables		Frequency (n=505)	Percentage (%)
Gender	Male	273	54.1
	Female	232	45.9
Ages	Less than 25	452	89.5
	26-30	20	4.0
	31-35	11	2.2
	35-40	8	1.6
	41-45	6	1.2
	More than 45	8	1.6
Occupation	Official Worker	5	1
	Education Sector	17	3.4
	Business Sector	8	1.6
	Industrial Sector	9	1.8
	Service Sector	13	2.6
	High-Tech Sector	1	0.2
	Students	443	87.7
Experienced	Others	9	1.8
	yes	420	83.2
Frequency of online shopping/per month	No	85	16.8
	Less than twice	351	69.5
	3-4times	107	21.2
	5-6times	22	4.4
	7-8times	15	3
	9-10times	1	0.2
Monthly spending on internet shopping	more than 11times	9	1.8
	<2,000	412	81.6
	2,001~4,000	64	12.7
	4,001~6,000	13	2.6
	6,001~8,000	6	1.2
	8,001~10,000	5	1
	>10,000	5	1

5.4.2 Evaluation of Measurement Model

The collected data were analyzed by Partial Least Squares (PLS) using SmartPLS software. PLS is appropriate for causal-predictive analysis when the research model is more complicated (Chin, 1998). Both the measurement model and structural model can be simultaneously examined by PLS (Hair, Ringle, & Sarstedt, 2011). The measurement model was evaluated to ensure the reliability and validity of measurement scales. Table 5-3 shows the results of measurement model. The test of the measurement model involves the estimation of reliability and validity, which indicate the strength of measures used to test the proposed model (Fornell, 1987).

To assess the reliability of the constructs, confirmatory factor analysis (CFA), Cronbach's α and composite reliability (CR) were calculated (Fornell & Larcker, 1981). All constructs have Cronbach's α value higher than its critical value of 0.7 (Hair, William, Babin, & Anderson, 2010). All constructs have CR value higher than its critical value of 0.8 (Hair, William, Babin, & Anderson, 2010). Furthermore, both convergent and discriminant validity were examined to assess the validity of the measurement scales. Convergent validity was assessed by factor loading and average variance extracted (AVE). All factor loadings were higher than the critical value of 0.6. All AVE values were higher than the critical value of 0.5.

In addition, discriminant validity was assessed by the construct inter-correlations, AVE square root values, and a comparison between these values. As shown in Table 5.4, all construct correlations were lower than 0.7 (Kline, 1998) and all the AVE square root values are higher than constructs' inter-correlations in the research model. As such, the measurement model of the constructs is considered satisfactory for use in hypotheses testing.

Table 5.3 Results of Constructs Measurement

Constructs	Research Items	Loadings	AVE	CR	Cronbach's α
Antecedent	UWD				
	V-FRW1	0.8761	0.7447	0.9357	0.9138
	V-FRW2	0.876			
	V-FRW3	0.9056			
	V-FRW4	0.8105			
	V-FRW5	0.8434			
	HWD				
	V-ERW1	0.8896	0.8015	0.9417	0.9174
	V-ERW2	0.9012			
	V-ERW3	0.9078			
	V-ERW4	0.8821			
	RS				
	P3-RS1	0.8939	0.7954	0.951	0.9354
	P3-RS2	0.9233			
	P3-RS3	0.8907			
	P3-RS4	0.9127			
	P3-RS5	0.8362			
	ES				
	P3-ES1	0.8577	0.8207	0.9581	0.9451
	P3-ES2	0.9083			
P3-ES3	0.9327				

Constructs	Research Items	Loadings	AVE	CR	Cronbach's α	
	P3-ES4	0.9192				
	P3-ES5	0.9098				
	FR					
	R-PFR1	0.797	0.6301	0.9107	0.8821	
	R-PFR2	0.8246				
	R-PFR3	0.8275				
	R-PFR4	0.7819				
	R-PFR5	0.8039				
	ER					
	R-PER1	0.8901	0.7945	0.9392	0.9139	
	R-PER2	0.9098				
	R-PER3	0.8806				
	R-PER4	0.8846				
	SN					
	S-SN1	0.8924	0.7828	0.9351	0.9072	
	S-SN2	0.9154				
	S-SN4	0.8499				
	S-SN5	0.8801				
	SI					
	S-SI1	0.8132	0.8113	0.9449	0.9212	
S-SI3	0.9332					
S-SI4	0.9317					
S-SI5	0.9192					
Rational Attitude	UV					
	U-UV1	0.829	0.7571	0.9257	0.8928	
	U-UV2	0.8888				
	U-UV3	0.8931				
	U-UV4	0.868				
	RT					
	T-RT1	0.8491	0.7076	0.9237	0.8972	
	T-RT2	0.8335				
	T-RT3	0.8271				
	T-RT4	0.8615				
	T-RT5	0.8344				
	CA					
	A-CB1	0.8781	0.7635	0.9281	0.8969	
	A-CB2	0.9051				
A-CB3	0.8566					
A-CB5	0.8543					
Emotional Attitude	HV					
	U-HV1	0.7901	0.6702	0.9102	0.8809	
	U-HV2	0.764				
	U-HV3	0.8032				
	U-HV4	0.8532				
	U-HV5	0.8776				
	AT					
T-AT1	0.7574	0.7192	0.927	0.9001		

Constructs	Research Items	Loadings	AVE	CR	Cronbach's α	
	T-AT2	0.8913				
	T-AT3	0.9253				
	T-AT4	0.9009				
	T-AT5	0.7483				
	AA					
	A-AB1	0.9197	0.8417	0.9551	0.9373	
	A-AB2	0.9335				
	A-AB3	0.9177				
A-AB4	0.8985					
Results	SATISFACTION					
	SAT1	0.8756	0.7732	0.9316	0.9022	
	SAT2	0.8983				
	SAT3	0.8926				
	SAT4	0.8498				
	INTENTION					
	INT1	0.9198	0.8706	0.9711	0.9629	
	INT2	0.9496				
	INT3	0.9323				
	INT4	0.9445				
INT5	0.9187					
Moderating	INV1	0.8424	0.7040	0.9553	0.9473	
	INV2	0.8483				
	INV3	0.8691				
	INV4	0.8304				
	INV5	0.7642				
	INV6	0.8559				
	INV8	0.8336				
	INV9	0.8598				
	INV10	0.8436				

Table 5.4 Correlation Matrix

	AA	AT	CA	ER	ES	FR	HV	HWD	INTENT	RS	RT	SAT	SI	SN	UV	UWD
AA	0.917															
AT	0.6359	0.848														
CA	0.8222	0.6496	0.873													
ER	0.2979	0.4789	0.3103	0.891												
ES	0.7573	0.6118	0.6711	0.2898	0.905											
FR	0.4108	0.4975	0.4077	0.6745	0.4339	0.793										
HV	0.73	0.7049	0.6923	0.4427	0.6675	0.4402	0.818									
HWD	0.6156	0.4558	0.5509	0.1777	0.5133	0.342	0.5193	0.895								
INTENT	0.5622	0.523	0.5551	0.3258	0.5879	0.2971	0.591	0.3198	0.933							
RS	0.6619	0.5461	0.6724	0.2584	0.7717	0.4476	0.5525	0.4931	0.467	0.891						
RT	0.6478	0.7902	0.7123	0.3558	0.613	0.4487	0.6938	0.4887	0.5265	0.5911	0.841					
SAT	0.6976	0.5976	0.6934	0.2846	0.7028	0.3667	0.5951	0.4463	0.6821	0.6709	0.6224	0.879				
SI	0.5022	0.6161	0.5297	0.4779	0.4827	0.4022	0.6621	0.3782	0.4378	0.4001	0.5524	0.4394	0.9			
SN	0.6254	0.6093	0.6451	0.2924	0.5399	0.3525	0.6437	0.4656	0.5028	0.513	0.6581	0.5323	0.6831	0.884		
UV	0.7056	0.6409	0.7655	0.3114	0.6374	0.4118	0.6843	0.541	0.5137	0.7031	0.735	0.6026	0.536	0.6484	0.87	
UWD	0.522	0.4286	0.5274	0.1555	0.5029	0.3263	0.4422	0.7853	0.3239	0.5201	0.4985	0.411	0.3029	0.4494	0.6083	0.829

5.4.3 Evaluation of Structural Model

5.4.3.1 The effects of firm factors

Table 5-5 shows the results of the effects of firm antecedent factors which are utilitarian-related website design and hedonic-related website design. The results show that utilitarian-related website design has a positive influence on utilitarian value ($\beta = 0.4805$; $p < 0.001$) but has no influence on hedonic value ($\beta = 0.1168$; $p > 0.05$) while hedonic-related website design has a positive value on both utilitarian value ($\beta = 0.1628$; $p < 0.01$) and hedonic value ($\beta = 0.452$; $p < 0.001$) but the influence is stronger for hedonic value. Therefore H1a and H1b are supported.

The results also show that utilitarian-related website design has a positive influence on rational trust ($\beta = 0.3148$; $p < 0.001$) and affective trust ($\beta = 0.1883$; $p < 0.05$) with stronger influence on rational trust while hedonic-related website design has a positive effect on rational trust ($\beta = 0.2442$; $p < 0.01$) and affective trust ($\beta = 0.3103$; $p < 0.001$) with stronger effect on affective trust. Thus, H1c and H1d are supported.

Furthermore, the results show that utilitarian-related website design has a positive influence on cognitive-based attitude ($\beta = 0.2486$; $p < 0.01$) but has no influence on affective-based attitude ($\beta = 0.0997$; $p > 0.05$) while hedonic-related website design has a positive effect on cognitive-based attitude ($\beta = 0.3611$; $p < 0.001$) and affective-based attitude ($\beta = 0.5386$; $p < 0.001$) with stronger effect on affective-based attitude. Lastly, both utilitarian-related ($\beta = 0.1921$; $p < 0.05$) and hedonic-related ($\beta = 0.1708$; $p < 0.05$) website design have a positive effect on intention to shopping online. Therefore, H1e, H1f, and H1g are supported.

The R^2 values of all dependent constructs are higher than its critical value of 0.1 (Falk & Miller 1992), and the goodness-of-fit of the model is 0.379, which is considered as a large effect size for R^2 (Vinzi, et al. 2010). According to Vinzi et al. (2010), the goodness of fit index (GoF) greater than 0.36 is considered to be large; 0.25 is described as medium, while 0.10 is described as small.

