AN INTEGRATED THEORETICAL MODEL OF

E-WOM ADOPTION—A CASE IN HOTEL INDUSTRY

By

WENJING ZOU

Bachelor of Science in Tourism
Beijing Forestry University
Beijing, China
2008

Master of Science in Tourism Management
Xiamen University
Xiamen, China
2011

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Dissertation Approved:

Dr. Hailin Qu

Dissertation Adviser

Dr. Murat Hancer

Dr. Jerrold Leong

Dr. Tom J. Brown

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Abstract: The purposes of this study were (a) to establish and empirically test an integrated theoretical model of e-WOM adoption based on technology acceptance model and elaboration likelihood model; and, (b) to provide implications and suggestions for marketing practitioners in the hotel industry. The significances of the study were investigating the combined effect of perceived usefulness and perceived credibility on e-WOM adoption, examining the antecedent factors of perceived usefulness and perceived credibility in hotel context, and testing the moderating effects of expertise and involvement. Descriptive and causal research design was employed to test the proposed research model. By using convenience sampling, a self-administered questionnaire was distributed through Amazon Mechanical Turk. A total of 531 responses were analyzed. Multiple statistical methods, including descriptive statistics, a Harman's single-factor test, confirmatory factor analysis and structural equation modeling were used for data analysis.

The results of structural equation modeling (SEM) for the proposed e-WOM adoption model supported all path relations among constructs that were hypothesized, except for the relationship between information timeliness and perceived usefulness. Furthermore, a series of multi-group SEM results revealed that there were moderating effects of (a) receiver expertise between attitude toward e-WOM and e-WOM adoption; (b) involvement between information relevance and perceived usefulness; (c) involvement between information sidedness, review consistency and perceived credibility. However, there were no statistically significant moderating effects of involvement between (a) information timeliness, information completeness and perceived usefulness, and between (b) review rating, product rating and perceived credibility. The findings suggested that perceived credibility play a vital role in e-WOM adoption; information timeliness was not found to be an important indicator for perceived usefulness. Furthermore, the higher degree of expertise on hotels a traveler obtains, the less likely that attitude significantly influences his or her adoption of e-WOM. The results suggested practitioners pay more attention to the design of the e-WOM exhibition system, and more peripheral cues should be provided by the administrators of the review forums.

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CHAPTER I

INTRODUCTION

The Importance of e-WOM for Decision Making

As the emergence and popularity of Web 2.0 allows consumers to interact with each other in user-generated content, traditional word-of-mouth (WOM) has been brought from oral to virtual community. Electronic word-of mouth (e-WOM) refers to "any positive or negative statement made by potential, actual or former customers about a product or company, that is made available to a multitude of people and institutions via the internet"(Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004, p. 39). Accompanying the prosperity of online shopping, e-WOM has become one of the most powerful and widely accepted factors impacting consumers' attitudes and purchasing behavior (D.-H. Park & Lee, 2008; See-To & Ho, 2014). Consumers consider e-WOM important in obtaining information, and companies increasingly pay attention to the impacts of e-WOM (Y. Chen & Xie, 2008; Man Yee, Chuan, Choon Ling, & Huaping, 2009; D.-H. Park, Lee, & Han, 2007).

The topic of e-WOM has been studied and recognized as important in the past two decades because it is an effective marketing communication element for consumers as well as service providers (Litvin, Goldsmith, & Pan, 2008). During the consumers' decision making process, consumers often seek information and ask others' advice in order to decrease uncertainty when making their final purchasing decisions (Chung Hun & Cranage, 2010). The Internet

provides great opportunities and convenience for interpersonal communications on platforms such as review sites, personal blogs, online discussion forums and social networking sites. Similar to traditional WOM, e-WOM has been discovered as more trusted than other marketer-generated sources (Bickart & Schindler, 2001; Hung & Yiyan Li, 2007; Kulviwat, Guo, & Napatsawan, 2004). Moreover, e-WOM provides customers with much more timely and convenient accessibility to massive amounts of information, which makes communication more efficient. According to Channel Advisor's 2011 Global Consumer Shopping Habits survey, 90% of online shoppers consult online reviews before their purchase, while 83% of them believe that e-WOM has a powerful influence when they make purchasing decisions (ChannelAdvisor, 2011). Additionally, previous studies have focused on effects of e-WOM that show e-WOM has a critical impact on consumers' attitudes toward products and online sales (Chevalier & Mayzlin, 2006; Hu, Liu, & Zhang, 2008; Mauri & Minazzi, 2013; Paul & Yun‐Chen, 2011).

Compared to purchases in product-oriented contexts, it has been found that e-WOM communication has an even more critical and important influence on consumers' buying decisions in service contexts (Mangold, Miller, & Brockway, 1999; Murray, 1991). Consumers can only evaluate the service after their consumption, thus purchase decisions are seen as high risk by most potential consumers (Quintal, Lee, & Soutar, 2010). This is especially true for hospitality and tourism products which are intangible, seasonal and perishable (Horák, Karlíček, & Kladívko, 2014; Jalilvand & Samiei, 2012; Litvin, Goldsmith, & Pan, 2008). For example, when a tourist decides to go to a destination, book a hotel or a restaurant, it involves risk in unfamiliar places he or she has little knowledge about, and a trial before buying is generally impossible due to the nature of service products (Oh, Lehto, & Park, 2009). Therefore, to reduce their uncertainty and perceived risk, it is important for travelers to actively seek information from the Internet to assist their decisions for destinations, hotels, restaurants and other travel-related services (Chung Hun & Cranage, 2010; Quintal, Lee & Soutar, 2010; G. Zhang & Liu, 2011).

In recent years, the rise of a new electronic environment has also changed marketing channels in the hospitality and tourism industry (Gretzel & Yoo, 2008). A variety of new website formats such as online review sites (TripAdvisor.com, Yelp.com) and online travel agencies (Expedia.com, Hotels.com, Travelocity.com) are successfully establishing themselves as important platforms for e-WOM. These user-generated websites allow travelers to share their travel experience by posting reviews on travel destinations, hotels, restaurants and other tourism products and services. It has been found that travelers do not purchase without seeking online information on tourist destination, restaurants, or hotels (E. E. K. Kim, Mattila, & Baloglu, 2011). The growth of e-WOM information or online recommendations play a vital role in the communication for both companies' marketing strategy and travelers' decision making process (Ye, Law, Gu, & Chen, 2011).

Previous studies have explored the impact of e-WOM on two levels: market level and individual level (C. M. K. Cheung & Thadani, 2012). At the market level, researchers asserted that online reviews have a significant impact on the popularity and online sales of certain products (Ye, Law, & Gu, 2009; Z. Zhang, Ye, Law, & Li, 2010). At the individual level, researchers have investigated the influence of e-WOM on consumers' expectation, attitude and purchase choice (Ladhari & Michaud, 2015;Tsao, Hsieh, Shih, & Lin, 2015; Xie, Miao, Kuo, & Lee, 2011).

Regarding the significant impact of e-WOM, it is necessary to understand more about how travelers adopt e-WOM from large sources of information (Leung, Law, van Hoof, & Buhalis, 2013). Increased studies on the consumers' e-WOM adoption process are needed (Serra Cantallops & Salvi, 2014). The findings following this stream of research may have behavioral implications that affect all stakeholders in the hospitality and tourism industry (R. Cheung, 2014).

E-WOM and the Hotel Industry

As mentioned above, e-WOM is increasing in importance in the hospitality and tourism industry. As one of the main types of e-WOM, online customer reviews (OCRs) are a key information

resource for consumers. According to market research by Nielsen (2012), about 70% of people trust consumer opinions posted online. Similarly with the hotel and tourism industry, more than 74% of travelers read online reviews and used them to make travel plans (Gretzel & Yoo, 2008). This study gave special interest to e-WOM in the hotel industry. The hotel sector is probably the most affected area by online reviews (Serra Cantallops & Salvi, 2014). However, it is noted that our understanding how prospective travelers' process e-WOM for hotels is limited (Serra Cantallops & Salvi, 2014).

Previous studies have discussed various facets of e-WOM and accommodation. In general, the literature involves the following research streams: the motivations for searching and posting e-WOM for hotels, the role of e-WOM on consumers' hotel booking intention, and the influence of e-WOM on hotel sales.

Motivations to post e-WOM for hotels

Researchers have investigated travelers' motivation to write reviews (Bronner & de Hoog, 2011; Yoo & Gretzel, 2008). According to Bronner and Honng (2011), there are five main categories of motivations for vacationer's to post e-WOM: 1) self-directed, including self-expression, self-enhancement, and venting negative feelings, etc.; 2) helping others, referring to efficacy, concern for other consumers, and being helpful to other, etc.; 3) social benefits, such as a sense of belonging, group attachment, and group commitment etc.; 4) consumer empowerment; and 5) helping companies.

In the hotel industry, Yen and Tang (2015) recently identified seven motivations for posting online reviews: 1) social benefits; 2) self-enhancement; 3) extraversion reduction; 4) dissonance reduction; 5) Altruism; 6) economic incentives; and 7) platform assistance. The researchers also argued that people have different motivations for choosing among the different online media used to post e-WOM: altruism and platform assistance motivations were more related to consumer opinion sites (e.g. TripAdvisor.com), while extraversion, social benefits and dissonance reduction were positively related to social network sites (e.g., Facebook).

Hotel performance can also stimulate the e-WOM generation. Service experience, service quality, satisfaction and dissatisfaction, as well as failure and recovery are predictable experience factors that motivate customers to post reviews (E. Jeong & Jang, 2011; W. G. Kim, Ng, & Kim, 2009; Sun & Qu, 2011; Swanson & Hsu, 2009). For example, dissatisfaction caused by service failure induces consumers' negative e-WOM behavior (Sánchez-García & Currás-Pérez, 2011), while recovery satisfaction can motivate positive e-WOM behavior (T. Kim, Kim, & Kim, 2009).

Motivations to search e-WOM for hotels

On the other hand, studies have also examined the reasons why consumers seek e-WOM (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004; Hennig-Thurau & Walsh, 2003). According to Hennig-Thurau and Walsh (2003), a number of motivations for consumers to read e-WOM include: 1) risk reduction; 2) reduction of search time; 3) to learn how a product is to be consumed; 4) dissonance reduction; 5) determination of social position; 6) belonging to a virtual community; 7) remuneration(rewarding people who provides reviews); and 8) to learn what products are new in the marketplace. Similarly, Goldsmith and Horowitz (2006) surveyed 309 consumers and revealed more motivations: to find lower price, ease of use, by accident, "it is cool" and "saw on TV".

Combing studies by Hennig-Thurau and Walsh (2003) and Goldsmith and Horowitz (2006), a recent research study identified three chief motivating dimensions for travelers to read online hotel reviews, namely convenience and quality, risk reduction, and social reassurance. (Kim, Mattila, & Baloglu, 2011). Time saving, lowest price and getting the best value for their money are mentioned for convenience and quality. Kim et al. (2011) also examined the impact of demographic characteristics on e-WOM searching, which indicated that gender has influences on travelers' behavior. Specifically, regarding risk reduction, women were found to perceive online shopping more risky than men. It is interesting that women generally seek tourism services on behalf of their families

and are more likely to read online hotel reviews for the purpose of convenience, while men use online hotel reviews mainly depending on their level of expertise.

E-WOM and online hotel booking intention

Searching for e-WOM may potentially impact consumers' hotel booking intention. There is a steadily increasing proportion of travelers who consult online reviews prior to booking a hotel room (Anderson, 2012). Toh, Dekay, & Raven (2011) surveyed 249 leisure travelers on their use of the internet for hotel search and online booking; the results showed that 80% of the respondents would use the web for a hotel room search and 67% continued online booking through either the hotel's own website or a third-party site. Vermeulen and Seegers (2009) found that exposure to online hotel reviews will improve consumers' consideration of the reviewed hotel. Specifically, positive reviews can increase consumers' hotel awareness and attitude, which further improve consumers' hotel consideration.

Prior studies have explored particular aspects of online reviews' impact on consumers' online hotel booking intention. For instance, Sparks and Browning (2011) investigated four factors that influence travelers' hotel booking intention: the content of reviews, overall review valence, review framing, and consumer ratings. The findings revealed that overall positive valence of a set of hotel reviews and positive framed reviews can significantly affect customers' willingness to book the hotel, while consumer ratings and content of reviews didn't. Mauri and Roberta (2013) also found that positive reviews posted on "non-transactional" travel websites are positively related to hotel booking intention.