Table 5-5 Path Coefficients of The Effects of Firm Factors

Hyp.	Path	Standardize Estimate	t-value
H _{1a}	Utilitarian Website Design → Utilitarian Value	0.4805***	8.3268
	Utilitarian Website Design → Hedonic Value	0.1168	1.4297
H _{1b}	Hedonic Website Design → Utilitarian Value	0.1628**	2.7075
	Hedonic Website Design → Hedonic Value	0.452***	6.1224
H _{1c}	Utilitarian Website Design → Rational Trust	0.3148***	3.8424
	Utilitarian Website Design → Affective Trust	0.1883*	2.507
H _{1d}	Hedonic Website Design → Rational Trust	0.2442**	3.054
	Hedonic Website Design → Affective Trust	0.3103***	4.1812
H _{1e}	Utilitarian Website Design → Cognitive Attitude	0.2486**	3.0959
	Utilitarian Website Design → Affect Attitude	0.0997	1.368
H _{1f}	Hedonic Website Design → Cognitive-based Attitude	0.3611***	4.9092
	Hedonic Website Design → Affect-based Attitude	0.5386***	8.4575
H _{1g}	Utilitarian Website Design → INTENTION	0.1921*	2.2295
	Hedonic Website Design → INTENTION	0.1708*	2.0348

Construct R^2

Utilitarian Value

0.3806

Rational Trust	0.2797
Cognitive-based Attitude	0.3335
Hedonic Value	0.301
Affective Trust	0.2237
Affect-based Attitude	0.3845
INTENTION	0.1178
<i>Goodness-of-Fit</i>	
0.379	

5.4.3.2 The effects of individual factors

Individual factors consist of two important factors, which are personal schema and perceived risk. Personal schema is divided into rational schema and emotional schema while perceived risk is divided into functional risk and emotional risk. Table 5-6 shows the results of the effects of rational schema and emotional schema. The results show that rational schema has a positive influence on utilitarian value ($\beta = 0.5234$; $p < 0.001$) and hedonic value ($\beta = 0.1086$; $p < 0.1$) with stronger influence on utilitarian value while emotional schema has a positive value on both utilitarian value ($\beta = 0.2336$; $p < 0.001$) and hedonic value ($\beta = 0.5949$; $p < 0.001$) with the stronger influence on hedonic value. Therefore H2a and H2b are supported.

The results also show that rational schema has a positive influence on rational trust ($\beta = 0.2969$; $p < 0.001$) and affective trust ($\beta = 0.1860$; $p < 0.05$) with stronger influence on rational trust while emotional schema has a positive effect on rational trust ($\beta = 0.3866$; $p < 0.001$) and affective trust ($\beta = 0.4683$; $p < 0.001$) with stronger effect on affective trust. Thus, H2c and H2d are supported.

Furthermore, the results show that rational schema has a positive influence on cognitive-based attitude ($\beta = 0.3847$; $p < 0.001$) and affective-based attitude ($\beta = 0.1922$; $p < 0.05$) with stronger effect on cognitive-based attitude while emotional schema has a positive effect on cognitive-based attitude ($\beta = 0.3761$; $p < 0.001$) and affective-based attitude ($\beta = 0.6098$; $p < 0.001$) with stronger effect on affective-based attitude. Lastly, rational schema ($\beta = 0.0342$; $p > 0.05$) has no influence on intention to shopping online while emotional schema has ($\beta = 0.5622$; $p < 0.001$). Therefore, H2e and H2f are supported while H2g is partially supported.

The R^2 values of all dependent constructs are higher than its critical value of 0.1 (Falk & Miller 1992), and the goodness-of-fit of the model is 0.481, which is considered as a large effect size for R^2 (Vinzi, et al. 2010). According to Vinzi et al. (2010), the goodness of fit index (GoF) greater than 0.36 is considered to be large; 0.25 is described as medium, while 0.10 is described as small.

Table 5-6 Path Coefficients of The Effects of Personal Schema

Hyp.	Path	Standardize Estimate	t-value
H _{2a}	Rational Schema → Utilitarian Value	0.5234***	8.2642
	Rational Schema → Hedonic Value	0.1086 ⁺	1.6592
H _{2b}	Emotional Schema → Utilitarian Value	0.2336***	3.9593
	Emotional Schema → Hedonic Value	0.5949***	10.0243
H _{2c}	Rational Schema → Rational Trust	0.2969***	3.3729
	Rational Schema → Affective Trust	0.1860*	2.3385
H _{2d}	Emotional Schema → Rational Trust	0.3866***	4.4834
	Emotional Schema → Affective Trust	0.4683***	6.1055
H _{2e}	Rational Schema → Cognition-based Attitude	0.3847***	4.9814
	Rational Schema → Affect-based Attitude	0.1922*	2.4105
H _{2f}	Emotional Schema → Cognition-based Attitude	0.3761***	5.1069
	Emotional Schema → Affect-based Attitude	0.6089***	8.9493
H _{2g}	Rational Schema → Intention to Shopping Online	0.0342	0.4705
	Emotional Schema → Intention to Shopping Online	0.5622***	7.9296
Construct R²			
	Utilitarian Value	0.5175	
	Rational Trust	0.4151	
	Cognition-based Attitude	0.5131	
	Hedonic Value	0.4656	
	Affective Trust	0.3885	
	Affect-based Attitude	0.5886	
	Intention to Shopping Online	0.347	
Goodness-of-Fit			
0.481			

Table 5-7 shows the results of the effects of functional risk and emotional risk. The results show that functional risk has no influence on utilitarian value ($\beta = 0.3573$; $p > 0.05$) but has a positive influence on hedonic value ($\beta = 0.2443$; $p < 0.01$) while emotional risk also has no influence on utilitarian value ($\beta = 0.0688$; $p > 0.05$) but has a positive influence on hedonic value ($\beta = 0.2992$; $p < 0.001$). Therefore H3a and H3b are not supported.

The results also show that functional risk has a positive influence on rational trust ($\beta = 0.3719$; $p < 0.001$) and affective trust ($\beta = 0.3217$; $p < 0.05$) with stronger influence on rational trust while emotional risk has a positive effect on rational trust ($\beta = 0.1087$; $p < 0.1$) and affective trust ($\beta = 0.2606$; $p < 0.001$) with stronger effect on affective trust. Thus, H3c and H3d are not supported.

Furthermore, the results show that functional risk has a positive influence on cognitive-based attitude ($\beta = 0.3617$; $p < 0.001$) and affective-based attitude ($\beta = 0.3848$; $p < 0.001$) with stronger effect on affective-based attitude while emotional risk has no effect on cognitive-based attitude ($\beta = 0.0618$; $p > 0.05$) and affective-based attitude ($\beta = 0.034$; $p > 0.05$). Lastly, functional risk ($\beta = 0.1393$; $p < 0.1$) and emotional risk ($\beta = 0.2308$; $p < 0.001$) have a positive influence on intention to shopping online. Therefore, H3e, H3f, and H3g are not supported.

The R^2 values of all dependent constructs are higher than its critical value of 0.1 (Falk & Miller 1992), and the goodness-of-fit of the model is 0.311, which is considered as a medium effect size for R^2 (Vinzi, et al. 2010).

Table 5-7 Path Coefficients of The Effects of Personal Scheme

Hyp.	Path	Standardize Estimate	t-value
H _{3a}	Functional Risk → Utilitarian Value	0.3573	1.1048
	Functional Risk → Hedonic Value	0.2443**	3.1571
H _{3b}	Emotional Risk → Utilitarian Value	0.0688	1.1048
	Emotional Risk → Hedonic Value	0.2992***	4.6048
H _{3c}	Functional Risk → Rational Trust	0.3719***	5.371
	Functional Risk → Affective Trust	0.3217***	4.4671
H _{3d}	Emotional Risk → Rational Trust	0.1087 ⁺	1.7849
	Emotional Risk → Affective Trust	0.2606***	4.1971
H _{3e}	Functional Risk → Cognition-based Attitude	0.3617***	4.4539
	Functional Risk → Affect-based Attitude	0.3848***	5.1052
H _{3f}	Emotional Risk → Cognition-based Attitude	0.0618	0.9198
	Emotional Risk → Affect-based Attitude	0.034	0.5061
H _{3g}	Functional Risk → Intention to Shopping Online	0.1393 ⁺	1.787
	Emotional Risk → Intention to Shopping Online	0.2308**	3.0814
Construct R²			
	Utilitarian Value	0.1662	
	Rational Trust	0.2057	
	Cognition-based Attitude	0.1654	
	Hedonic Value	0.2498	
	Affective Trust	0.2868	
	Affect-based Attitude	0.1672	
	Intention to Shopping Online	0.1169	
Goodness-of-Fit			
0.3111			

5.4.3.3 The effects of social factors

Table 5-8 shows the results of the effects of social factors which are social norms and social interaction. The results show that social norms has a positive influence on utilitarian value ($\beta = 0.527$; $p < 0.001$) and hedonic value ($\beta = 0.341$; $p < 0.001$) with stronger influence on utilitarian value while social interaction has a positive value on both utilitarian value ($\beta = 0.1778$; $p < 0.001$) and hedonic value ($\beta = 0.4349$; $p < 0.001$) with the stronger influence on hedonic value. Therefore H4a and H4b are supported.

The results also show that social norms has a positive influence on rational trust ($\beta = 0.5218$; $p < 0.001$) and affective trust ($\beta = 0.3535$; $p < 0.001$) with stronger influence on rational trust while social interaction has a positive effect on rational trust ($\beta = 0.2012$; $p < 0.001$) and affective trust ($\beta = 0.3739$; $p < 0.001$) with stronger effect on affective trust. Thus, H4c and H4d are supported.

Furthermore, the results show that social norms has a positive influence on cognitive-based attitude ($\beta= 0.5291$; $p < 0.001$) and affective-based attitude ($\beta= 0.5289$; $p < 0.001$) with stronger effect on cognitive-based attitude while social interaction has a positive effect on cognitive-based attitude ($\beta= 0.1708$; $p < 0.01$) and affective-based attitude ($\beta= 0.1412$; $p < 0.01$) with stronger effect on cognitive-based attitude. Lastly, social norms ($\beta= 0.3841$; $p < 0.01$) and social interaction ($\beta= 0.1757$; $p < 0.01$) have a positive influence on intention to shopping online. Therefore, H4e and H4g are supported while H4f is not supported.

The R^2 values of all dependent constructs are higher than its critical value of 0.1 (Falk & Miller 1992), and the goodness-of-fit of the model is 0.459, which is considered as a large effect size for R^2 (Vinzi, et al. 2010).

Table 5-8 Path Coefficients of The Effects of Social Factors

Hyp.	Path	Standardize Estimate	t-value
H4a	Social Norms → Utilitarian Value	0.527***	9.6955
	Social Norms → Hedonic Value	0.341***	5.792
H4b	Social Interaction → Utilitarian Value	0.1778***	3.707
	Social Interaction → Hedonic Value	0.4349***	8.4901
H4c	Social Norms → Rational Trust	0.5218***	9.9046
	Social Norms → Affective Trust	0.3535***	6.8494
H4d	Social Interaction → Rational Trust	0.2012***	3.9038
	Social Interaction → Affective Trust	0.3739***	6.8494
H4e	Social Norms → Cognition-based Attitude	0.5291***	8.9475
	Social Norms → Affect-based Attitude	0.5289**	2.5921
H4f	Social Interaction → Cognition-based Attitude	0.1708**	3.2614
	Social Interaction → Affect-based Attitude	0.1412**	2.5921
H4g	Social Norms → Intention to Shopping Online	0.3841**	2.8005
	Social Interaction → Intention to Shopping Online	0.1757**	2.8005
Construct R^2			
	Utilitarian Value	0.4376	
	Rational Trust	0.4564	
	Cognition-based Attitude	0.4328	
	Hedonic Value	0.5084	
	Affective Trust	0.4457	
	Affect-based Attitude	0.4019	
	Intention to Shopping Online	0.2708	
Goodness-of-Fit			
0.459			

5.4.3.4 The effects of attitude formation

Table 5-9 shows the results of the effects of attitude formation which consist of rational attitude and emotional attitude. Rational attitude consists of utilitarian value, rational trust, and cognitive-based attitude while emotional attitude consists of hedonic value, affective trust, and affect-based attitude. Totally, from 13 sub-hypotheses, only six hypotheses are supported. Those are first, hedonic value has a positive influence on intention ($\beta= 0.271$; $p < 0.001$); second, rational trust ($\beta= 0.1368$; $p < 0.05$), affective trust ($\beta= 0.1134$; $p < 0.1$), cognitive-based attitude ($\beta= 0.2412$; $p < 0.01$), and affective-based attitude ($\beta= 0.3269$; $p < 0.001$) have a positive effect on satisfaction; and lastly, satisfaction has a positive influence on intention ($\beta= 0.5049$; $p < 0.001$). Therefore, H5d, H6a-b, H7a-b, and H7e are supported while others are not supported.

The R^2 values of all dependent constructs are higher than its critical value of 0.1 (Falk & Miller 1992), and the goodness-of-fit of the model is 0.519, which is considered as a large effect size for R^2 (Vinzi, et al. 2010).

Table 5-9 Path Coefficients of The Effects of Attitude Formation

Hyp.	Path	Standardize Estimate	t-value
H5a	Utilitarian Value → SATISFACTION	0.0078	0.1132
H5b	Hedonic Value → SATISFACTION	0.0097	0.1444
H5c	Utilitarian Value → INTENTION	0.0181	0.2498
H5d	Hedonic Value → INTENTION	0.271***	3.3735
H6a	Rational Trust → SATISFACTION	0.1368*	2.1855
H6b	Affective Trust → SATISFACTION	0.1134 ⁺	1.725
H6c	Rational Trust → INTENTION	-0.0031	0.0332
H6d	Affective Trust → INTENTION	0.035	0.4459
H7a	Cognitive-based Attitude → SATISFACTION	0.2412**	2.9569
H7b	Affect-based Attitude → SATISFACTION	0.3269***	3.8392
H7c	Cognitive-based Attitude → INTENTION	0.0029	0.0333
H7d	Affect-based Attitude → INTENTION	-0.0239	0.2662
H7e	SATISFACTION → INTENTION	0.5049***	6.5178
Construct R^2			
	SATISFACTION	0.5592	
	INTENTION	0.5191	
Goodness-of-Fit			
0.519			

5.4.4 The moderating effects

5.4.4.1 The moderating effects of involvement

To evaluate the moderating effects of involvement moderator, this study used K-means method to cluster the respondents into 4 groups for each independent variable and moderator variable. For example, the respondents were divided into 4 groups using utilitarian-website design (UWD) and involvement (INV) as the two categorizing variable. Therefore, the respondents were divided into the following 4 groups: (1) High UWD/High INV, (2) High UWD/Low INV, (3) Low UWD/High INV, and (4) Low UWD/Low INV. The ANOVA results,

which used to compare the mean values of dependent variables, are as shown in Figure 5-1. These results indicated that when the utilitarian-website design is high, respondents with higher involvement tended to have higher utilitarian value ($F=99.239$, $p<0.000$) and higher rational trust ($F=100.044$, $p<0.000$) than those with lower involvement. Furthermore, when the hedonic-website design is high, respondents with higher involvement tended to have higher hedonic value ($F=95.839$, $p<0.000$) and higher affective trust ($F=101.197$, $p<0.000$) than those with lower involvement. Thus, H8a until H8d are supported.

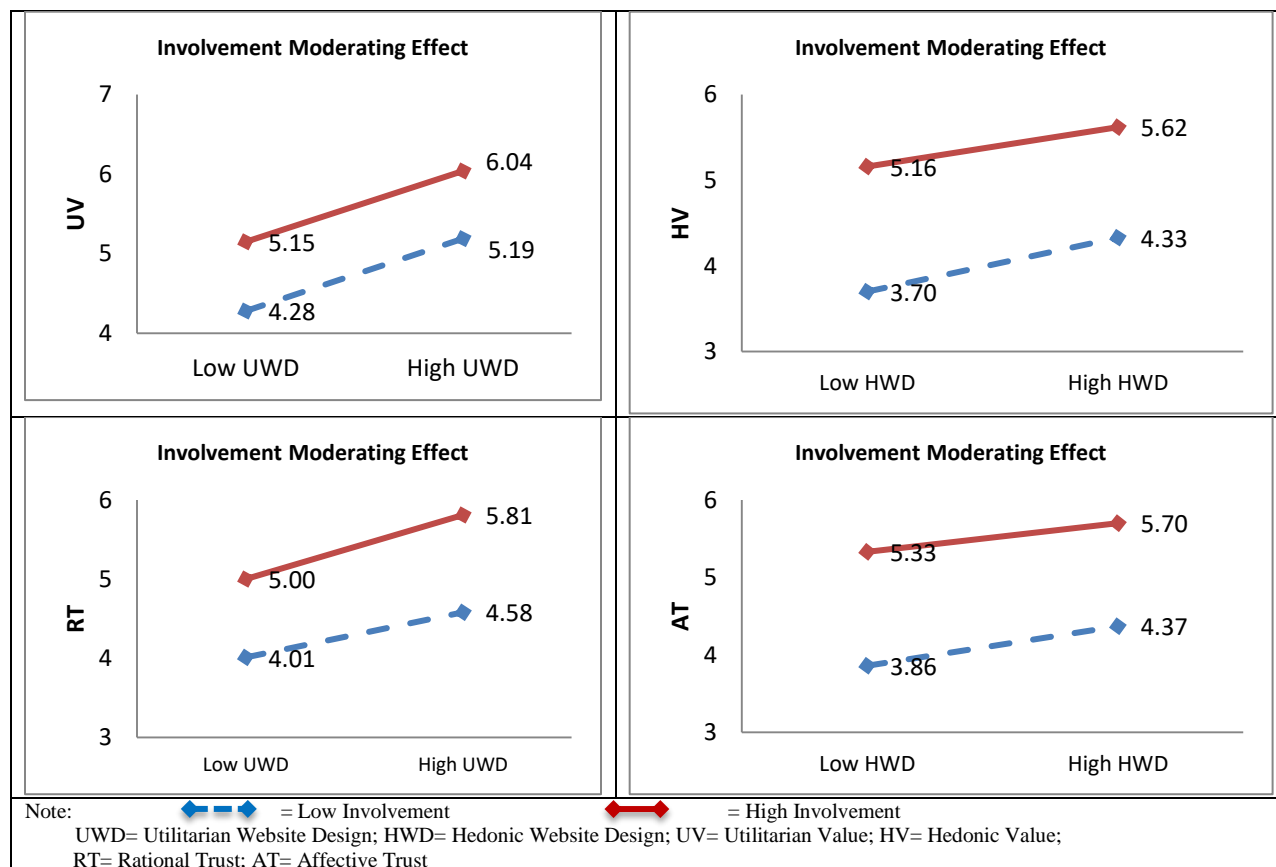


Figure 5-1. The Moderating Effects of Involvement

5.4.4.2 The moderating effects of experience

To evaluate the moderating effects of experience moderator, this study used K-means method to cluster the respondents into 4 groups for each independent variable and moderator variable. For example, the respondents were divided into 4 groups using utilitarian value and experience as the two categorizing variable. Therefore, the respondents were divided into the following 4 groups: (1) High UV/More EXP, (2) High UV/Less EXP, (3) Low UV/More EXP, and (4) Low UV/Less EXP. The ANOVA results, which used to compare the mean values of dependent variables, are as shown in Figure 5-2. These results indicated that when the utilitarian value is high ($F=40.411$, $p<0.000$), hedonic value is high ($F=53.527$, $p<0.000$), rational trust is high ($F=56.538$, $p<0.000$), and satisfaction is high ($F=98.597$, $p<0.000$), respondents with more shopping experience tended to have higher intention to do online shopping. On the other hand,

when affective trust is high ($F=46.941, p<0.000$), respondents with less shopping experience tended to have higher intention to do online shopping. Therefore, H9a, H9c, H9d, and H9e are supported while H9b is not supported.