Most recently, Ladhari and Michaud (2015) examined the influence of e-WOM generated on Facebook on consumers' hotel booking intention. Consistent with earlier research (Mauri & Minazzi, 2013; Sparks & Browning, 2011), this study confirmed that positive e-WOM about a particular hotel

on Facebook has a positive impact on hotel booking intentions, and the more positive the comments are, the more positive attitude toward a hotel.

Similarly, Tsao, Hsieh, Shih, & Lin (2015) conducted an experimental study on the impacts of review valence and review quantity on consumers' hotel booking intention. The results showed that positive reviews are more effective than negative reviews, and increasing the number of reviews can strengthen the impact of review valence on booking intentions. Furthermore, this study investigated the moderating influence of consumer conformity on hotel booking intentions, where conformity refers to the individuals' tendencies in thinking and behavior approved by group (Bearden, Netemeyer, & Teel, 1989). The results showed that conformist consumers are more likely to be persuaded regardless of valence of quantity of e-WOM, whereas non-conformists need a great number of positive reviews to increase their booking intentions.

Considering that online reviews are often mixed with both positive and negative information, Xie, Miao, Kuo & Lee (2011) claimed that the presence of personal identifying information of reviewers are likely to affect consumers' hotel booking intention via perceived credibility of online reviews. Consumers may have a pre-decisional disposition before an actual purchase, and then online reviews are used to validate their tentative belief (Xie, Miao, Kuo, & Lee, 2011). The authors claimed that the presence of personal identifying information affects the perceived credibility of the online reviews. When both positive and negative reviews are given about a specific hotel, the presence of personal identifying information will lower consumers' booking intention for those who have a negative or neutral pre-decisional disposition (Xie et al., 2011).

E-WOM and hotel sales

Online reviews are realized as having an important role on hotel sale performance from the hotels' perspective as well (Blal & Sturman, 2014; Öğüt & Onur Taş, 2011; Ye, Law & Gu, 2009; Ye, Law, Gu, & Chen, 2011). It is argued that positive online reviews can significantly increase online

hotel sales (Ye et al., 2011). Besides, Ye et, al (2009) and Öğüt and Tas (2012) concluded that high customer ratings for hotels significantly leads to an increase of online hotel sales. In particularly, higher ratings of hotels were found to have a greater effect on luxury hotels' RevPAR than lower-tier hotels (Blal & Sturman, 2014). Yacouel and Fleischer (2011) also suggested that hotels' online review rating has a positive influence on hotels' reputation and the possibility of obtaining price premiums.

Moreover, the quantity of online reviews also has effects on hotel sales. Higher volumes of online reviews appear to be positively related with the sales of economy hotels, mid and upper scale hotels, but negatively with the luxury hotels(Blal & Sturman, 2014).

Discussion of e-WOM literature in hotel industry

By reading and analyzing e-WOM, hoteliers can gain information about customers' satisfaction in hotel performance and predict customers' needs for service quality (Browning, So, & Sparks, 2013; H. Li, Ye, & Law, 2013; Min, Lim, & Magnini, 2015; Phillips, Zigan, Santos Silva, & Schegg, 2015). As discussed earlier, the characteristics of online hotel reviews such as review valence, customer rating, review content and review quantity have been found to have an significant impact on hotel sales and price premium (Öğüt & Onur Taş, 2011; Ye et al., 2009).

From the customers' perspective, much effort has been put into exploring the following questions: What factors shape people's motivation to read or write online reviews? What outcomes or effects are influenced by e-WOM in the hospitality industry? Previous findings generally show that online hotel reviews can influence customers' decision making process (Browning et al., 2013; Vermeulen & Seegers, 2009).

Statement of the Problem

E-WOM has emerged as an increasingly important topic in the hospitality and tourism industry (C. M. K. Cheung, Lee, & Rabjohn, 2008; Litvin et al., 2008). A growing number of studies have focused on the consequences of reading e-WOM, such as consumers' expectation(S. Liu, Law, Rong, Li, & Hall, 2013; Mauri & Minazzi, 2013), perception of trust (Sparks & Browning, 2011), customer satisfaction (H. Li, Ye, & Law, 2012; Min et al., 2015), customer loyalty (Berezan, Raab, Tanford, & Kim, 2015) and purchase intention (Ladhari & Michaud, 2015; Mauri & Minazzi, 2013). The scope of published studies on e-WOM is large and fragmented (Cheung and Thadani, 2012). There is a need for consistent and systematic conclusion on the influence of e-WOM on consumers' decision making process.

Although several factors were taken into account for the influence of e-WOM in the hotel industry, agreement towards the adoption mechanism of e-WOM hasn't been determined. The process of consumers' adoption of online hotel reviews is still a black box. Technology acceptance model (Davis, 1989) is regarded as one of the most widely used models for predicting consumers' acceptance of various information technologies. However, given the discrete nature of e-WOM as well as the service products, insufficient research has been paid to the customers' information processing of online hotel reviews (Serra Cantallops & Salvi, 2014). E-WOM adoption refers to the acceptance or persuasiveness of using e-WOM communication for making decisions (C. M. K. Cheung et al., 2008; Sussman & Siegal, 2003). When consumers confront a large amount of e-WOM information via online channels (e.g., review sites, blogs, social media, etc.), a large portion of the comments may include some biased information and the readers will need to assess the validity of the information. In this case, what cognitive factors lead consumers to adopt the e-WOM and how do those factors change the customer's attitude toward e-WOM in their decision-making process? This study recognized that there is still lack of systematic research on the antecedents of the consumers' e-

WOM adoption in the hospitality and tourism industry. The TAM needs to be extended to offer sufficient understanding of travelers' e-WOM adoption for their trip planning.

Besides, existing research on e-WOM and accommodation mainly focus on the impacts aspects such as review volume (the quantity of information) and review valance (positive or negative) (Man Yee et al., 2009; Meli án-Gonz ález, Bulchand-Gidumal, & Gonz ález L ópez-Valc árcel, 2013; Z. Zhang, Zhang, & Law, 2012), while little attention has been paid to the impact of the different communication routes of e-WOM on the traveler's decision making process in hotel booking intention. According to the Elaboration Likelihood Model (ELM), users' elaboration process of information can be classified into central and peripheral routes (Petty & Cacioppo, 1986). Such ELM studies can help explain travelers' e-WOM adoption behavior by understanding what different dimensions of e-WOM influence travelers' processing routes (Cheng & Loi, 2014; C. M. K. Cheung et al., 2008; Filieri & McLeay, 2014; Tang, Jang, & Morrison, 2012; W. Zhang & Watts, 2008). Despite that the effect of e-WOM information may vary from person to person, little research has been done to investigate how the travelers use the different communication routes of e-WOM for hotel booking.

In order to improve hotel attractiveness and travelers' booking intention, marketers not only need to know travelers' motivations for writing e-WOM, but also need to understand what factors drive travelers to adopt e-WOM. It is suggested that e-WOM influences travelers' awareness, attitude and consideration of accommodation (Vermeulen & Seegers, 2009). Therefore, identifying the mechanism of travelers' e-WOM adoption is very important in the hotel industry and there is a need to fill in the practical gap. By understanding the determinants of e-WOM adoption for travelers' decision making, it might help e-marketers and review websites administrators present e-WOM information in a much more efficient and effective way to attract more potential customers.

Purpose of the Study

The purpose of this study is to establish and empirically test an integrated theoretical model of e-WOM adoption based on technology acceptance model and elaboration likelihood model; and to provide implications and suggestions for marketing practitioners in the hotel industry. In particular, this study examines eight issues of e-WOM adoption:

1) The effects of central route factors (i.e., information relevance, information timeliness, and information completeness) on travelers' judgement of perceived e-WOM usefulness;
2) The effects of peripheral route factors (i.e., information sidedness, review consistency, review rating, and product rating) on travelers' judgement of perceived e-WOM credibility;
3) The effects of perceived usefulness, perceived ease of use, and perceived credibility on travelers' attitudes toward e-WOM;
4) The effects of perceived usefulness, perceived credibility, and attitude toward e-WOM on e-WOM adoption;
5) The moderating effect of receivers' expertise on the relationship between attitude toward e-WOM and e-WOM adoption;
6) The moderating effects of e-WOM involvement on the relationship between elaboration central route factors (information relevance, information timeliness and information completeness) and perceived usefulness;
7) The moderating effects of e-WOM involvement on the relationships between elaboration peripheral route factors (information sidedness, review consistency, review rating, and product rating) and perceived credibility; and
8) Provide recommendations for hotel practitioners to facilitate promoting their accommodation in regards to e-WOM and suggest directions for future research.

Significance of the Study

Understanding the travelers' e-WOM adoption process is necessary and important in the hospitality and tourism industry. This study makes three valuable contributions to the body of knowledge in the theoretical as well as practical way.

Theoretical Contributions

Firstly, although the impact of e-WOM on consumers' decision-making process has been investigated by a number of previous studies (J. Lee, Park, & Han, 2008; Sparks & Browning, 2011; Sparks, Perkins, & Buckley, 2013; Vermeulen & Seegers, 2009), there is a research gap in examining the antecedent mechanism of travelers' e-WOM adoption in the hotel context. Sussman and Siegal (2003) argued that people form intentions toward adopting particular ideas that are similar to adopting a technology. Some researchers have examined indicators of perceived usefulness that predict consumers' e-WOM adoption (C. M. K. Cheung et al., 2008; Sussman & Siegal, 2003). Some other researches have investigated indicator of perceived credibility that predict consumers' e-WOM adoption (Fang, 2014; Lis, 2013). However, no research has been conducted in examining both perspectives simultaneously. Therefore, to fill this research gap, this study, rooted in the theoretical perspective of information technology acceptance, makes a contribution by investigating the combined effect of perceived usefulness and perceived credibility on e-WOM adoption via extending the TAM in consumers' decision making process. Doing this is meaningful for a better understanding of the determinants of travelers' utilization of e-WOM and presenting the relative importance to enhance their adoption desire regarding the e-WOM information.

Secondly, this study makes efforts to provide new insights on the combination of TAM and ELM. In the hotel industry, researchers perceive consumers' pre-purchase information search of online customer reviews as one of the most important driving forces to reduce their online purchase uncertainty (Chung Hun & Cranage, 2010; E. E. K. Kim et al., 2011). However, research on what

external factors and how they influence the travelers' e-WOM adoption in the hotel industry is scant. Recent research (Filieri & McLeay, 2014) proposed several specific factors of online reviews that impact travelers' e-WOM adoption by drawing on Elaboration Likelihood Model (Petty & Cacioppo, 1986). However, no research has been done to investigate the moderating effect of receivers' involvement on the relationship between information-processing routes factors (central or peripheral route) and perceived belief of e-WOM (perceived usefulness and perceived credibility) in the hotel context. By testing the moderating effect of involvement on ELM communication route factors and perceived belief of e-WOM in TAM, this study enriches the literature of e-WOM adoption in the hotel industry. This perspective of moderator is important because individual driver variables do influence how travelers adopt e-WOM, and knowing how different force could lead to adoption of e-WOM is useful for both practitioners and academics (Papathanassis & Knolle, 2011).

Thirdly, this study provides contribution to e-WOM literature by examining the moderating effect of expertise on the relationship between attitude toward e-WOM and e-WOM adoption. Inconsistent results from previous studies presented the importance of expertise's moderating effects (Punj & Staelin, 1983; Gilly et al.,1998; Brucks,1985). Researchers argue that expertise can affect consumer information search behavior. This study suggests that expertise may have a moderating effect on travelers' adoption of e-WOM. By investigating the moderating effects of expertise, the study presents a more complete picture of the mechanism of e-WOM in the hotel context, and provides a better understanding of e-WOM adoption for marketing and management research.

Overall, this study contributes to the literature by proposing a comprehensive theory toward e-WOM adoption by bringing together Technology Acceptance Model and Elaboration Likelihood Model. By linking the elaboration process and cognitive perception of e-WOM, an integrated model is proposed to understand e-WOM adoption in traveler's decision making processes, which would advances the knowledge of e-WOM literature.