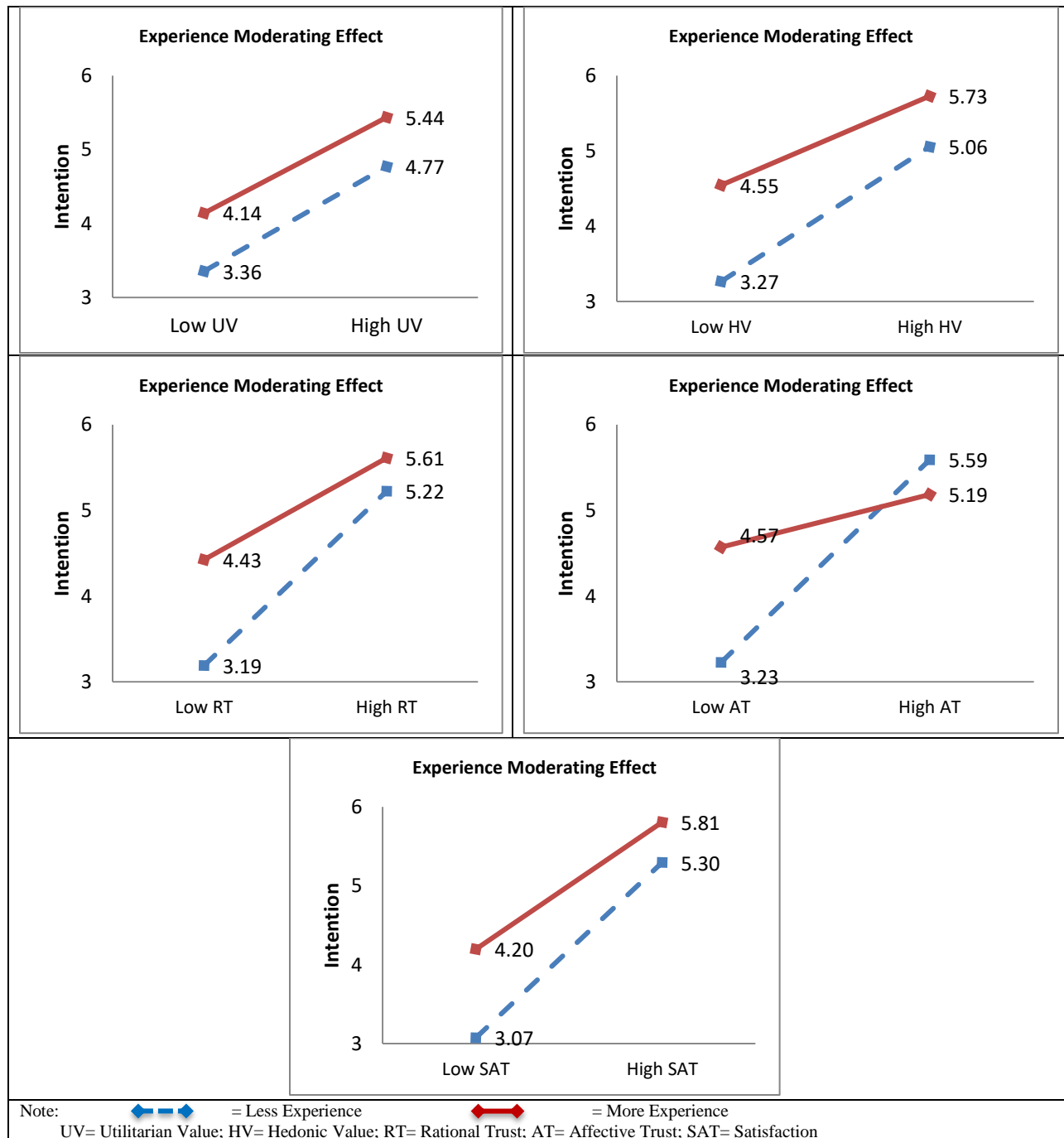
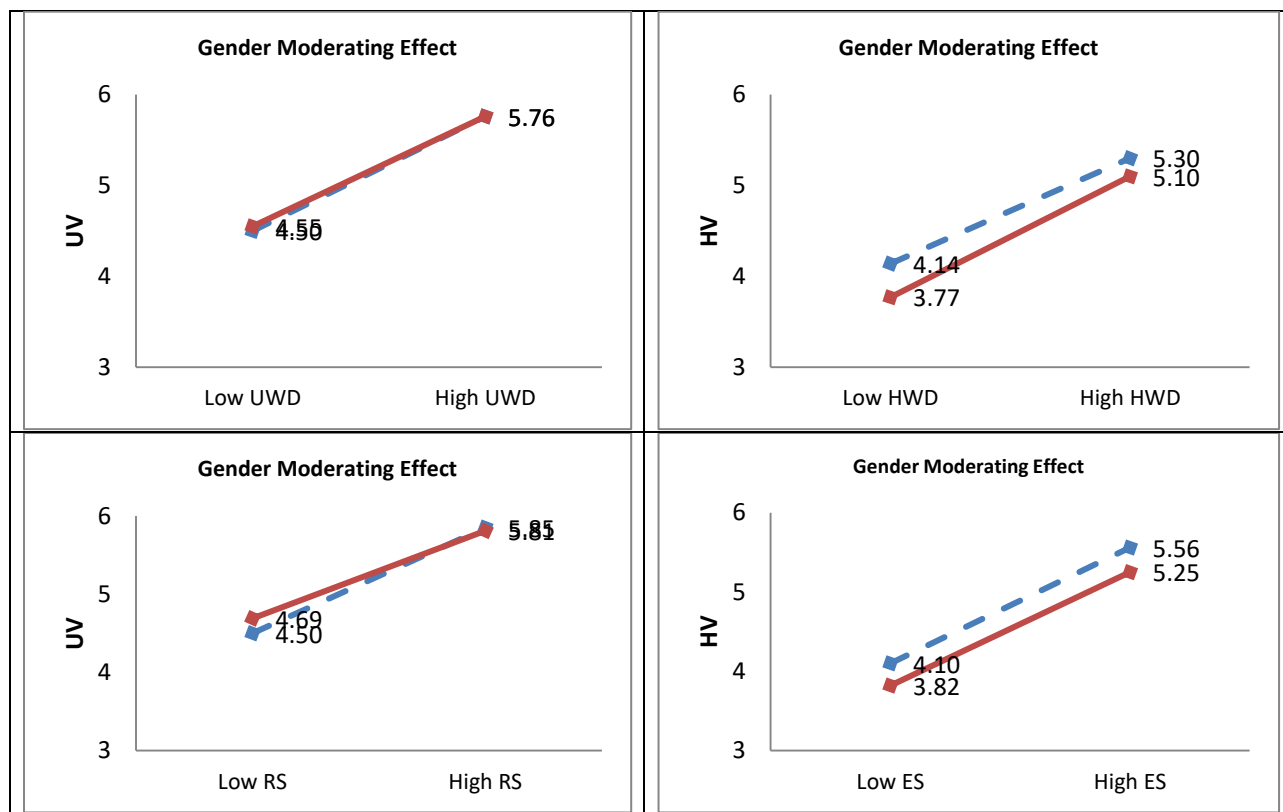


Figure 5-2. The Moderating Effects of Experience

5.4.4.3 The moderating effects of gender

To evaluate the moderating effects of gender moderator, this study used K-means method to cluster the respondents into 4 groups for each independent variable and moderator variable. For example, the respondents were divided into 4 groups using utilitarian-website design and involvement as the two categorizing variable. Therefore, the respondents were divided into the following 4 groups: (1) High UWB/Female, (2) High UWB/Male, (3) Low UWB/Female, and (4) Low UWB/Male. The ANOVA results, which used to compare the mean values of dependent variables, are as shown in Figure 5-3. These results indicated that when the utilitarian-website design is high ($F=51.550$, $p<0.000$) and rational schema is high ($F=63.812$, $p<0.000$), there are no big differences between female and respondents in influencing their utilitarian value. Furthermore, the results also show that when hedonic-website design is high ($F=30.494$, $p<0.000$) and emotional schema is high ($F=63.654$, $p<0.000$), male respondents tended to have higher hedonic value than those female respondents. Moreover, when rational schema is high ($F=44.293$, $p<0.000$) and functional risk is high ($F=28.196$, $p<0.000$), male respondents tended to have higher rational trust than those female respondents. Lastly, when emotional schema is high ($F=49.390$, $p<0.000$) and emotional risk is high ($F=40.304$, $p<0.000$), male respondents tended to have higher emotional trust than those female respondents. Thus, H10a until H10h are not supported.



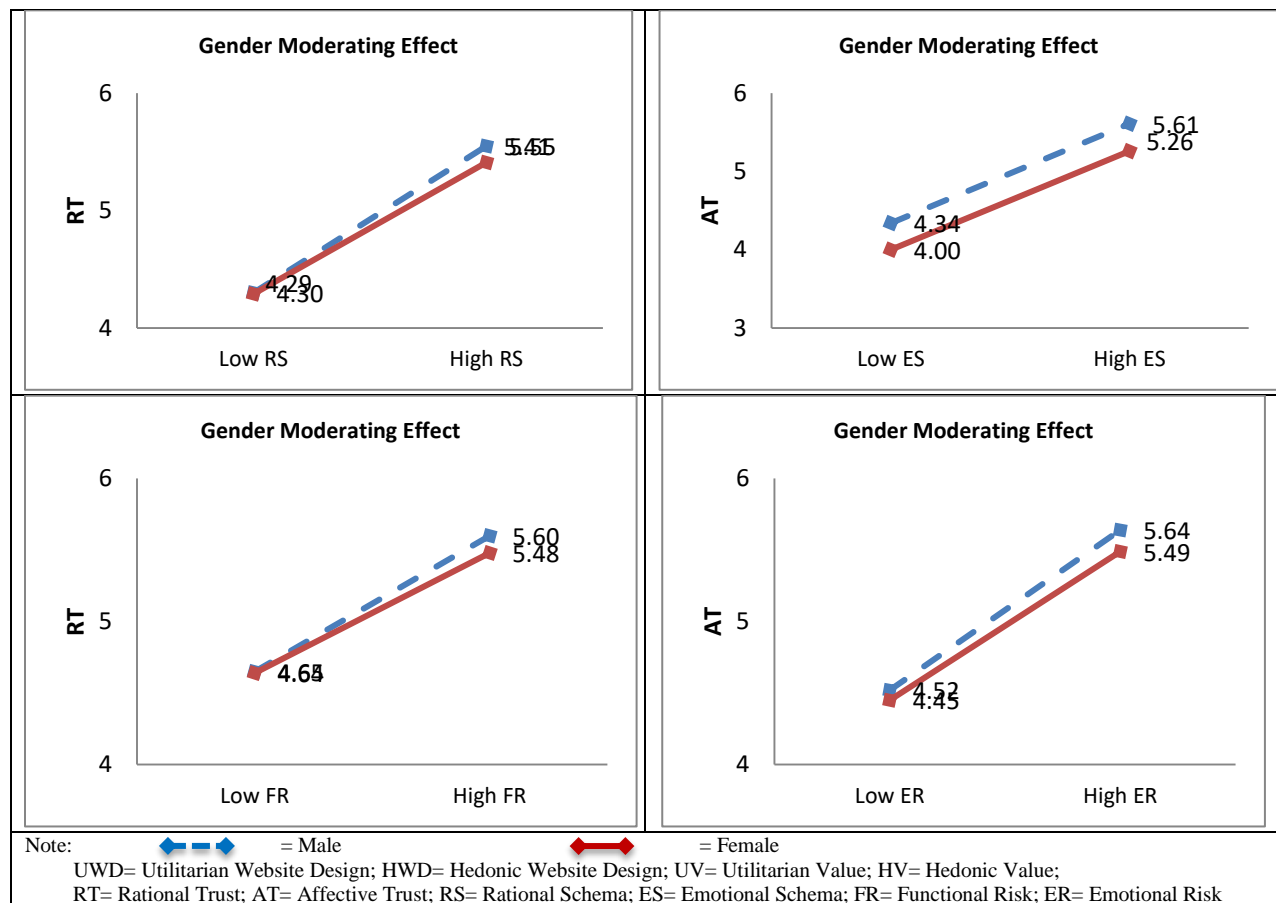


Figure 5-3. The Moderating Effects of Gender

VI. Conclusions and Suggestions

6.1 Conclusions

This study of online shopping behaviors was completed in 2 years. Within 2 years, there are 3 studies were conducted, such as qualitative study, meta-analysis and empirical study. For qualitative study, in-depth interviews were conducted with 19 experts from experienced online shoppers which consist of information engineers, students, researchers, and marketing managers. For meta-analysis study, a total of 41 articles which published from 2000 to 2014 were included. For empirical study, 505 valid respondents were used for analysis.