Practical Contributions

The results and findings of this study are expected to make practical contributions to the hospitality and tourism industry in the following ways. First, this study presents a model with instructional insight about travelers' WOM adoption process, helping hotels concerned with online reviews attracting potential customers. By understanding how the travelers handle the masses of online reviews and what criteria of e-WOM are used for the decision process of online hotel booking, the administrators of review forums or e-marketers of hotels can design effective strategies for the management work of e-WOM information.

Second, this research expects to provide some implications for the third-party review websites. Since our study examines the antecedents of attitude toward e-WOM including perceived usefulness, perceived ease of use and perceived credibility, important informational and normative factors are identified and assessed to be influential in travelers' decision making processes. Practitioners of review websites can redesign the filter system or exhibition method of online reviews to help readers obtain helpful information more conveniently by depending on the characteristics and degree of the influence of e-WOM information.

Third, because travelers' expertise and involvement may influence their adoption process of e-WOM for hotel choice, the practitioners may improve potential customers' trust and consideration of the reviewed hotel by managing the responses of consumers' online reviews. This study explains how information adoption can facilitate effective online communication, and, based on the underlying mechanism, hotels may be interested in promoting information sharing and developing brand recognition by such e-WOM communication.

Organization of the Study

This dissertation consists of five chapters. Chapter I provides an overview, the background of the study, the purpose and the significance of the research. Chapter II reviews the literature of relevant theories and study objects, proposes the conceptual model with hypotheses of this study. Chapter III presents the detailed research methods, including research design, sampling, measurement items, data collection; and statistical analysis. Chapter IV reports the results based on data collected through the online survey. Hypothesis testing and demographic information of the sampling are also analyzed. Chapter V summarizes the findings, concludes implications and suggests recommendations for future research. Limitations of this study are also discussed.

CHAPTER II

LITERATURE REVIEW

Research on Electronic Word-of-Mouth

WOM vs. e-WOM

Traditional Word-of-mouth (WOM) was originally defined as informal oral communication about particular goods, brands or services between non-commercial communicators in a face-to-face situation (Ardnt, 1967; Westbrook, 1987). The definition has evolved over years, and Fitzgerald Bone (1992) identified that word-of-mouth communication could be "an exchange of comments, thoughts, and ideas among two or more individuals in which none of the individuals represent a marketing source" (p.579). Since WOM communication is not related to commercial attempts and is seemed as a more reliable and independent source of information, previous research has proved that WOM has greater influence than other marketing media such as salespeople, television, radio or printed media (Day, 1971; Mangold, 1988).

Following the development of information technology in recent decades, the advent of the Internet has profoundly changed the platform for people to interact and share their opinions, experience and knowledge. The Web 2.0 tools provide opportunities and foster online WOM through electronic media, such as online discussion forums, personal blogs, product review

websites, and social networking sites. Therefore, the traditional WOM has evolved into electronic word-of-mouth (e-WOM) communication. Based on the definition of WOM, e-WOM is defined as "any positive or negative statement made by potential, actual, or former customers about a product or company which is made available to a multitude of people and institutes via the Internet" (Hennig-Thurau et al., 2004). Litvin, Goldsmith and Pan (2008) refer to e-WOM communication as "all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers" (p.461).

While e-WOM communication and traditional WOM communication have some common aspects, they are different in several dimensions:

Firstly, unlike WOM, sharing information in oral, face-to-face situation with a limited number of individuals; e-WOM communication can occur among people who are faceless strangers and could involve all the people around the world via Internet (Xie et al., 2011). In other words, the network of e-WOM is larger than that of WOM, and more contributors and audiences are affected.

Secondly, e-WOM communication doesn't require information senders and receivers be present at the same time like WOM usually does. Most of the opinions presented online are persistent and accessible at any time, so the readers don't need to be online when the e-WOM is created. Therefore, e-WOM is asynchronous, observable and measurable compared to the traditional WOM (C. M. K. Cheung & Thadani, 2012).

Thirdly, the quantity of e-WOM information is far larger than that achieved from traditional WOM. Users can access e-WOM more conveniently and quickly, and with lower cost.

Finally, there is a key difference regarding credibility between WOM and e-WOM. Traditional WOM communication happens among acquaintances, however e-WOM takes place among people you usually don't know.

Research on the Effects of E-WOM

Given the importance of e-WOM on consumers' buying behavior and the distinct characteristics of Internet communication with offline WOM, scholars have explored the topic of e-WOM from various disciplines such as marketing, information technology, sociology, consumer behavior and economics.

The marketing research of WOM started in the 1960s (Dichter, 1966; Engel, Kegerreis, & Blackwell, 1969; Westbrook, 1987). The discussion of WOM can be concluded into two major dimensions: the antecedents or motives for WOM, and the outcomes of WOM. In other words, the general questions researchers tried to answer about WOM in earlier years are: "Why do consumers spread WOM?" from the perspective of WOM senders; and "What are the expected outcomes from the dissemination of WOM" from the perspective of WOM receivers (Litvin et al., 2008). Figure 1 illustrates the main constructs of WOM discussed by previous studies.

Emerging literature has shifted the focus from WOM to e-WOM communications in the past two decades. Similar to the studies of WOM, most e-WOM literature has investigated the motives or triggers of e-WOM and the impact of e-WOM via the platform of the Internet. It is found that information technology has a more profound impact on consumers' information search, as well as their decision making process, and in many different ways than traditional WOM, including the volume of the information, the source of information, the type of information etc.(M. Kim & Lennon, 2008; D.-H. Park & Lee, 2008; Xie et al., 2011).

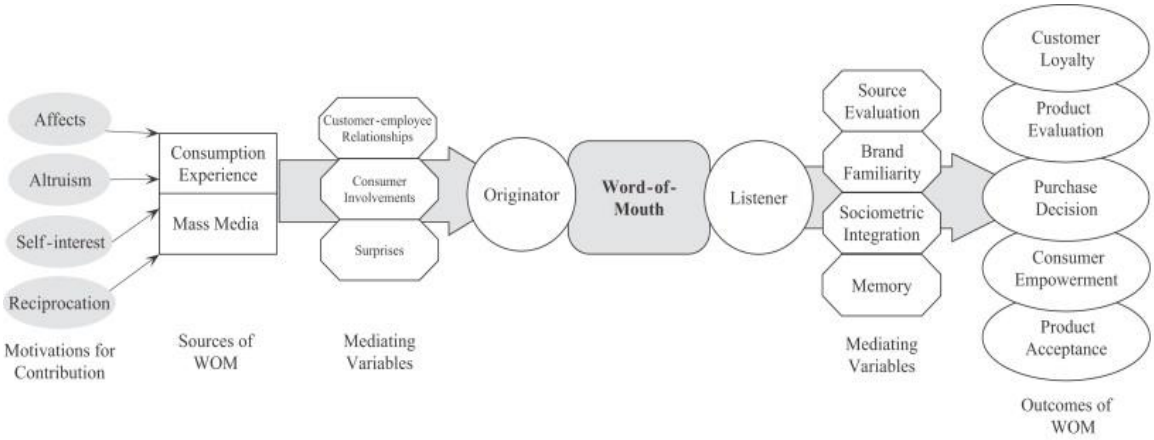


Figure 1. A Conceptual Model of Word-of-Mouth

Source: Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458-468.p.460

Effects of e-WOM from the company's perspective

Various impacts of e-WOM have been widely investigated by researchers in recent years. In general, these impacts can be analyzed from two perspectives: company perspective and consumer perspective (C. M. K. Cheung & Thadani, 2012).

From the perspective of companies, with the popularity of e-WOM as a new marketing tool, scholars have been stimulated to investigate the impact of e-WOM from a few research streams. One of the main factors highlighted by studies refers to product sales, which leads to the financial success of the company. Chevalier & Mayzlin (2006) examined the effect of online consumer reviews on book sales at Amazon.com and Barnesandnoble.com, and they found that positive reviews and a large number of e-WOM information can significantly increase sales. Ghose & Ipeirotis (2010) also found that the content and readability of reviews have an economic impact on product sales. Cui, Lui & Guo (2012) investigated the e-WOM effect on new product sales for video games, and their results showed that the percentage of negative reviews has greater effect on new product sales than that of positive reviews.

In addition to sales, several other factors have also been explored as the outcomes of e-WOM at the company's level. For example, consumers' attitudes toward the brand and website was indicated to be strongly impacted by extremely positive or negative e-WOM (M. Lee, Rodgers, & Mikyoung, 2009). Furthermore, Zhan, Lou, & Liu (2009) argued that online customer reviews are valuable sources for businesses to control product quality and to assemble customer concerns, which leads to generating more loyal customers. Customer relationship management is another factor emphasized by the company concerning e-WOM. A company needs to take care of e-complainants and find effective ways to handle those comments (Pantelidis, 2010; Zheng, Youn, & Kincaid, 2009). Additionally, properly handling online complaints can increase customer retention and turn an unsatisfied customer to a loyal one (Ah‐Keng & Elizabeth Wan‐Yiun, 2006; Min et al., 2015).

In summary, e-WOM management has significant influences from the perspective of companies. Customers' e-WOM could be seen as opportunities and challenges for companies, and successfully managing e-WOM can become a competitive advantage for marketing strategies.

Effects of e-WOM from the consumer's perspective

At the consumers' level, it is evident that e-WOM is a major source which can be easily accessed and conveniently used for information, anywhere and anytime. Numerous studies in this line of research emphasize the issues related to the effects of e-WOM in consumers' decision making process and behavior at the individual level. Some broadly-discussed constructs are summarized and presented in this section.

Expectation and perception of a product or service

The early researchers of service marketing consider customer expectation as one of the consequences of WOM communication. In Zeitham, Berry & Parasuraman (1993)'s study, customer experience and positive WOM were proposed to have influence on consumers' expectation or desired service quality. In the context of e-WOM communication, Mauri and Minazzi (2013) found that customers' expectation of hotels would differ depending on the prevalence of positive or negative comments. Vermeulen and Seegers (2009) tested the impact of online hotel reviews on consumers' perception of hotels. The results showed that positive online reviews can significantly improve customers' attitudes and awareness toward the hotel, which leads to hotel consideration, while negative reviews would lower consumer attitudes toward the hotels. Similarly, Ladhari and Michaud (2015) also reported that e-WOM receivers exposed to positive comments of a hotel on the Facebook network would generate a more positive overall impression or attitude toward the hotel than those exposed to negative reviews.

Purchasing Intention

One of the dependent variable studied most often in e-WOM literature is purchase intention, which refers to the willingness to purchase a product or service in the future. Researchers have explored and investigated a few determinants related to customers' purchase intention using e-WOM information. Variables such as the quality of e-WOM, the quantity of e-WOM, and the valance are frequently discussed.

The quality of e-WOM refers to the persuasive strength of the message and can be evaluated based on its accuracy, comprehensiveness, relevance, and timeliness (C. M. K. Cheung & Thadani, 2012), while the quantity refers to the number of e-WOM. Previous studies have shown their influences on purchase intention. For example, Park, Lee & Han (2007) examined the effects of online review quality and quantity on consumers' purchasing intention. They found that

reviews which are persuasive with sufficient reasons or high quality information have greater effect on the consumers' purchasing intention than low quality reviews; and a large number of positive online reviews indicate the popularity of the product, which can also significantly increases purchasing intention. Similarly, Lee (2009) surveyed 258 undergraduate students to investigate how online reviews affect their purchasing intention, and reported that quality as well as quantity of online reviews has a positive effect on the purchasing intention of online shoppers.

Likewise, the consequence of e-WOM overload on consumers' purchasing intention was investigated. The number of positive online reviews was found to positively relate to the perceived product popularity. For low-involvement consumers, the quantity of e-WOM or the perceived product popularity has greater influence on purchasing intention than the perceived informativeness of the review information (D.-H. Park & Lee, 2008).

Further, the effect of e-WOM also varies in e-WOM valence (framed positively, neutral or negatively). Many previous studies demonstrate that the valance of e-WOM has a strong influence on consumers' purchase intentions (Mauri & Minazzi, 2013; Ye et al., 2011). It is suggested that people are more likely to read negative reviews than positive ones, and the negative e-WOM has a greater effect than the positive ones (C. Park & Lee, 2009; Sen & Lerman, 2007).

Mauri and Minazzi (2013) investigated the relationship between online hotel reviews valence and purchase intention, and the results revealed that the prevalence of positive or negative comments positively related to the consumers' purchasing intention. What's more, negative reviews lead to low purchase intention while positive reviews lead to high intention (Sparks & Browning, 2011).

Hao, Jiang & Hou (2010) studied the impact of online review valence on consumers' decision making, which is moderated by types of products (search goods vs. experience goods).

They found that there is no significant effect of e-WOM valence for search goods, whereas the negative reviews have a greater effect than positive reviews for experience goods.

In addition to the informational attributes, researchers also found that customers' attitudes toward e-WOM websites and online shopping also has a positive influence on their purchase intention (C. M. K. Cheung & Thadani, 2012; Prendergast, Ko, & Siu Yin, 2010). A significant relationship was also shown between review valence and the attitude toward the product or brand (Doh & Hwang, 2009; H.-J. Jeong & Koo, 2015; Wen, 2009).

Perceived Credibility of e-WOM

In contrast to face-to-face WOM from acquaintances, due to the Internet connecting vast amounts of information from unknown communicators, e-WOM readers tend to be concerned about the credibility of e-WOM, which makes them uncertain about comments. According to Cheung et al. (2009), e-WOM credibility can be defined as "the extent to which one perceives a recommendation/review as believable, true, or factual" (p. 12). An early study of e- WOM credibility is conducted by Wathen and Burkell (2002), and the authors argued that recipients' perception of messages' credibility was vital in the early stage of the persuasion process. In other words, if the messages are regarded as credible, they are likely to have a greater impact on the decision making process and purchase behavior. The higher the perceived e-WOM credibility is, the greater its influence on consumers' purchasing decision (Shu-Chuan & Kamal, 2008; Xiufang & Meihua, 2010).

Cheung et al.(2009) analyzed the antecedents of e-WOM credibility in a third-party discussion forum from two dimensions: informational and normative determinants. The authors found that both informational determinants (including argument strength, source credibility, and confirmation with prior belief) and normative determinants (recommendation consistency and recommendation rating) have a strong effect on consumers' perceived e-WOM credibility. Cheng

and Zhou (2010) assessed e-WOM credibility in the communication process regarding the senders, information itself and receivers of e-WOM. Three factors including sender's expertise, site trustworthiness and receiver's propensity to trust were confirmed as the contributors of credibility of e-WOM.

Fan, Miao, Fang, & Lin(2013) also focused on the factors that influence a consumer' perceived e-WOM credibility, their results showed that e-WOM quantity, e-WOM quality, source credibility; consumer expertise, and consumer involvement can significantly enhance perceived e-WOM credibility. This is consistent with Cheung et al (2012)'s study which reported that review quality is the strongest determinant of review credibility. Moreover, recipients' expertise and involvement were also studied by Cheung et al as moderators to recognize how these antecedents work at different levels of consumers' motivation and ability.

Teng, Wei Khong, Wei Goh, & Yee Loong Chong (2014) identified source credibility as one of the main factors associated with persuasive e-WOM messages. Source credibility refers to e-WOM receivers' perception of the credibility of a message source, and has nothing to do with message itself. Higher perceived source credibility has a higher level influence on information adoption and purchase intention (Xie et al., 2011; W. Zhang & Watts, 2008).

Besides, social relationship constructs such as social homophily and social tie strength between e-WOM senders and receivers are another two important factors for the antecedents of e-WOM credibility. Rogers (1983) describes social homophily as the similarity of individuals such as age, gender, education, occupation, beliefs, and personalities. People tend to regard people who are similar to them or "like me" as credible. Greater homophily between individuals has been proven to have a more positive effect on users' perceived e-WOM credibility (Ayeh, Au, & Law, 2013a; Lis, 2013). The other construct which refers to the relationship between individuals is social tie strength. Different from social homophily, social tie strength is used to describe the

intensity or degree of the relationship between two individual's. Strong tie relationships between communicators are more likely to be perceived as reliable and credible compared to weak tie relationship (Steffes & Burgee, 2009).

In general, research on the credibility of e-WOM has mainly discussed the antecedents of perceived e-WOM credibility, and their impacts on the related decision making process. However, there is scant research investigating the weight of e-WOM credibility for their e-WOM adoption in the hospitality and tourism industry.

Perceived usefulness of e-WOM

Considering that there is a large amount of available e-WOM information, not all of it has a great impact on purchase decisions, and consumers must decide which are helpful in their decision making process. Review helpfulness refers to a user's evaluation of whether or not the review is helpful for readers (Sen & Lerman, 2007). In general, consumers may evaluate the effectiveness of e-WOM by the content of reviews, product type and reviewers' characteristics (Mudambi & Schuff, 2010; Pan & Zhang, 2011).

From the perspective of reviews' content, several factors such as review valence, review length, review rating and review consistency were examined in prior studies. For example, it is showed that both review valence and review length are found to have positive effects on review helpfulness (Pan & Zhang, 2011). More specifically, positive and longer reviews are perceived as more helpful than shorter and negative ones since consumers usually hold some favorable attitudes toward the reviewed product and the longer reviews reveal more information. However, many studies reported mixed findings and showed that negative information is more valuable than positive (J. Lee et al., 2008; Sparks & Browning, 2011). Researchers explain that negative reviews are more diagnostic than positive ones, and give clearer evaluation to help consumers purchase choices(Wu, 2013). Therefore, people tend to have a negativity bias and value negative

reviews as more helpful than positive reviews(Sen & Lerman, 2007). Lee, Rodgers, & Mikyoung (2009) found that extremely negative reviews have a stronger impact on consumers' attitude towards the brand than either moderately negative reviews or extremely positive reviews.

Due to the existence of controversial findings on the effects of review valence, researchers have attempted to explain further by investigating more factors. One of the research streams argues that the product type has moderating effects on perceived helpfulness of e-WOM. Specifically, Pan and Zhang (2011) attempted to ascertain the effects of product type on perceived review helpfulness. The results showed that the effect of positive review valence is greater for experiential than utilitarian products, whereas longer reviews have more prominent impact for utilitarian than experiential products. Sen and Lerman (2007) also investigated the moderating role of product type on negativity bias of reviews in consumer decision making process, and the results found that negative reviews have a greater influence on utilitarian products than hedonic products.

In addition, Mudambi & Schuff (2010) conducted a study on product type by analyzing 1,587 reviews on Amazon.com across six different products. The results indicated that the effects of review extremity and review depth on the helpfulness of reviews are moderated by product type (experience good vs. search good). For experience goods (music CD, MP3 player, and video game), extreme reviews are less helpful than moderate reviews, and review depth has less positive effects on the perceived helpfulness than search goods (digital camera, cell phone, and laser printer).

Taken together, due to the aspects of nature and consumption differences among product types, e-WOM readers tend to seek and process online information differently.

As well as the impact of review valance on perceived usefulness, Baek, Ahn, & Choi (2012) analyzed another three factors influencing the reviewers' perceived helpfulness. By

collecting online reviews from Amazon.com, they revealed that review rating and reviewer's credibility, as well as the proportion of negative words in a review, can increase the consumers' perceived helpfulness of a review. In addition, Ghose and Ipeirotis (2011) found that the extent of subjectivity, readability; and linguistic correctness in a review can also affect its perceived helpfulness. Review valence consistency is another factor which can affect review helpfulness. Consistent reviews are perceived as more helpful than inconsistent ones (Baek, Ahn, & Choi, 2012; Quaschning, Pandelaere, & Vermeir, 2015).

Last but not least, the characteristics of e-WOM communicators who spread e-WOM information appear to be another important research stream for perceived e-WOM helpfulness. According to the uncertainty reduction theory (Berger & Calabrese, 1975), people generally feel uncertainty in interpersonal communication and would like to reduce it. The disclosure of the personal identity of review providers, such as real name, real address and real photo, were argued to affect the perceived credibility of the information source (Fang, 2014; Xie et al., 2011), therefore further impacting the receivers' perceived helpfulness of e-WOM (Forman, Ghose, & Wiesenfeld, 2008; Ghose & Ipeirotis, 2011; Z. Liu & Park, 2015).

Also, the reviewer's expertise and reputation were indicated to have significant influence on the perceived helpfulness of e-WOM (Z. Liu & Park, 2015; Racherla & Friske, 2012; Wu, 2013; Zhu, Yin, & He, 2014). Expertise refers to "the reviewer's capabilities and credentials of writing quality reviews and providing useful information, recognized by the community" (Zhu, Yin & He, 2014. p.271). In the online review sites, the status of expert level is evaluated and presented through badges (e.g., Amazon.com). Cheung et al (2008) recognized that the higher the perceived expertise and trustworthiness of communicators, the more helpful the message will be perceived to be.

Adoption of e-WOM

Although e-WOM is perceived as effective on consumers' decision making process, there is a lack of studies investigating the e-WOM adoption process. E-WOM adoption refers to a psychological process in which people purposefully engage in using the e-WOM information (Man Yee et al., 2009). Different recipients can have different responses with the same e-WOM content. Therefore, what aspects of e-WOM are determinant in influencing consumers to follow the message? How is it that the explicit information is transformed into internal knowledge?

Among the existing literature, Sussman and Siegal (2003) proposed a theoretical model of information adoption to investigate the process which individuals use to adopt or accept the relevant message in computer-mediated communication contexts. This model indicated that information usefulness is an important mediator between influence processes and information adoption. Specifically, the perceived argument quality and source credibility of information were examined and showed significant relationship with information usefulness, which further affects the consumers' information adoption. Figure 2 shows the information adoption model by Sussman and Siegal (2003).

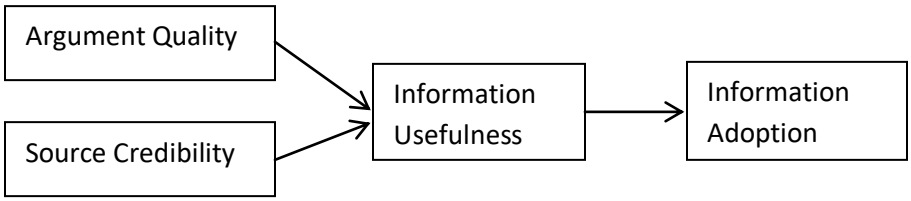


Figure 2. Model of Information Adoption

Sussman, S. W., & Siegal, W. S. (2003). Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption. *Information Systems Research, 14*(1). p.52

Built on this model of information adoption, Cheung et al (2008) developed and explored the precursors to informational usefulness (information quality and source credibility) in the

context of online customer communities. Four dimensions of argument quality (accuracy, timeliness, relevance, and comprehensiveness) and two dimensions of source credibility (source expertise and source trustworthiness) were measured in their study. The results showed that only the comprehensiveness and relevance of the argument quality were effective components making the information useful and inherently adopted by customers. What's more, source credibility was not found to play a significant role in predicting information usefulness.

In line with the extended model of information adoption, Liu and Zhang (2010) conducted an empirical study on the perceived usefulness of online customer feedback (OCF) in customers' information adoption. A strong central role of perceived usefulness of OCF was stated. Furthermore, they argued that perceived usefulness can be affected by prior experience with OCF, perceived importance of OCF, and trust of OCF.

E-WOM credibility is recognized as another important predictor for online consumers' e-WOM adoption. Cheung et al (2009) examined this by applying dual-process theory of information processing and found that online consumers' perceived credibility of recommendations ultimately leads to their adoption of the e-WOM. It was observed that consumers are more likely to adopt e-WOM when they perceive the higher credibility of e-WOM (Fan, Miao, Fang, & Lin, 2013; Fang, 2014; K.-T. Lee & Koo, 2012).

Overall, it seems that e-WOM adoption, perceived e-WOM usefulness, and perceived e-WOM credibility are related theoretically. However, most existing studies focused on only one antecedent of e-WOM adoption. There is a need for further exploring the determinants and processes of consumers' e-WOM adoption, and a systematical analysis of their interrelationships is expected.

Theoretical Background and Foundation

In this section, the paper summarizes the theories and models related to the e-WOM studies which help develop the conceptual model in this research. Specifically, it includes Stages in Consumer Decision Making, Technology Acceptance Model, and Elaboration Likelihood Model.

Stages in Consumer Decision Making

Consumer decision making is an important and central part of consumer behavior. Nowadays, the Internet is changing the way consumers obtain information and, evaluate products or service, as well as their online purchasing behavior. A consumer can be seen as a problem solver when he wants to make a purchase to satisfy his needs or wants, Solomon (2009) stated several steps essential in a typical decision process for the consumer's selection of a product or service, 1) problem recognition, 2) information search, 3) evaluation of alternatives, 4) product choice, and 5) outcomes. Figure 3 shows the overview of the consumers' decision-making process.