From 3 studies that were conducted, several conclusions can be drawn. First, for firm level, utilitarian-related website design has a stronger influence on all rational attitudes formation compare to hedonic-related website design while hedonic-related website design has a stronger influence on all emotional attitudes formation than utilitarian-related website design. The formal design website presents better performance in order process, legibility, and simplicity of website. It is also closer to the utilitarian, economic practice, properties of design as well as focus more on goal-achievement, well organization, and informational process. Therefore, it leads to rational attitudes formation. On the other hand, the hedonic design website is focused on presenting hedonic quality and is more reflected by hedonic, attractive, and enjoyable attributes of website design (Baia, Law, & Wen, 2008) and provides more

hedonic properties of a website's online visual attractiveness and enjoyment. Thus, it leads to emotional attitudes formation.

Second, for individual level, rational schema has a stronger effect on all rational attitudes formation than emotional schema while emotional schema has a stronger influence on all emotional attitudes formation than rational schema. Since personal schema is like individual's mental map and is cultivated by learning and past experience. Personal schema affects the online shopping process of collecting information, interpretations and selection (Lee, Chung, & Lee, 2011). Rational schema which involves perceived ease of use, usefulness, efficiency, and convenience tend to lead to higher rational attitudes formation while emotional schema which involves enjoyment, fun, desirability and pleasure tend to lead to higher emotional attitudes formation.

Third, for social factor, social norm has a stronger effect on all rational attitudes formation than social interaction while social interaction has a stronger effect on all emotional attitudes formation than social norm. Social norms are identified as the social pressure that influences the individual behavior intention (Ajzen, 1991) while social interaction is focused on the interpersonal interaction that could provide shopping enjoyment and enhance hedonic motivation (Toa, Liaob, & Linc, 2007). Therefore, social norm leads to higher rational attitudes formation while social interaction leads to emotional attitudes formation.

Fourth, almost all rational attitude and emotional attitude have a positive influence on satisfaction but only several of those attitudes have a positive influence on online purchase intention. It is implied that to make online purchasing, respondents of this study need to be satisfied first by the online shopping (Jones, Reynolds, & Arnold, 2006). Having only a favorable attitudes toward online shopping is not enough for them to do online purchasing.

Lastly, the results show that involvement, experience, and gender are important moderators for the relationship between antecedents, mediators, and outcome of online shopping. The results show that highly involved and more experienced respondents results in higher attitude formation and higher intention to shopping online than those with low involvement and less experienced respondents. The surprising results were shown for the moderating effect of gender. The results of the empirical study show that male respondents have higher emotional responses than female respondents when it comes to online shopping. It may be because of male respondents in this study have higher enjoyment when they do shopping online than female respondents.

6.2 Research Implications

6.2.1 Theoretical Implication

Although a plenty of studies have conducted to understand of customers' online shopping behavior, none of the previous studies have integrated those antecedents, mediators, and moderators into a more comprehensive framework like this study. Research framework that developed in this study may contribute to online shopping literature for further examination. This study intends to contribute to the current literatures from the following three aspects.

Firstly, this study treats the individual factors, vendor factors and social factors as the antecedents of value, trust and cognition-based and affect-based attitude to develop a more comprehensive model of online shopping behavior. Those antecedents were divided into both rational and emotional aspects of variables. This study also tried to verify the influence of antecedents on the cognitive attitude or affective attitude. The results show that rational

antecedents have stronger effect on rational attitude formation than emotional antecedents while emotional antecedents have stronger effect on emotional attitude than rational antecedents.

Secondly, this study identifies value, trust and cognition-based and affect-based attitude as three of the most important mediators that can bridge the effects of the antecedents on satisfaction and repurchasing intention. The results show that these important mediators have a positive influence on satisfaction but most of the mediators do not have a positive influence on intention to shopping online. It means that the effects of these rational attitude and emotional attitude on intention are mediated by satisfaction. From the results we can see that the respondents intend to do online shopping after they satisfy with online shopping. These results may need further validation.

Finally, this study identifies involvement, experience, and gender as the variables that moderate the influences of online shopping behavior. The results show that highly involved and more experienced respondents results in higher attitude formation and higher intention to shopping online than those low involvement and less experienced respondents. The surprising results were shown for the moderating effect of gender. The results of the empirical study show that male respondents have higher emotional responses than female respondents when it comes to online shopping. This is interesting to be validated for future research.

6.2.2 Managerial Implication

The results of this study also have some implication for practitioners, especially managers of online shopping companies. For managers, firstly, pay more attention to website design may become one of the most important things to win customers from the website. Different types of website design can arouse different values of customers. For the customers who pay more attention to perceived utilitarian, online vendors might make efforts to provide more function explanations of website designs to enhance the values such as safe, convenience, quick service and so on. For the customers who search for hedonic values, the attractive and fascinating website designs are the vital factors.

Second, the results suggest that marketers need to pay more attention to enhance customers' interests of the market through the creation of perceived utilitarian and hedonic attitudes. Most of the informants concerned the utilitarian values of speed, discount, and time, and hedonic value of beautiful pictures clear and close to real products, various and interesting introduction. How to enhance customers' utilitarian and hedonic evaluation is the key to open customers' mind.

Third, to attract customer to do online shopping, managers need to make sure that they can satisfy their customers. Based on our results, satisfaction fully mediates the effects of attitude formation on intention to shopping online. The results also show that rational attitude has stronger effect on satisfaction than emotional attitude. Therefore, eliciting customers' rational attitude such as utilitarian value, rational trust, and cognitive-based attitude may strengthen customers' satisfaction.

Lastly, to attract male customers, online shopping managers should promote more hedonic-related website design as well as hedonic value to them. Based on our results, male respondents have higher emotional responses than female respondents when it comes to online shopping. Having the attractive and fascinating website designs is important for online shopping companies to gather more male customers.

6.3 Limitation and Future Research Suggestions

Although the results of this study are interesting and plentiful, there are several limitations and suggestions for the future research. First, to the meta-analytic work, although the author has made an effort to collect all the relevant studies in the meta-analysis, some may not have been included. And, the collected studies might be suffered from some methodological weaknesses and measurement problems. A relatively small number of relationships were examined in previous studies. This affects the connections among the studies examined in this work. Although the constructs in all three models have all played as key factors that impact online shopping behaviors, others could also be discussed in future research, such as transaction cost theory, pricing model and so on.

Second, for the empirical study, the total data that were collected were 505 respondents and 87.7% of respondents are students. Although the students are the main group acting on Internet, the overall behaviors of customers may be different from students, and this issue may need to be validated further. Third, this study only collected data from Taiwanese customers; future study may collect data from different countries in order to test the generalizability of research model. Lastly, this study only used gender to test the moderating effect, other demographic variables such as income, age, etc. may also show different results.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2):179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4): 665-683.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: a contingency framework. *Psychology & Marketing*, 20 (2): 123-138.
- Argyriou, E. & Melewar, T. C. (2011). Consumer Attitudes Revisited: A Review of Attitude Theory in Marketing Research. *International Journal of Management Reviews*, 13(4):431-451.
- Babin, B., Hardesty, D. M., & Suter, T.A. (2003). Color and shopping intentions: the intervening effect of price fairness and perceived affect. *Journal of Business Research*, 56(7): 541-551.
- Bagozzi, R. P., Tybout, A. M., Craig, S., & Sternthal, B. (1979). The construct validity of the tripartite classification of attitudes. *Journal of Marketing Research*, 16 (1): 88-95.
- Bridges, E., & Florsheim, R. (2004). Hedonic and utilitarian shopping goals: the online experience. *Journal of Business Research*, 61(4):304-314.
- Cacioppo, J. T., Petty, R. E., Kao, C. F. & Rodriguez, R. (1986). Central and peripheral routes to persuasion - an individual difference perspective. *Journal of Personality and Social Psychology*, 51(5):1032-1043.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of Consumer Research*, 8 (2): 197-207.
- Chang, H. H., & Chen S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6):818-841.
- Chang, M.L., & Wu, W. Y. (2012). Revisiting perceived risk in the context of online shopping: an Alternative perspective of decision-Making styles. *Psychology & Marketing*, 29(5): 78-400.
- Chen, S. H., & Lee, K. P. (2008). The role of personality traits and perceived values in persuasion: an elaboration likelihood model perspective on online shopping. *Social Behavior and Personality*, 36(10):1379-1400.
- Chen, Y. Y. (2012). Why do consumers go internet shopping again? understanding the antecedents of repurchase intention. *Journal of Organizational Computing and Electronic Commerce*, 22(1): 38–63.
- Cheng, S. Y., Tsai M. T., Cheng, N. C., & Chen, K. S.(2012). Predicting intention to purchase on group buying website in Taiwan. virtual community, critical mass and risk. *Online Information Review*, 36 (5):698-712.
- Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, 33(4): 761-784.
- Chiu, C. M., Lin, H.Y., Sun S. Y., & Hsu, M. H. (2009). Understanding customers loyalty intentions towards online shopping: an integration of technology acceptance model and fairness theory. *Behaviour & Information Technology*, 28(4): 347-360.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3):319–339.
- Del Bosque, I. R., & Crespo, Á. H. (2011). How do internet surfers become online buyers? An integrative model of e-commerce acceptance. *Behaviour & Information Technology*, 30(2): 161-180.

- Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. *Journal of Personality and Social Psychology*, 59 (2): 202-216.
- Enrique, B.A., Carla R. M., Joaquín A.M., & Silvia S. B. (2008). Influence of online shopping information dependency and innovativeness on internet shopping adoption. *Online Information Review*, 32(5):648-667.
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research, Special Issue on Retail Strategy and Consumer Decision Research*, 54(2):177-184.
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing*, 20(2): 39-150.
- Farley, S. D. & Stasson, M. F. (2003). Relative influences of affect and cognition on behavior: Are feelings or beliefs more related to blood donation intentions? *Experimental Psychology*, 50 (1): 55-62.
- Gefen, D., Karahanna, E., & Straub, D.W. (2003). Inexperience and experience with online stores: the importance of TAM and trust. *IEEE Transactions on Engineering Management*, 50(3): 307-321.
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. *Aldine Publishing Company*, Hawthorne, NY.
- Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: antecedents in a technology acceptance model. *Journal of Business Research*, 62(5):565-571.
- Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, 32(2):128-137.
- Hernandez, B., Jimenez J., & Martí'n, M. J. (2009). Adoption vs acceptance of e-commerce: two different decisions. *European Journal of Marketing*, 43 (9/10): 1232-1245.
- Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management*, 10(4):549-570.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Thousand Oaks, CA: Sage.
- Jacoby, J. (2002). Stimulus-organism-response reconsidered: an evolutionary step in modeling (consumer) behavior. *Journal of Consumer Psychology*, 12(1): 51-57
- Jacoby, J., & Kaplan, L. B. (1972). The components of perceived risk. *Association for Consumer Research, Conference Proceeding*, 3: 382-393.
- Jai, T. M., Burns, L. D., & King, N. J. (2013). The effect of behavioral tracking practices on consumers' shopping evaluations and repurchase intention toward trusted online retailers. *Computers in Human Behavior*, 29(3):901-909.
- Johnson, D., & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research*, 58(4): 500-507.
- Jones, M., Reynolds, K., & Arnold, M. (2006). Hedonic and utilitarian shopping value: investigating differential effects on retail outcomes. *Journal of Business Research*, 59(9): 974-981.
- Kim, C., Galliers, R.D., Shin N., Ryoo, J.H., & Kim, J. (2012). Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, 11(4): 374-387.
- Kim, H., & Niehm, L. S. (2009). The impact of website quality on information quality, value, and loyalty intentions in apparel retailing. *Journal of Interactive Marketing*, 23(2):221-233.

- Kim, J. U., Kim, W. J., & Park, S. C. (2010). Consumer perceptions on web advertisements and motivation factors to purchase in the online shopping. *Computers in Human Behavior*, 26(5):1208–1222.
- Kim, J., & Forstthe, S. (2008). Adoption of virtual try-on technology for online apparel shopping. *Journal of Interactive Marketing*, 22(2):45-59
- Kim, S. S., Malhotra, N. K., & Narasimhan, S. (2005). Two competing perspectives on automatic use: a theoretical and empirical comparison. *Information Systems Research*, 16 (4):418-432.
- Kim,C., Galliers, R. D., Shin N., Ryoo, J. H., & Kim, J. (2012). Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, 11(4): 374–387.
- Kwon, S. J., & Chung, N. (2010). The moderating effects of psychological reactance and product involvement on online shopping recommendation mechanisms based on a causal map. *Electronic Commerce Research and Applications*. 9(6):522-536.
- Kraft, P., Rise, J., Sutton, S., & Røysamb, E. (2005). Perceived difficulty in the theory of planned behaviour: perceived behavioural control or affective attitude? *British Journal of Social Psychology*, 44 (3): 479-496.
- Kramer, R. M. (1999). Trust and distrust in organizations: emerging perspectives, enduring questions. *Annual Review of Psychology*, 50(1):569-598.
- Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of web sites. *International Journal of Human-Computer Studies*, 60 (3):269–98.
- Lee ,L. C., Chung, N., & Lee, S. (2011). Exploring the influence of personal schema on trust transfer and switching costs in brick-and-click bookstores. *Information & Management*, 48(8): 364-370.
- Lee, D. H., & Olshavsky, R. W. (1995). Conditions and consequences of spontaneous inference generation: A concurrent protocol approach. *Organizational Behavior and Human Decision Processes*, 61(2):177–189.
- Lee, K. C., & Kwon, S. (2008). Online shopping recommendation mechanism and its influence on consumer decisions and behaviors: A causal map approach. *Expert Systems with Applications*. 35(4):1567-1574
- Lee, K .S., & Lee, H .S. (2007). Factors influencing the adoption behavior of mobile banking: a South Korean perspective. *Journal of Internet Banking and Commerce*, 12 (2): 1-9.
- Lee, W. S.,& Selart, M. (2011). The impact of emotions on trust decision: in Handbook on Psychology of Decision-Making. Nova Science Publishers.
- Lin, C. L., Lee, S. H., & Horng, D. J. (2011). The effects of online reviews on purchasing intention: the moderating role of need for cognition. *Social Behavior And Personality*, 39(1):71-82.
- Lipsey, M. W., & Wilson, D. B. (2001). Practical meta-analysis. Beverly Hills: Sage.
- Matos, C. A., & Rossi, C. A. V. (2008). Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators. *Journal of The Academy of Marketing Science*, 36(4):578–596
- Mayer, R. C., Davis, J.H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3):709-734.
- McAllister, D. J. (1995). Affect-and cognition-based trust as Foundations for interpersonal Cooperation in organizations. *Academy of Management Journal*, 38(1):24-59.

- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial Trust Formation in New Organizational Relationships. *The Academy of Management Review*, 23(3):473-490.
- McQuarrie, E. F., & Munson, J. M. (1992). A revised product involvement inventory: Improved usability and validity. *Advances in Consumer Research*, 19(1):108-115.
- Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer Affairs*, 35 (1): 27-43.
- Morris, J. D., Woo, C., Geason, J. A., & Kim J. (2002). The Power of Affect: Predicting Intention. *Journal of Advertising Research*, 42(3):7-17.
- Neuendorf, K. A.(2002). Content analysis. guidebook. London: SAGE.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4):460-469.
- Overby, J. W., & Lee, E. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *Journal of Business Research*, 59(10/11): 1160–1166.
- Pahnila, S., & Warsta, J. (2010). Online shopping viewed from a habit and value perspective. *Behaviour & Information Technology*, 29(6):621-632.
- Peter, J. P., & Tarpey, L. X. (1975). A comparative analysis of three consumer decision strategies. *Journal of Consumer Research*, 2 (1): 29-37.
- Peterson, R. A., & Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. *Journal of Applied Psychology*, 90(1):175–181.
- Petter, S., & McLean, E. R. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: an examination of IS success at the individual level. *Information & Management*, 46(3):159-166
- Petty R.E., Cacioppo J. T., & Schumann D. (1983). Central and Peripheral Routes to Advertising Effectiveness: the moderating role of involvement. *Journal of Consumer Research*, 10 (2):135--46.
- Petty, R. E., & Cacioppo, J. T. (1984a). Source factors and the elaboration likelihood *model of persuasion*. *Advances in Consumer Research*, 11(1):668-672.
- Petty, R. E., & Cacioppo, J. T. (1984b). The elaboration likelihood model of persuasion. *Advances in Consumer Research*, 11(1):673-675.
- Roberts, M., & Pettigrew, S. (2013). Psychosocial influence on children's food consumption. *Psychology and Marketing*. 30(2):103-120.
- Rousseau, D. M., Sitkin, S. B., & Burt, R. S. (1998). Not so different after all: a cross-discipline view of trust. *The Academy of Management Review*, 23(3):393-404.
- Sherman, E. Mathu, A., & Smith, R. B. (1997). Store environment and consumer Purchase Behavior: mediating role of consumer emotions. *Psychology & Marketing*, 14(4):361–378.
- Singh N., Fassott G., Chao M. C. H., & Hoffmann J. A. (2006). Understanding international web site usage. A cross-national study of German, Brazilian, and Taiwanese online consumers. *International Marketing Review*, 23(1):83-97.
- To, P., Liao, C., & Lin, T. (2007). Shopping motivations on Internet: a study based on utilitarian and hedonic value. *Technovation*, 27(12): 774-784
- Wang, Y. J., Minor, M. S., & Wei, J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, 87(1): 46-58
- Williamson, O. E. (1993). Calculativeness, trust, and economic organization. *Journal of Law & Economics*, XXXVI (April):453-486.
- Yu, J., Ha, I., Choi, M., & Rho, J. (2005). Extending the TAM for a t-commerce. *Information & Management*, 42(7):965-976.

科技部補助專題研究計畫出席國際學術會議心得報告

日期：104 年 8 月 30 日

計畫編號	MOST 103-2410-H-343-020-MY2		
計畫名稱	從效用與娛樂的整合觀點探討網路購物之行為		
出國人員姓名	吳萬益	服務機構及職稱	南華大學企業管理學系專任 講座教授兼管理學院院長
會議時間	104 年 8 月 23 日至 104 年 8 月 26 日	會議地點	河南省河南大學
會議名稱	(中文)第 11 屆海峽兩岸華文出版論壇暨華文出版與傳統文化研究 學術研討會 (英文)		
發表題目	(中文)從功利主義與享樂主義的觀點探討消費者線上購物滿意度 (英文)		

一、參加會議經過

此次會議由北京大學現代出版研究所、臺灣南華大學管理學院華文出版趨勢研究中心和河北大學新聞傳播學院主推的海峽兩岸華文出版論壇，迄今已在兩岸成功舉辦 10 屆，而今年是舉行第 11 屆研討會議。此次參加第 11 屆海峽兩岸華文出版論壇暨華文出版與傳統文化研究學術研討會，在河南開封河南大學內舉辦，2015 年 8 月 23 日由河南大學舉辦歡迎晚宴款待各界貴賓，接著 8 月 24 日上午舉行開幕式，由河南大學新聞與傳播學院王鵬飛副院長主持，本

人作為台灣方面之學者代表上台致詞，接著由河南大學副校長張寶明教授、海峽兩岸華文出版論壇理事長蕭東發教授及河南大學新聞與傳播學院王文科書記上台致詞，並互贈紀念品及合影留念。

接著在當日上午舉行主題發言，共有 7 位專家學者發表論文。首先，邀請到韜奮基金會理事長聶震甯總裁以「大出版、新載體與廣傳播—我注六經，六經注我及代有時文」為題發表專題演講，其演講深刻地分析了資訊網路的應用，使整個時代出版有了相當大的改變，因此出版應當具備的長尾思路，同時也提及出版社資料庫的建立和國外傳統文化保存與開發的相關問題。第二階段邀請了臺灣南華大學楊聰仁教授發以「纏出中華文化嶄新意—春仔花·漾」為主題演講，圍繞在象徵閩南傳統文化的春仔花展開了系列演說。第三階段邀請了北京大學肖東發教授以「由導讀書目看中國經典著作與傳統文化」為題進行演講，闡述了中國經典書籍的選取工作，並傳達其觀點在閱讀上分為「深閱讀，慢閱讀，經典閱讀」的概念。第四階段則邀請到南京大學張志強教授以「國外出版教育的現狀與啟示」為題進行演講，該研究中呈現國內外各高校對於出版專業方面的設置與發展。第五階段由河北大學新聞傳播學院任文京教授以「近年來傳統文化圖書出版反思」為演講主題進行演說，任教授以「二十四孝圖」作為反面例子，其主要想傳達之概念為「發揚精華，摒棄糟粕，深度傳播傳統文化」等之精神，並表示當前的社會主義核心價值觀與傳統文化一脈相承。隨後更邀請了當日正好是 80 大壽的王振鐸老教授，他以「思想之光，歷史之境」為題，闡述了用思想來做學問的主題。最後邀請到河南大學李建偉教授，講授「大陸編輯出版專業高等教育發

展現狀及問題」，從現實出發。討論編輯出版學科的現狀、問題與解決辦法。以上這些專題演講，使大眾更深入了解現今華文出版之所面對問題，且現今有許多國際學生的加入學習中文，在華文教學之方面須更加完善的進行規劃。