The hospitality and tourism industry is strongly impacted by Internet technology, and online hotel booking is suggested as one of the most popular decision making activities for online service experience. Online hotel booking is perceived as a high risk task with uncertainty. Therefore, it is assumed that consumers would search for the most valuable information to make their final decision. It is necessary to understand the steps consumers use for their hotel choice.

According to Solomon (2009), problem recognition is the first stage in the decision making process, and it occurs when a person realizes that he has a desire and must take action. Specifically in the case of online hotel booking, this step may be triggered by travelers' trip planning needs. Their individual characteristics may also influence their wants for hotel type, brand or service (Ayeh, Au, & Law, 2013b; Wolfe, Hsu, & Kang, 2004).

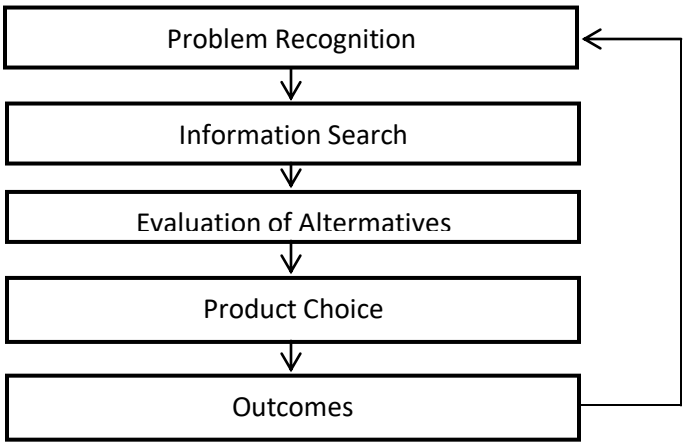


Figure 3. Stages in Consumer Decision Making

Source: Solomon, M.R. (2009). Consumer Behavior: Buying, Having, and Being (8th ed.) New Jersey, United Stated: Person Education, Inc. p. 325

The next stage is information search, the process by which people survey the environment to make a reasonable decision. Information search intention is found as an important indicator of Internet purchase intention (Shim, Eastlick, Lotz, & Warrington, 2001). People may engage in many kinds of pre-purchase search such as internal search (simply scanning their own memory or experience) as well as external search (extensive sources to amass as much information as possible), deliberate search (result of directed learning) and accidental search (result of incidental learning). The Internet provides consumers with a greater variety of sources to gain hotels information than offline. In the context of online hotel booking, several different sources have been emphasized as the channels for hotel e-WOM information search, including hotels' own websites, third-party online review sites, online travel agencies, and social media, etc. Consumers' perceived risk and uncertainty has been investigated particularly in this stage as relevant to travelers' intention for online hotel booking (C. H. Lee & Cranage, 2010; Lin, Jones, & Westwood, 2009; Mason & Roberts, 2004; Nysveen, 2003).

In the third stage of evaluating alternatives, consumers may have a set of potential choices to which they apply evaluation criteria (dimensions used to judge the competing options) to narrow down their alternatives and then choose the one that best matches their requirements (e.g., hotel price, brand, location, and service quality). Regarding the online hotel booking environment, customers have a number of hotel options and more hotel information is available than ever. The increasing amount of relevant alternatives and decision-relevant information may lead to customer confusion for online hotel booking (Matzler & Waiguny, 2005). E-WOM can be utilized to play a major role in the evaluating alternative stage, however, this area still needs much more work to uncover online consumers' decision-making processes (Darley, Blankson, & Luethge, 2010).

The following stage is product choice which refers to booking the hotel that really appeals to customer. And the final stage is the outcome of this decision making process which in turn has an impact on the problem arisen in the first stage.

In this study, it focused to investigate readers' information processing of e-WOM and the influence of online hotel reviews on their online hotel booking decision. Therefore, the stage of information search and evaluating alternatives are the focus of this study in consumers' decision making process.

Technology Acceptance Model

The Technology Acceptance Model (TAM) is regarded as one of the most widely used models in predicting consumers' acceptance of various information technologies. Developed by Davis (1989), this model is adapted from the Theory of Reasoned Action (TRA) (Fishbein & Azjen, 1975, Ajzen & Fishbein 1980) which is a well-accepted attitude-intention-behavior model and has been proven successful in explaining an individual's behavior.

According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), an individual's behavior is determined by his or her behavior intention, where behavior intention is in turn determined by two factors: 1) attitude toward the behavior (positive or negative feelings about the target behavior), and 2) subjective norms (the perceived opinion from most people associated with the behavior). The model of TRA is shown in Figure 4.

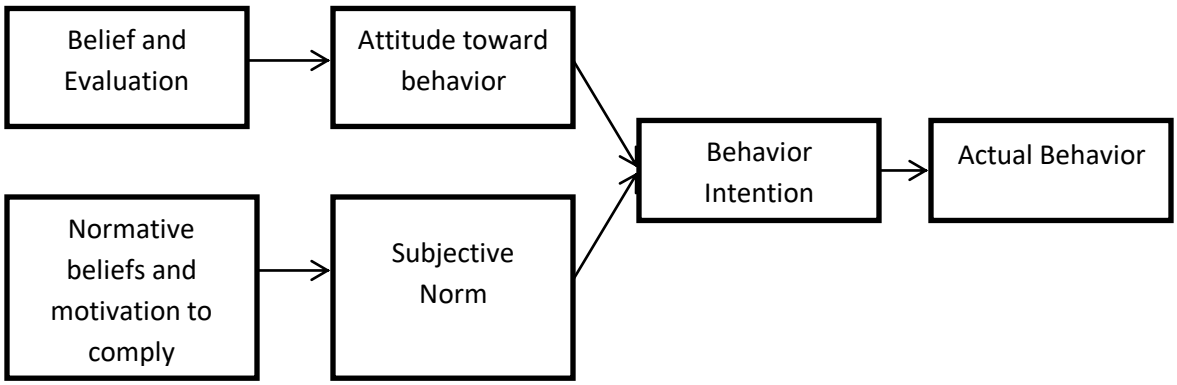


Figure 4. The Theory of Reasoned Action (Fishbe & Ajzen, 1975)

Based on the TRA, Davis (1989) proposed the Technology Acceptance Model to find out what factors impact people's acceptance of information technology. It is suggested that perceived usefulness and perceived ease of use are the two important individual beliefs that replace the TRA model's attitudinal determinants (Figure 5). Specially, perceived usefulness (PU) is defined as the degree to which a person believes that using a particular technology would benefit his or her job performance. Perceived ease of use (PEOU) refers to the degree to which an individual believes that using a particular technology would be free of effort. In their study, perceived usefulness was found the strongest predictor for usage intention.

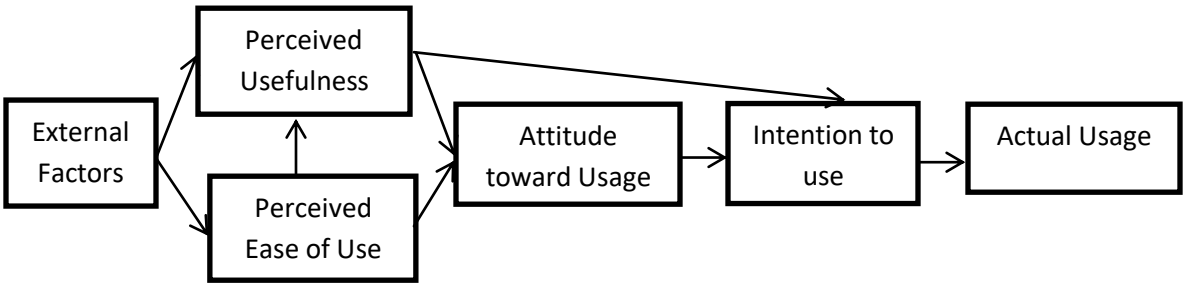


Figure 5. The Technology Acceptance Model (Davis, 1989)

While TRA is proposed to explain virtually any human behavior, the goal of TAM is to explain the determinants of computer-usage acceptance behaviors across a broad range of end-users (Davis, Bagozzi, & Warshaw, 1989). A number of studies have successfully adopted TAM to examine consumers' acceptance of Internet related technologies in the hospitality and tourism industry, such as online shopping (Gefen, Karahanna, & Straub, 2003), consumer-generated media for travel planning (Ayeh et al., 2013b), online booking for tourism products (Deniz, Rob, Alia, & Patrick, 2015), and web-based GIS in tourism information search (Chang & Caneday, 2011). In general, this model would be well-suited for modelling acceptance of any computing technology.

In this study, TAM is relevant because e-WOM for online hotel booking is highly associated with information technology. As a result, this model can be used as a fundation to help the researcher understand the adoption or acceptance mechanism of travelers' attitudes toward using e-WOM. Also, TAM can facilitate researchers to investigate the different levels of acceptance of using e-WOM from different respondents regarding their demographics.

In the information system field, TAM has been considered the most influential and widely used theory for studying an individual's acceptance of various technologies under

different situations. Previous researchers have also extended TAM in order to address problems and develop a better understanding of TAM variables. For instance, some researchers introduce external factors to the two major belief constructs (perceived usefulness and perceived ease of use) such as computer self-efficacy, prior experience and demographic characteristics (Agarwal & Prasad, 1999; Gefen & Straub, 1997; Reid & Levy, 2008). Other researchers introduce additional belief factors, such as social influence, compatibility, and perceived value (L.-d. Chen, Gillenson, & Sherrell, 2002; Hsu & Lu, 2004; T. G. Kim, Lee, & Law, 2008).

Considering the importance and impact of perceived credibility of e-WOM on receivers' e-WOM adoption, the researcher of this study extended the TAM by adding this belief factor. Perceived credibility is noted as a very important construct in e-WOM adoption (Fang, 2014; Lis, 2013; Man Yee et al., 2009). Studies show that a receiver will be more likely to use the e-WOM recommendations when he or she thinks the information is credible (K.-T. Lee & Koo, 2012). Therefore, the basic conceptual model for this study is presented in Figure 6, and their relationships are stated as the hypotheses:

Hypothesis 1: Receivers' perceived usefulness of e-WOM has a positive effect on their attitude toward e-WOM.

Hypothesis 2: Receivers' perceived credibility of e-WOM has a positive effect on their attitude toward e-WOM.

Hypothesis 3: Receivers' perceived ease of use of e-WOM has a positive effect on their attitude toward e-WOM.

Hypothesis 4: Receivers' perceived usefulness has a positive effect on their adoption of e-WOM.

Hypothesis 5: Attitude toward e-WOM has a positive effect on the adoption of e-WOM.

Hypothesis 6: Receivers' perceived credibility has a positive effect on the adoption of e-WOM

Hypothesis 7: Receivers' perceived ease of use has a positive effect on perceived usefulness.

The figure below shows the basic conceptual framework of this study.