8月24日下午開始論文發表，大會安排第一場是針對華文出版與傳統文化之議題發表論文並邀請8位學者專家進行發表，第二場則是以數字閱讀與出版創新邀請10位學者專家發表論文，第三場則以華文出版產業發展為主題，邀請10位專家學者進行論文發表。本人此次前往發表之論文題目為「從功利主義與享樂主義的觀點探討消費者線上購物滿意度」，與會學者對於本論文之內容相當有興趣，多位學者於會後討論未來共同合作進行相關議題研究之可行性。

二、與會心得

此次主要是因為南華大學與北京大學、河北大學、河南大學、武漢大學及北京印刷學院等學校共同努力，在過去10年持續舉辦海峽兩岸華文出版論壇及學術研討會，10年不是一段很短的時間，這個研討會特別在北京大學蕭東發教授的領導之下，能夠在各地分別舉辦，而每次開會均能邀請到相當多華文出版界的學者專家來討論此一議題，特別是南華大學所擔任的角色一直被大陸學者所尊重，這樣一個非常合作的專業團體，不論是在大陸或在台灣都創造非常好的成效。同時，藉此次會議多位學者表示可以進行合作研究，希望未來能夠具體落實，與國際學者進行更進一步的合作。

三、發表論文全文或摘要

近幾年，因為普遍的科技發展而影響電子商務大幅成長。從 eMarketer 的報告指出，網路賣家、網路購物者和網站營收都持續增加(Chen, 2012)。網路商店藉由資訊的共享和各種不同的搜尋服務，可以達到：更快的交貨、較低的價格、縮短購物時間，此優勢降低資訊不對稱問題也降低轉嫁成本，對傳統商店造成威脅。(Lee, Chung, & Lee, 2011)。先前有許多研究已討論過接受新科技和新購物環境的態度的重要性，而實證結果也顯示這些因素確實顯著地影響消費者的決定。讓消費者感到有效率，能正確且放心地執行線上交易，則能增加潛在網路購物者的信心，並成功轉換至新的購物管道，影響其決定(Hernandez, Jimenez, & Martin, 2009)。新科技如虛擬試穿，增加了網路購物商店和消費者的互動性、娛樂性，網路購物者的接受度在此明顯地扮演重要的角色(Kim, & Forstthe, 2008)。由此可見創新接受度直接且正面的影響了未來的網路購物意圖，且對電子商務呈現正向態度者也有很高的接受度。(Enrique, Carla, Joaquín, & Silvia, 2008)。

另外，相關研究指出消費者的感知和行為受到購物環境影響，依網站風格的呈現和產品的類別有所不同。消費者態度影響消費者感知，消費者感知又直接影響購物意圖。Sternthal(1979)指出態度上的認知基礎和情感基礎可以提供較好的線上購物行為解釋。(Chang & Wu, 2012)。然而過去的研究通常不是專注在理性決策模型就是個人情感狀態，鮮少有將之統合成一個全面完整的架構。本論文即試圖發展出整合性的線上購物架構，包括理性和感性的面向，並且對線上購物行為做一個完整的討論。

本研究整合了理性和感性的影響因子，可以充分了解消費者線上購物意圖。在電子商務消費者行為的議題上，過去的研究鮮少同時討論到理性和感性。為了填補這些研究上的缺失，本研究特別以功利主義價值、享樂主義價值、理性信任、感性信任、認知態度及情感態度等項目作為線上購物滿意度及再次購買意願之影響變數，此種構思將比過去之研究更加具體周延，預期可以與過去研究之結果比對，以了解本研究所發展之研究模型的優劣。

研究之結果並顯示網頁設計對態度的影響大於價值和信賴，態度對滿意度和再次購買意願的影響也大於價值和信賴。而注重情感的消費者在態度的影響又較注重功利主義的消費者強烈。由以上討論得知，網頁設計對價值、信賴和態度皆有正面影響，而價值、信賴和態度對購物滿意度和再次購買意願也皆有正面影響，不同類型的網頁設計可以引發消費者的不同價值。當消費者注重功利價值時，線上賣家應該提供功能性的網頁設計藉以增加價值，例如安全、方便、快速服務……等。當消費者注重享樂價值時，吸引人和迷人的網頁設計就會是最重要的影響原因。大部分的消費者經常在網路上購買日常用品，例如書、服飾等，此類線上購物決策對他們來說並不是很重要。因此這類的消費者會較注重功利主義價值，具有功利主義設計的網頁可以幫助他們快速了解商品資訊，並且正確無誤的購買所需要的商品。

四、建議

過去十年來大陸華文出版與傳統文化之研究有相當大的進步，十多年前台

灣之華文出版遠遠領先大陸，但隨著時間的過往，大陸的進步有目共睹，未來兩岸之合作，必須要有更創新之作為，才能領導學術之潮流，因此建議學校可考慮再投入更多資源使本校之華文研究及華文出版能夠更上一層樓。

五、 攜回資料名稱及內容

此次與會本人帶回大會手冊及論文集光碟，將予以詳細閱讀，有部分研究成果將加以整理後做為教材，有部分則將做為往後研究之參考資料。

科技部補助專題研究計畫出席國際學術會議心得報告

日期：104 年 11 月 30 日

計畫編號	MOST 103-2410-H-343-020-MY2		
計畫名稱	從效用與娛樂的整合觀點探討網路購物之行為		
出國人員姓名	吳萬益	服務機構及職稱	南華大學企業管理學系專任講座教授兼管理學院院長
會議時間	104 年 11 月 15 日至 104 年 11 月 18 日	會議地點	商業大學河內校區
會議名稱	(中文) 灰色經濟：經濟學之實踐與新興議題國際研討會 (英文) Informal Economy: Practices and Emerging Issues in Economics International Conference		
發表題目	(中文)再合作意願之前置與中介變數之實證研究 (英文) Antecedents and Mediators of Re-patronage Intention: An Empirical Study.		

一、參加會議經過

此次會議是由越南教育部、越南商業大學以及南華大學所共同舉辦之國際研討會議。在過去幾年中，經濟的快速成長，促進了越南及東南亞各國的灰色經濟的發展。然而，尚未有關探討其灰色經濟對於國家經濟貢獻（如生產價值、勞動力等方面）的具體研究。因此，此次大會以「Informal Economy: Practices and Emerging Issues in Economics International Conference」為主題。希望能夠更深入探討灰色經濟。

本會議從 2015 年 11 月 15 日開始，當天主辦單位舉辦晚宴來歡迎各界

嘉賓，接著再 11 月 16 日由越南商業大學校長 Prof. Dinh Van Son 發表開幕致詞後，進行分組討論。此研討會主要之目的如有：(1)收集和更準確地統計這一部門，以提出扶貧戰略；(2)制定政策，支持灰色經濟的單位/組織提高其績效；(3)保護這一部門的勞動力；(4)國家對該部門勞動力的完美政策；(5)研究與管理主題相關的效率和有效性問題。

本次研討會之主題主要分為 8 類，其分別探討：(1)越南和其他國家發展灰色經濟的經驗；(2)國家對灰色經濟中的灰色企業和工人的管理政策；(3)針對灰色經濟中工人的培訓計劃；(4)灰色會計（灰色企業的會計活動，灰色信貸，灰色匯款等）；(5)灰色貨物運輸；(6)灰色交易中的信息技術應用；(7)灰色企業的活動，模式和營銷策略；(8)政府或私營部門的管理相關主題，包括營銷管理，財務管理，運營管理，人力資源管理，信息和技術管理以及其他管理領域。

會議依造各主題總共分為 8 個場次進行論文口頭報告，每場次上下場各進行約 6 篇論文頭口發表，本人此次前往發表之論文題目為「Antecedents and Mediators of Re-patronage Intention: An Empirical Study」，與會學者對於本論文之內容相當有興趣，多位學者於會後討論未來共同合作進行相關議題研究之可行性。本人待參加研討會之後，特別與越南商業大學校長、副校長及國際長討論雙方可能之合作事項，終於敲定兩校將以合作辦學之方式，在越南開辦 MBA 學位班，由南華大學負責草擬計畫書，並經討論之後送雙方政府核定，即可開始招生，在完成討論後的隔天，適逢越南商業大學 55 週年校慶，

本人也特別參與該校之校慶，在校慶場合中越南教育部長也前來道賀，本人有機會與越南教育部長進行短暫的交談，並向他表達謝意。並邀請到越南總理以及越南教育界官員及許多大學校長前來出席致詞，因此透過此機會有幸與越南各界專家與學者有更進一步的互動。

二、 與會心得

此次前往越南河內商業大學與南華大學共同舉辦之國際學術研討會並順道參加河內商業大學 55 週年校慶，深覺獲益良多。越南人口已超 9000 萬，最近幾年其經濟發展非常順利，越南第一年之工資已經吸引超過 4000 家台商前往投資設廠，此次有幸能夠與越南各界專家學者進行短暫交流，對於未來國際合作之開展有很深之幫助。特別針對灰色經濟之議題，越南政府相當有經驗，此次研討會是由南華大學、越南商業大學及越南教育部共同舉辦，此次除參加研討會並發表論文之外，並拜訪校長 Dr. Son 洽談本校與越南商業大學未來之合作機會。另外大會安排每一場主題論壇發表時間僅有 90 分鐘，但安排 present 之 paper 約在 6 篇左右，因此所能夠交流的時間就比較有限，然而在會議進行中及在結束後之晚宴能夠在會後時段仍有機會與相關領域的學者進行交流，仍覺得頗有收穫。此次有多位學者表示可以進行合作研究，希望未來能夠具體落實，與國際學者進行更進一步的合作。

三、 發表論文全文或摘要

The major objectives of this study are to identify the interrelationships among customer shopping motives, utilitarian and experiential value, expenditure resources, customer satisfaction, and re-patronage intention. Data on department store shoppers were collected by surveying 308 male and female consumers who said they had made at least one purchase from a department store during the previous 3-month period. A total of 308 survey questionnaires were collected, all of the questionnaires were usable. Analysis result on 308 customers shows there is a significant difference in that consumer with high shopping motives had higher utilitarian and experiential shopping value; consumers with high shopping motives when have a shopping trip will tend to spend more time and money in the department store; utilitarian and experiential value dimensions each affected consumers satisfaction; both utilitarian and experiential value have positively influence on re-patronage intention and we find that different levels of shopping motives were not significantly different in shopping satisfaction. This finding provides several suggestions to retail managers: first, they must pay much attention to consumers with low level of shopping motives, and try to raise their motivation of shopping or interesting by using promotion or other means. Second, marketers need to consider multiple ways to enhance their total consumer value package, stimulating both the utilitarian route and the experiential route in order to create the best value proposition for customers. Third, making efforts to improve repeat patronage intention with utilitarian value will increase customers to visit again in the future.