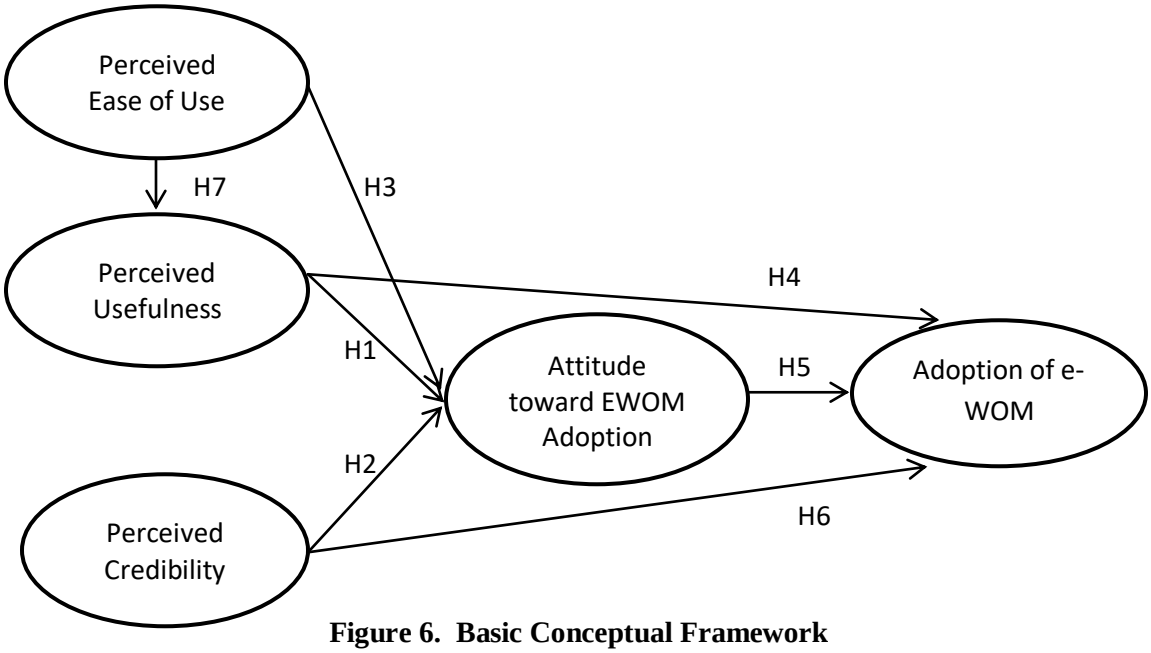


Figure 6. Basic Conceptual Framework

Elaboration Likelihood Model

While TAM is useful in understanding how receivers' intention toward using e-WOM is formed, it doesn't answer the question about the influence process itself. For example, when receivers read a large number of e-WOM information, how is it that different people can process the same message in different ways? What aspects of the message are influencing the readers to follow it? The adoption theories (TRA and TAM) were not designed to answer these kinds of questions, so this study suggests using the Elaboration Likelihood Model for further understanding the complex process on how the attitude toward adopting e-WOM is formed.

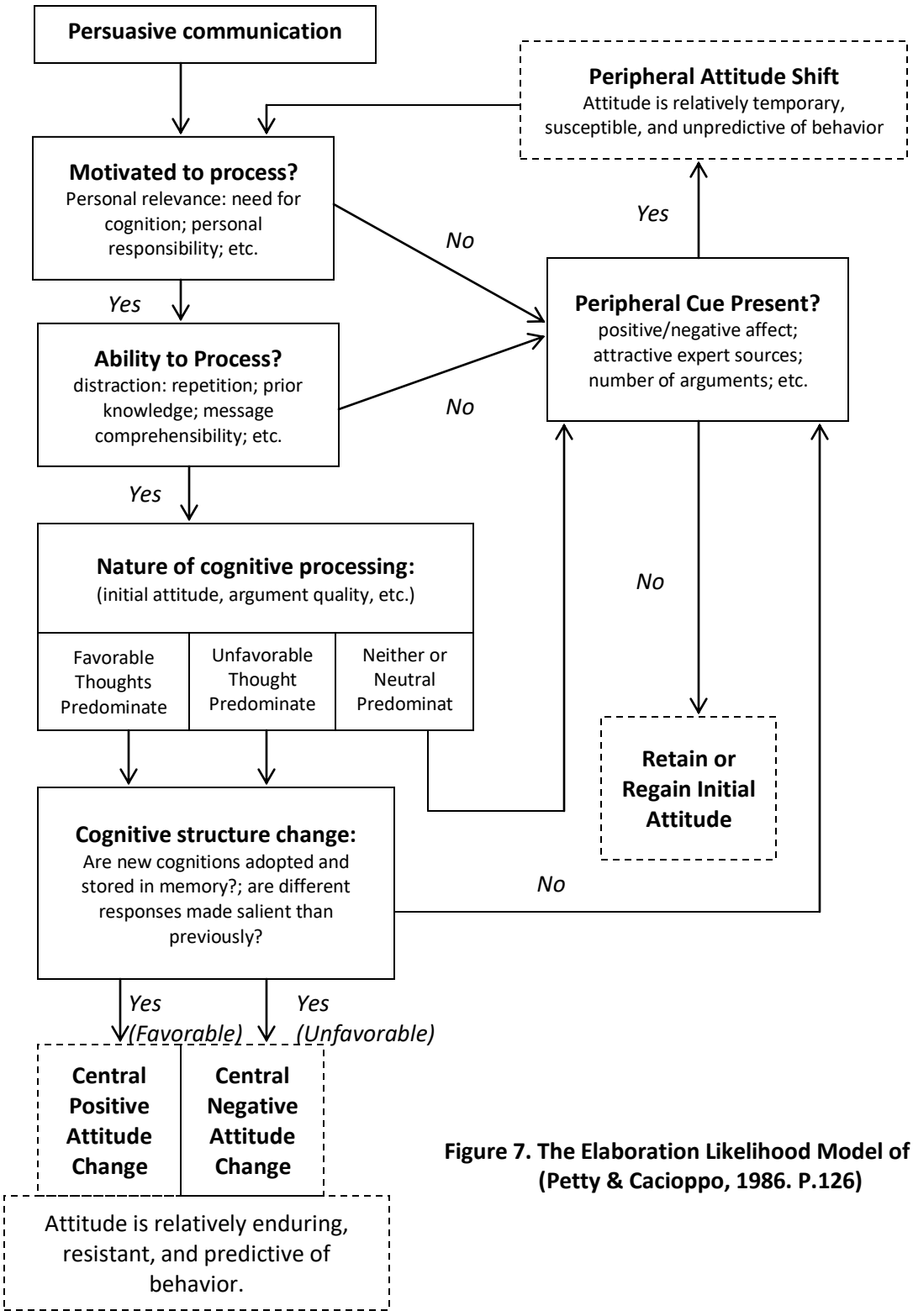


Figure 7. The Elaboration Likelihood Model of Persuasion (Petty & Cacioppo, 1986. P.126)

The Elaboration Likelihood Model (ELM), proposed by Petty and Cacioppo (1986), is a dual-process theory for understanding the basic processes underlying the effectiveness of informational persuasion communication. In general, this theory helps to understand how the external or internal variables impact on individuals' information evaluations. The basic idea in this model is that "elaboration" occurs when people encounter persuasive messages, where elaboration means the degree or the extent to which an individual carefully thinks about the information (Petty & Cacioppo, 1986). Figure 7 shows the model of ELM.

Elaboration continuum can range from low elaboration (no thought about the information presented) to high elaboration (complete thinking of every argument). Along this continuum, the authors postulate two extreme ways of information processing on attitude change: the central route and the peripheral route (Petty & Cacioppo, 1986). People who have the motivation and ability concerning the issue will spend more time carefully processing the relevance and logic of the arguments presented and this deep processing is described as the central route. On the other hand, people who are less motivated or unable to process the relevant arguments are inclined to use simple cues or decision rules to evaluate the argument instead of the content of argument (Petty, Cacioppo, & Schumann, 1983). In normal conditions, both the influence of the central route and peripheral route are involved in consumer attitude formation and change.

According to the ELM, the central route processes the "argument quality" and focuses on the message itself in a cognitive effort of evaluation, and the persuasion effect is more stable and enduring, while the persuasion effect of the peripheral route, which processes cues as heuristics, saves more time and mental effort. In the context of e-WOM, due to the great amount of available online reviews on customer-generated media, the ELM is sound enough to be used as a popular and influential theoretical framework (Yolanda & Ngai, 2011). However, only a few studies have comprehensively investigated travelers' information processing for online hotel

reviews by using the ELM. This study aims to fill this gap in hospitality studies, and the factors associated with central and peripheral route processing are discussed as following.

Central Route Processing Factors

Argument quality is an important construct for central route processing in the Elaboration Likelihood Model and is defined as ”the audience’s subjective perception of the arguments in the persuasive message as strong and cogent on the one hand versus weak and specious on the other” (Petty & Cacioppo, 1981, p.264-5). As a central cue, people would like to rely on carefully examining the cognitive information of the message itself before forming an attitude. Previous studies have confirmed that consumers’ purchase intention is greatly impacted by the quality of argument when highly involved (S.-H. Lee, 2009; D.-H. Park & Lee, 2008; D.-H. Park et al., 2007; Petty et al., 1983). Sussman and Siegal (2003) proposed the information adoption model and suggested that argument quality is an antecedent of perceived usefulness of information, which leads to information adoption.

Despite the importance and persuasive effects of the argument quality, there is no clear identification or systematic analysis of argument quality. Petty and Cacioppo (1986) stated that they “have ignored the specific qualities that render some arguments cogent and others specious” (Petty & Cacioppo, 1986, p.32). As a result, it is hard to identify what is a strong or high quality message and what is a weak or low quality message. Therefore, there is a research gap for assessing the argument quality of information.

In the e-WOM context, consistent with the ELM, this study claims that the argument quality of e-WOM is a critical determinant in persuasive communication in central route. However, instead of using argument quality as a composite construct, this study regards it as an abstract construct which can be evaluated in terms of three dimensions: information relevance,

information timeliness and information completeness. These three antecedents were selected based on their representation and widespread use for information technology context.

Information Relevance

Information relevance is a subjective perception of the applicability and helpfulness between the information need and a task at hand (Wang & Strong, 1996). Xu (2007) summarized that there are four forms of subjective relevance including subjective topicality (the subject of interest), cognitive relevance (affect knowledge of a user), situational relevance (pragmatic utility in problem solving) and affective relevance (the emotional reaction of the user). It is posited that relevance should be a main concern for information searchers within the information science (Xu, 2007).

Readers generally aim to find product reviews that benefit them in purchase decisions. For our research in the context of online reviews for online booking decision, it is assumed that tourists expect some relevant and unknown information about this hotel. Alternatively, information which is irrelevant to the readers' goal may be deemed weak. Tourists want to find information quickly and effortless. When they read online hotel reviews, if customers perceive that the content of the reviews is relevant to his/her needs and requirements, the information can have an important effect on their decision making (C. M. K. Cheung et al., 2008; Filieri & McLeay, 2014). The perception of relevance varies from person to person, and the feeling of relevance toward a target would significantly impact people's evaluation (Michel Tuan Pham, 1998). Overall, messages containing product-relevant information can assist tourists' buying decisions. Therefore, this study argues that:

Hypothesis 8: Information relevance has a positive effect on recipients' perceived usefulness of e-WOM.

Information Timeliness

Information timeliness refers to the degree to which information is current, timely and up to date (C. M. K. Cheung et al., 2008). It is identified as an important factor in contextual information quality (Michnik & Lo, 2009; Wang & Strong, 1996; Wixom & Todd, 2005). Since the amount of online reviews is numerous and people can access them any time, a timely or updated reviews might be especially useful for information searchers.

Some previous studies suggested that timeliness is positively associated with the readers' perceived usefulness of the review (Wixom & Todd, 2005; Yang, Xiangji, Aijun, & Xiaohui, 2008), while some other studies showed moderate influence of timeliness on users' information adoption (Filieri & McLeay, 2014). There are also researchers who found a non-significant relationship between timeliness and information usefulness (C. M. K. Cheung et al., 2008). Therefore, it can be summarized that the effect of information timeliness on readers' perceived usefulness is inconsistent, and this causes the author of this study to examine the following hypothesis:

Hypothesis 9: Information timeliness has a positive effect on perceived usefulness of e-WOM.

Information completeness

Information completeness refers to the extent to which information is of sufficient breadth, depth, and scope for the task at hand (Wang & Strong, 1996). The more detailed and the wider the breadth of the information, the more complete and comprehensive the review is. For example, online hotel reviews are considered as complete if a wide range of aspects are discussed including cleanliness, price, service quality, location, and staff, etc.

Cheung et al. (2008) measured review completeness as one of the dimensions of argument quality, and supported that consumers find complete information helpful in assessing

the product or service they plan to purchase. However, Filieri and Mcleay (2014) found that information completeness has non-significant influence on reviewers' adoption of information, and the information relevance strongly affected information adoption instead. In this study, we supposed that:

Hypothesis 10: Information completeness has a positive effect on perceived usefulness of e-WOM.

The figure below shows the antecedents of perceived usefulness of e-WOM in central route.