四、 建議

此次會議邀請到越南國民議會、部委、省人民委員會、越南工商會、及來自越南大學，學院和研究機構的代表，而其他國家有來自台灣、中國、韓

國、菲律賓、日本、法國、德國、澳大利亞及美國的企業和學者的代表參與出席，然其論文篇數約有 100 餘篇，但大多數論文著作採用越南語言書寫，因此在研讀上較為困難，且研討論會文章均列印出紙本裝訂成冊，並無相關電子檔資料，建議修改為 CD 較為適當較不浪費紙張，且語言期望能夠擁有更多以英語進行撰寫較為恰當。

五、 攜回資料名稱及內容

此次與會本人帶回大會手冊及 Informal Economy: Practices and Emerging Issues in Economics International Conference 論文集紙本，將予以詳細閱讀，有部分研究成果將加以整理後做為教材，有部分則將做為往後研究之參考資料。

科技部補助專題研究計畫出席國際學術會議心得報告

日期：104 年 7 月 30 日

計畫編號	MOST 103-2410-H-343-020-MY2		
計畫名稱	從效用與娛樂的整合觀點探討網路購物之行為		
出國人員姓名	吳萬益	服務機構及職稱	南華大學企業管理學系專任講座教授兼管理學院院長
會議時間	105 年 7 月 21 日至 105 年 7 月 24 日	會議地點	越南峴港商業學院
會議名稱	(中文) 越南中南部海灣之永續觀光發展國際研討會 (英文) Sustainable Tourism Development of South Central Coast of Vietnam		
發表題目	(中文) 觀光旅遊研究之引用分析 (英文) A Citation Analysis of Hospitality Research		

一、參加會議經過

越南中南部海灣之永續觀光發展國際研討會是由南華大學、越南商業大學及峴港商業學院共同舉辦，會議從 7 月 21 開始舉行，當晚由主辦單位越南商業大學設宴款待各界嘉賓，接著於第二天早上由越南商業大學校長 Prof. Dinh Van Son 主持開幕式，並邀請本人及峴港商業學院校長 Dr. Dinh Van Tuyen 上台講話，本人談話內容如下：

「 On behalf Nanhua Univeristy from Taiwan, I would like to send my sincere congratulations and appreciation to Vietnam University of Commerce and Danang College of Commerce, particular to President Dinh Van Son and President Dinh Van Tuyen to organize this conference and to arrange all of us to attend this wonderful conference today. As one of the co-sponsors of the Conference, I am very great to see so many participants from different parts of the world. I am deeply convinced that the conversations and interactions among scholars,

administrators and business professionals will integrate our knowledge to understand “Sustainable tourism development of South Central Coast of Vietnam”. In recent years, the provinces located in the region have had a number of policies and measures to develop tourism and initially achieved important results. However, there are many underlying factors for unsustainable tourism in terms of growth quality, competitiveness of tourism products, weaknesses of infrastructure system and technical infrastructure for tourism development, and environmental and social issues, etc. These pose big issues for the government, businesses and research organization helpful to reach consensus about the sustainable development of tourism in South Central Coast of Vietnam. Nanhua University is located in Chiayi, Taiwan and was founded by Venerable Master Hsing Yun. Through the support of millions of Fo Guang Shan worshippers. The University is centered on the balanced development of five principles, including humanization, specialization, digitalization, industrialization and internationalization. The University’s unique educational mission is to achieve life and cultural coordination in a spirit of charity and justice, with high-quality teaching. I firmly believe that this educational goals can be shared with Vietnam University of Commerce, Hue University as well as many other universities. Therefore, I hope we can develop more exchange and collaboration programs among universities in the near future. Finally, I want to express my deepest appreciation to President Son and President Tuyen who make the conference realize today, wish all of the distinguished guests have a wonderful stay in Danang. Thank you.」

開幕之後開始分組論文發表，本人此次發表之主題為「A Citation Analysis of Hospitality Research」，與會學者對於本論文之內容相當有興趣，多位學者於會後討論未來共同合作進行相關議題研究之可行性。主要之考慮到岬港是一個非常漂亮的海港都市，有數十公里之白色沙灘及明亮之天空，是政府開發吸引國際觀光客之重點都市，此次研討會中，看到多位學者專家均以永續觀光之議題發表論文，深深覺得像越南這個所得比台灣低的國家，也已經全力重視環境保護及資源永續之議題，非常令人敬佩。

二、 與會心得

本人多次與越南商業大學合作辦理不同議題之研討會，其主要考量是一方面帶領南華大學之學者前往越南了解當地政治、經濟、文化及觀光產業之變遷與進步。另外，也要藉多次參與研討會來找出機會與越南商業大學校長、副校長、國際長以及相關單位主管洽談可能之合作辦學模式，經過三次共同舉辦研討會，越南商業大學首先同意支持南華大學主辦下一屆研討會在南華召開，同時同意與南華大學合作辦學開辦MBA境外專班，因此透過多方交流，不但能夠與越南商業大學各階層及相關領域之教授建立友好關係，並能夠在互信之基礎下合作辦學，使兩校合作之前景往前邁進一大步，展望未來，本校將舉辦下一屆研討會，邀請越南商業大學及其他相關大學前來本校發表論文，並開展更大規模之合作契機。

三、 發表論文全文或摘要

This paper identified the most frequently cited hospitality scholars in periods from 2006 to 2015. The two refereed hospitality journals, International Journal of Hospitality Management and International Journal of Contemporary Hospitality Management were the focus of analysis. The results of a productivity analyses pertaining to repeat authorship, author affiliation, and research contributions are presented. Findings of the paper contribute to providing insights on multidisciplinary structure of hospitality research using bibliometric technique.

四、 建議

此次會議邀請到來自台灣、中國、日本、法國、奧地利及美國之學者代表參與出席，然其論文篇數約有 100 餘篇，但大多數論文著作採用越南語言書寫，因此在研讀

上較為困難，期望能夠擁有更多以英語進行撰寫的文章較為恰當。

五、 攜回資料名稱及內容

此次與會本人帶回大會手冊及 Sustainable Tourism Development of South Central Coast of Vietnam 論文集紙本，將予以詳細閱讀，有部分研究成果將加以整理後做為教材，有部分則將做為往後研究之參考資料。

科技部補助計畫衍生研發成果推廣資料表

日期:2016/10/17

科技部補助計畫	計畫名稱: 從效用與娛樂的整合觀點探討網路購物之行為
	計畫主持人: 吳萬益
	計畫編號: 103-2410-H-343-020-MY2 學門領域: 行銷
無研發成果推廣資料	

103年度專題研究計畫成果彙整表

計畫主持人：吳萬益		計畫編號：103-2410-H-343-020-MY2				
計畫名稱：從效用與娛樂的整合觀點探討網路購物之行為						
成果項目		量化	單位	質化 (說明：各成果項目請附佐證資料或細項說明，如期刊名稱、年份、卷期、起訖頁數、證號...等)		
國內	學術性論文	期刊論文		0	篇	
		研討會論文		0		
		專書		0	本	
		專書論文		0	章	
		技術報告		0	篇	
		其他		0	篇	
	智慧財產權及成果	專利權	發明專利	申請中	0	件
				已獲得	0	
			新型/設計專利		0	
		商標權		0		
		營業秘密		0		
		積體電路電路布局權		0		
		著作權		0		
		品種權		0		
		其他		0		
	技術移轉	件數		0	件	
		收入		0	千元	
	國外	學術性論文	期刊論文		1	篇
研討會論文			3			
		Wu, W.Y., Quyen, P.T.P., & Rivas, A.A.A. (2016). How e-servicescapes affect customer online shopping intention: the moderating effects of gender and online purchasing experience. Information Systems and e-Business Management. http://link.springer.com/article/10.1007/s10257-016-0323-x (Published online on June 18, 2016). [SSCI]				
		1. 吳萬益、廖英凱、許婷婷 (2015) 從功利主義與享樂主義的觀點探討消費者線上購物滿意度，第11屆海峽兩岸華文出版論壇暨華文出版與傳統文化研究學術研討會。(8/23-8/26，河南省河南大學。)				
		2. Wu, W.Y., Liao, Y.K., Qomariyah, A., & Lin, Y.S. (2015) Antecedents and Mediators of Re-				

					patronage Intention: An Empirical Study. Informal Economy: Practices and Emerging Issues in Economics International Conference, 15-18 November, Hanoi, Vietnam. 3. Wu, W.Y., Nguyen, M. H. (2016) A Citation Analysis of Hospitality Research, Sustainable Tourism Development of South Central Coast of Vietnam, 21-24 July, Da Nang City, Vietnam.
	專書		0	本	
	專書論文		0	章	
	技術報告		0	篇	
	其他		0	篇	
智慧財產權 及成果	專利權	發明專利	申請中	0	件
			已獲得	0	
		新型/設計專利	0		
	商標權		0		
	營業秘密		0		
	積體電路電路布局權		0		
	著作權		0		
	品種權		0		
	其他		0		
技術移轉	件數		0	件	
	收入		0	千元	
參與計畫人力	本國籍	大專生	0	人次	
		碩士生	0		
		博士生	1		
		博士後研究員	0		
		專任助理	0		
非本國籍	大專生	0			
	碩士生	0			
	博士生	3			
	博士後研究員	0			
	專任助理	0			
其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)					

科技部補助專題研究計畫成果自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否具有政策應用參考價值及具影響公共利益之重大發現）或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以100字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形（請於其他欄註明專利及技轉之證號、合約、申請及洽談等詳細資訊）

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以200字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性，以500字為限）

本研究第一年之目的有(1)從個人、公司及社會的角度發展一個整合性的線上購買行為意圖模型，(2)透過後設分析探討過去有關線上購買之文獻。第一年之研究有以下之結論，在深入訪談部份本研究訪問了十九位專家，在後設分析方面本研究蒐集2001-2014年之相關文章共41篇，進行綜合分析，發展成為一個整合性的模型及18個研究假設。在後設分析中，本研究從18個假設中抽出共針對12個研究假設進行驗證，其中10個假設獲得支持，第二年之量化研究是以第一年所推導之研究假設為基礎，以問卷調查法共收集505份問卷進行分析，在10個研究假設中有9個研究假設獲得支持。

整體而言，本研究之結果指出，以理性為基礎之前置變數對於消費者理性態度之形成具有較高的影響力，而以感性為基礎之前置變數對於消費者感性態度之形成具有較高的影響力。同時理性態度與感性態度對於消費者線上購買意圖均有正向的影響力，然而只有少數的態度變數對於消費者線上購買滿意度具有正向的影響。

最後，本研究之結果顯示涉入程度、線上採購經驗及性別均為本研究前置變數與中間變數，及中間變數與結果變數之關係的重要調節變數。

4. 主要發現

本研究具有政策應用參考價值： 否 是，建議提供機關大學及研究機構

(勾選「是」者，請列舉建議可提供施政參考之業務主管機關)

本研究具影響公共利益之重大發現：否 是

說明：(以150字為限)

本研究所推導之研究架構可以做為進一步認證線上購買文獻之依據，從經營者的角度而言，注重網站設計來吸引線上購買者可能是贏得線上消費者最重要的工作。