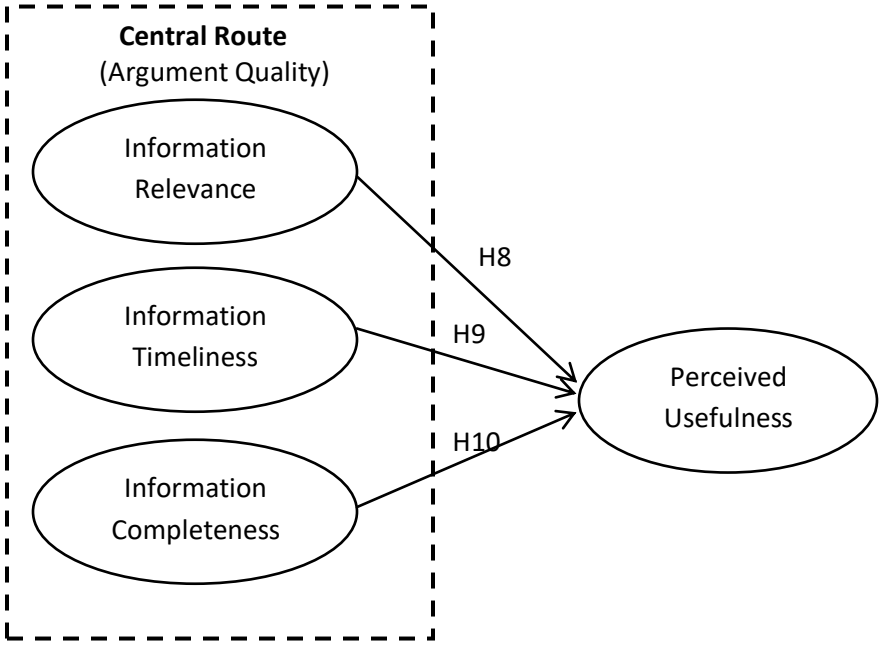


Figure 8. The Antecedents of Perceived Usefulness

Peripheral Route Processing Factors

ELM describes the peripheral route as an elaboration processing in which people do not engage in extensive issue-relevant thinking (Petty & Cacioppo, 1986). Under these circumstances, information receivers process the message association rather than message itself, and less cognitive effort is required for the resulting attitude change. The peripheral cues received are generally unrelated to the quality of information, and play an especially important role when an individual is either unable or unwilling to evaluate. Compared with people who use the central route, the receivers' attitudes change resulting from peripheral cues tend to be less stable (Petty & Cacioppo, 1986).

Previous studies have indicated several peripheral cues in the e-WOM literature, including source-related cues such as source credibility, source attractiveness and source expertise(DeBono & Harnish, 1988; Kusumasondjaja, Shanka, & Marchegiani, 2012; M. Li, Huang, Tan, & Wei, 2013; Sussman & Siegal, 2003); and message-related cues such as e-WOM quantity, e-WOM consistency, e-WOM extremity and recommendation rating (Baek et al., 2012; Cindy Man-Yee, Choon-Ling, & Kuan, 2012; Filieri & McLeay, 2014; Man Yee et al., 2009; Mudambi & Schuff, 2010). This extant research has examined the effect of these peripheral cues on readers' attitudes toward e-WOM usefulness, credibility or purchasing intention. Given the research on determinants of e-WOM credibility haven't been empirically examined so far, this study puts focus on the antecedents of e-WOM credibility from the perspective of e-WOM receivers drawing on the dual process theory.

In this study, given the context of e-WOM in the hospitality industry, the author introduces four peripheral cues which have effects on receivers' perceived credibility of online hotel reviews: information sidedness, information consistency, review rating and product rating.

Information sidedness

When readers evaluate whether the information argument has high quality, it is important to note whether the pros and cons are both presented in a review. One-sided messages usually only present either positive or negative reviews, while a two-sided message presents both. Attribution theory which explains why people do a behavior is commonly used to explain the persuasive effects of two-sided information (Crowley & Hoyer, 1994). However, regarding the impact of message sidedness on helpfulness, empirical results are contradictory.

In general, compared with one-sided reviews, two-sided reviews appear to provide more complete information and therefore tend to be deemed more diverse and useful. It has been empirically proven that an argument with both positive and negative information is more persuasive than other kinds of argument (Eisend, 2007). Several previous studies support this and argue that two-sided message will be more effective or helpful than one-sided messages (Allen et al., 1990; Chebat & Picard, 1988; Etgar & Goodwin, 1982; Willemsen, Neijens, Bronner, & de Ridder, 2011).

On the other hand, recent studies suggest that two-sided messages are less effective than one-sided message. For instance, Schlosser (2011) conducted a content analysis of peer reviews and the results showed that the perceived helpfulness of two-sided message is higher only when the rating of the product or service is moderate. When the rating score is extreme, the advantage of two-sided information will disappear (Schlosser, 2011).

Given the different ideas of information sidedness as mentioned above, it can be concluded that the effects of information sidedness on information credibility haven't been agreed upon. The strength of two-sided messages may function as a dimension that affects information usefulness. Therefore, in this study, the researcher further examined this issue and the hypothesis is stated as follows:

Hypothesis 11: The information sidedness positively affects consumers' perceived credibility of e-WOM.

Review consistency

Review consistency refers to the degree to which the current information in a review is consistent with other contributors' reviews concerning the same product or service evaluation (Cindy Man-Yee et al., 2012; Man Yee et al., 2009).

In the online environment, consumers usually evaluate a variety of comments together. Information searchers can perceive the review consistency as a heuristic cue that affects e-WOM adoption. If the current review is consistent with many reviews presented by other reviewers, it is likely to be perceived as more credible. For example, if the good service quality of a hotel is repeatedly reported by different reviewers, readers are more likely to believe the information is true. In contrast, if the online review is inconsistent with others about the same product of service, the readers may be skeptical toward the credibility of the reviews (Cindy Man-Yee et al., 2012). Hence, it is argued that:

Hypothesis 12: Review consistency positively affects consumers' perceived credibility of e-WOM.

Review Rating

Many review websites ask users to vote whether or not the review posted by others was helpful for them (e.g., "Was this review helpful?"). The answer is merely "yes" or "no". The number of votes for the review's helpfulness is then summarized under the reviewer's profile showing the reviewer's contribution. Since the helpfulness of reviews can facilitate users coping with information overload, the researcher in this study is interested in investigating the influence of the helpfulness votes on users' perceived e-WOM credibility.

Duan, Cao, & Gan (2010) conducted a study on the helpfulness of online reviews, and the results showed that various characteristics of online reviews can influence the number of the readers' helpfulness votes. Using the text-mining technique, the authors found that basic, stylistic; and semantic characteristics of reviews can all impact the number of helpfulness votes. The more positive the rating of a review, the higher the perceived credibility of the online review is (Lis, 2013).

As a peripheral cue, before reading the review content, a reader could get a general idea about the helpfulness of the review by the number of helpfulness votes. Generally, more helpful votes indicate that more people have a favorable attitude toward the review, and it therefore can be treated as more credible. However, there are also a number of online reviews that do not receive any helpfulness votes. Is the review with less helpfulness votes necessarily containing non-valuable information? Would the review with more helpfulness votes provide more credible information? These questions peak the author's interest to investigate the relationship between helpfulness votes and perceived e-WOM credibility.

Therefore, the review rating can facilitate readers' decision-making to some extent. Cheung et al.(2009) supports that the overall rating given by other readers on an e-WOM recommendation has a positive effect on perceived e-WOM credibility. Thus, this study states the following hypothesis:

Hypothesis 13: Review rating positively affects consumers' perceived credibility of e-WOM.

Product rating

Product rating refers to a reflection of reviewers' average evaluation of the product (Qiu, Pang, & Lim, 2012). The aggregate information usually reflects a general evaluation of the product such as the overall popularity (via the quantity of reviews), and the degree of consensus among reviewers. On the e-WOM platform in the hospitality industry, the aggregate rating

sometimes also consists of the subtotal of each rating category. For instance, for the aggregated rating information of hotels on TripAdvisor, the subtotal rating includes the overall traveler rating and rating summary for location, sleep quality, rooms, service, value and cleanliness.

Since product rating and individual review are supposed to provide information together, readers can use product rating as a shortcut in the information processing. The representation format and content of aggregated rating information is clear and straightforward for reading, and thus can be easily used to evaluate the product or service. It is argued that the aggregate information will impact consumers' inferences of reviews and that there is a positive relationship between aggregated ranking of product and travelers' information adoption (Filieri & McLeay, 2014). Qiu, Pang, & Lim (2012) explored the effect of conflicting aggregated ratings with individual reviews on perceived credibility, and the results showed a negative relationship between them. In this research, the author argues that aggregated rating may influence perceived credibility of e-WOM, and the hypothesis is stated as following:

Hypothesis 14: Product rating positively affects consumers' perceived credibility of e-WOM.

The figure below shows the antecedents of perceived credibility of e-WOM in the peripheral route.

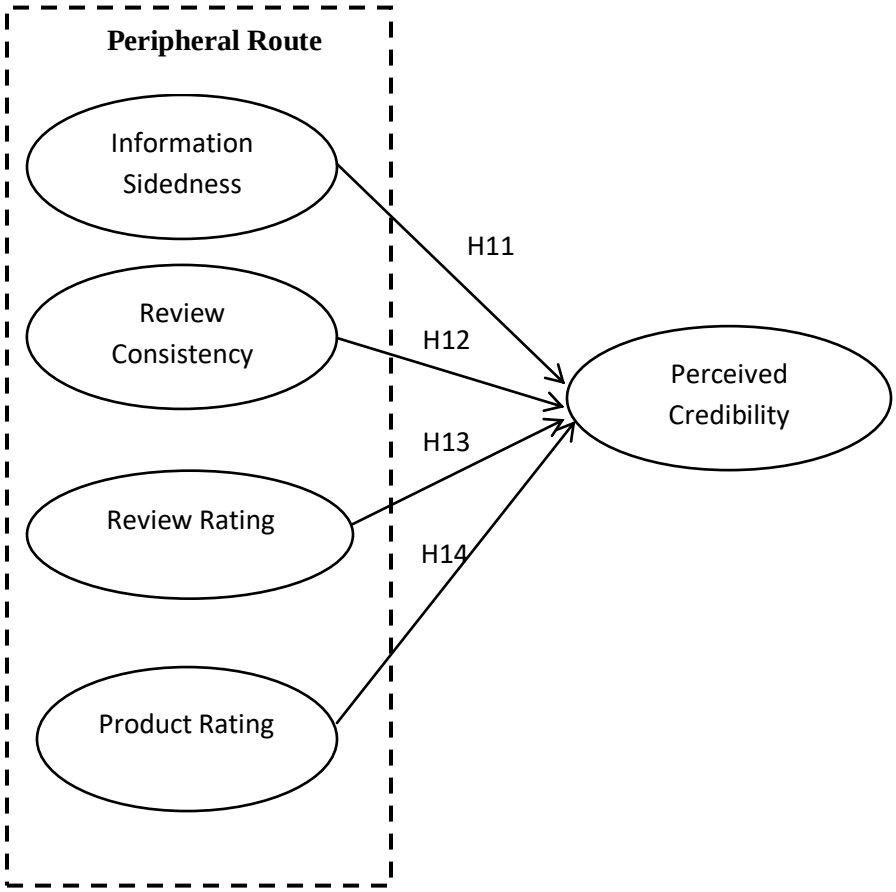


Figure 9. The Antecedents of Perceived Credibility

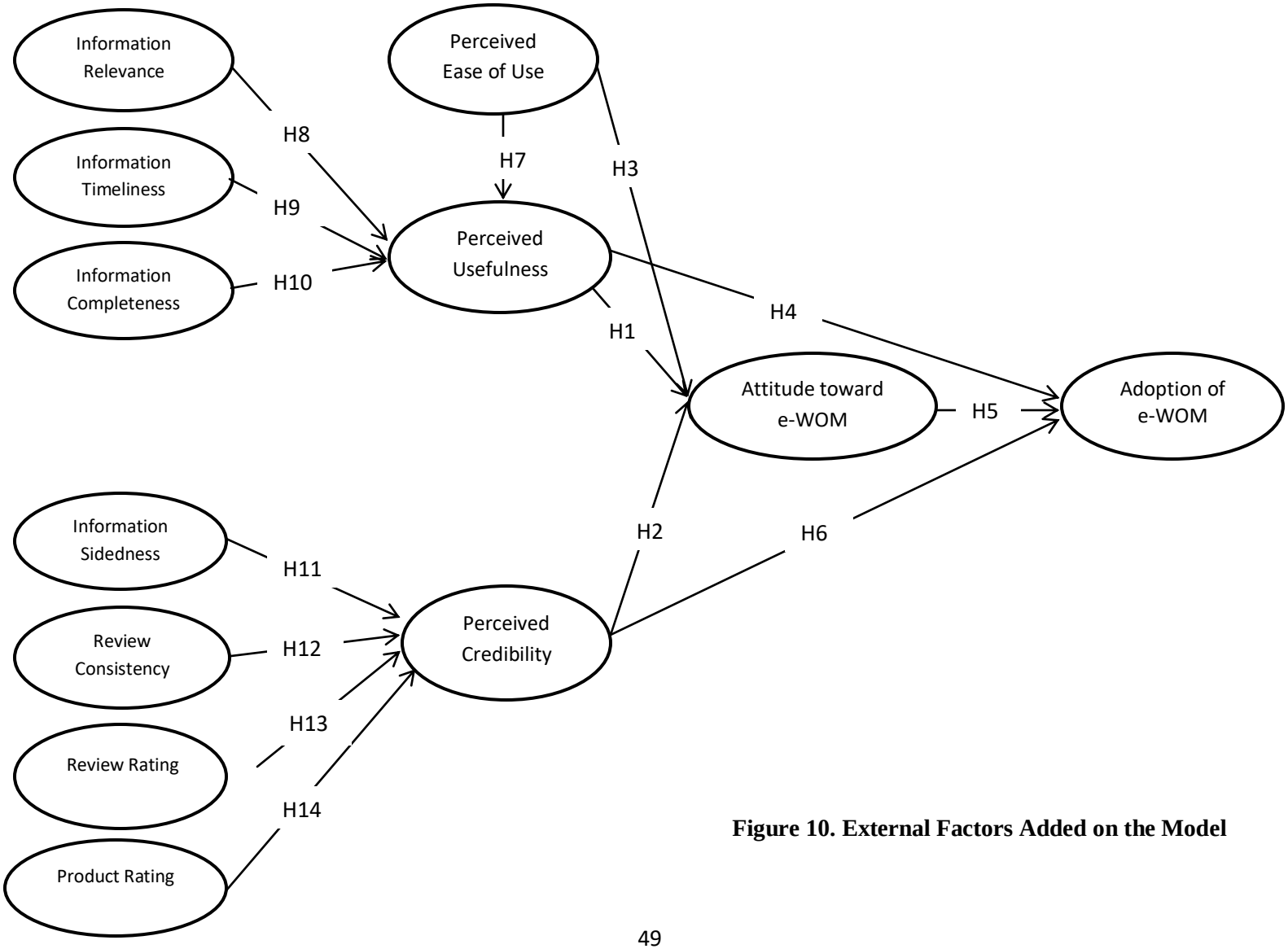


Figure 10. External Factors Added on the Model

The Moderators in e-WOM adoption

Moderators in ELM

According to ELM, which is a theory about elaboration process for receiving a persuasive communication, motivation and ability of the person are two important factors that affect his or her choice of processing route (Petty & Cacioppo, 1986). As the authors emphasized, when the individual is highly motivated and able to process the message in depth, he or she engages in a higher level of thinking, while those who are not motivated or unable to evaluate the message would more likely rely on peripheral cues. Much of the efforts in consumer behavior studies have paid attention to exploring the antecedents that influence motivation and ability, and involvement and expertise are strongly recommended (Bansal & Voyer, 2000; Gilly, Graham, Wolfinbarger, & Yale, 1998; D.-H. Park & Lee, 2008; D.-H. Park et al., 2007).

Expertise refers to the extent to which the recipient has prior knowledge about this product or service(Sussman & Siegal, 2003). Early research argued that the degree of expertise of the receiver can influence their WOM searching behavior(Bansal & Voyer, 2000). Interestingly, some researchers supported that people with more expertise can be encouraged to search for more professional information due to their ability and knowledge (Punj & Staelin, 1983). Whereas, other research claimed that the higher degree of expertise an individual has, the less likely they would search WOM often (Brucks, 1985). Gilly et al.(1998) agreed with this and claimed that receivers' expertise is negatively correlated with searching activities. Given the interesting result from the early research, this study proposed that expertise has a moderating effect on the relationship between attitude toward e-WOM and e-WOM adoption.

Hypothesis 15: Receivers' expertise on hotels weakens the relationship between attitude toward e-WOM and the e-WOM adoption.

Involvement refers to personal relevance of a product or service based on needs, interests and values (D.-H. Park et al., 2007). The level of personal importance and interest in a product can be reflected by the involvement level. Previous studies found that highly involved e-WOM receivers utilize heavily informative e-WOM messages, which have more effect on their purchase intention (Huang, Chou, & Lin, 2010; S.-H. Lee, 2009; D.-H. Park et al., 2007). The consumers with low involvement of product or service also experience low need for information, whereas consumers of high involvement are more likely to look for valued information (Zaichkowwshky,1985).

Sussman and Siega (2003) investigated the moderating roles of receiver's involvement and expertise on receivers' information adoption. They found that perceived usefulness is influenced significantly only at high level of receiver's expertise and high involvement. Cheung et al,(2012) also examined the moderating roles of expertise on the relationship between several processing factors and review credibility, and found only review sidedness had a strong impact on credibility when expertise is high.

In this study, the moderating role of receiver's e-WOM involvement was examined. Leisure travelers have different experiences of e-WOM involvement, and this study was interested in understanding how e-WOM involvement influences their decision making process. Therefore, based on the ELM, we predict that travelers with high e-WOM involvement would use central route or message quality more than low e-WOM involvement travelers in forming attitudes toward e-WOM. The hypotheses to test the relationship are shown below:

Hypothesis 16-1: Involvement strengthens the relationship between information relevance and the perceived usefulness.

Hypothesis 16-2: Involvement strengthens the relationship between information timeliness and the perceived usefulness.

Hypothesis 16-3: Involvement strengthens the relationship between information completeness and the perceived usefulness.

Hypothesis 17-1: Involvement weakens the relationship between information sidedness and the perceived credibility.

Hypothesis 17-2: Involvement weakens the relationship between review consistency and the perceived credibility.

Hypothesis 17-3: Involvement weakens the relationship between review rating and the perceived credibility.

Hypothesis 17-4: Involvement weakens the relationship between product rating and the perceived credibility.

Conceptual Framework

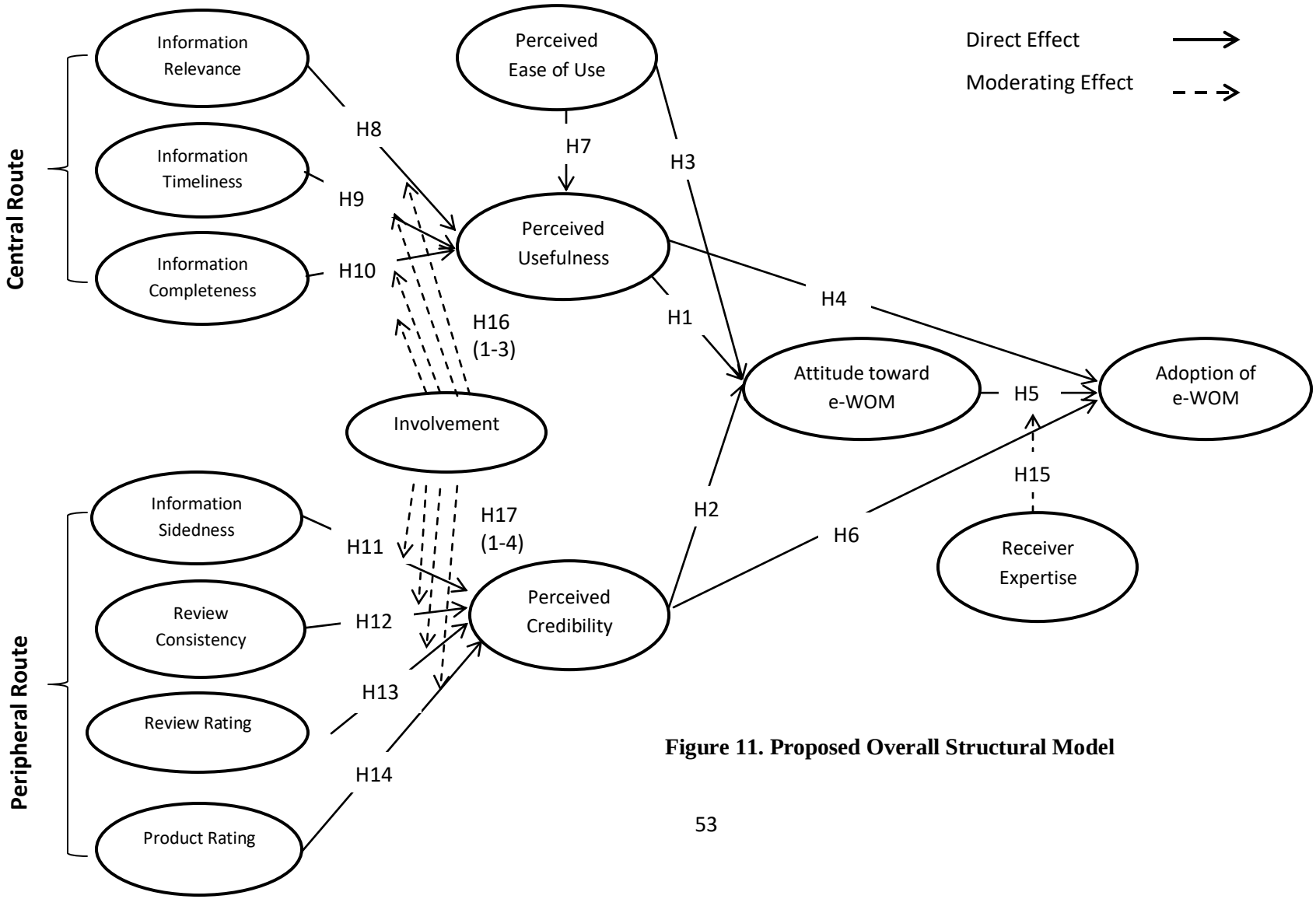


Figure 11. Proposed Overall Structural Model

Summary of Research Hypotheses

Here is the summary of all hypotheses in this study:

H1: Receivers' perceived usefulness of e-WOM has a positive effect on their attitude toward e-WOM.

H2: Receivers' perceived credibility of e-WOM has a positive effect on their attitude toward e-WOM.

H3: Receivers' perceived ease of use of e-WOM has a positive effect on their attitude toward e-WOM.

H4: Receivers' perceived usefulness has a positive effect on their adoption of e-WOM.

H5: Attitude toward e-WOM has a positive effect on the adoption of e-WOM.

H6: Receivers' perceived credibility has a positive effect on the adoption of e-WOM.

H7: Receivers' perceived ease of use has a positive effect on perceived usefulness.

H8: Information relevance has a positive effect on recipients' perceived usefulness of e-WOM.

H9: Information timeliness has a positive effect on perceived usefulness of e-WOM.

H10: Information completeness has a positive effect on perceived usefulness of e-WOM.

H 11: Information sidedness positively affects consumers' perceived credibility of e-WOM.

H12: Information consistency positively affects consumers' perceived credibility of e-WOM.

H13: Review rating positively affects consumers' perceived credibility of e-WOM.

H14: Product rating positively affects consumers' perceived credibility of e-WOM.

Here is the summary of all hypotheses in testing moderating effects:

Hypothesis 15: Receivers' expertise on hotels weakens the relationship between attitude toward e-WOM and the e-WOM adoption.

Hypothesis 16-1: Involvement strengthens the relationship between information relevance and the perceived usefulness.

Hypothesis 16-2: Involvement strengthens the relationship between information timeliness and the perceived usefulness.

Hypothesis 16-3: Involvement strengthens the relationship between information completeness and the perceived usefulness.

Hypothesis 17-1: Involvement weakens the relationship between information sidedness and the perceived credibility.

Hypothesis 17-2: Involvement weakens the relationship between review consistency and the perceived credibility.

Hypothesis 17-3: Involvement weakens the relationship between review rating and the perceived credibility.

Hypothesis 17-4: Involvement weakens the relationship between product rating and the perceived credibility.

CHAPTER III

METHODS

Research Design

As the purpose of this study is to establish and empirically test an integrated model that systematically examines travelers' e-WOM adoption, a quantitative approach was the method for primary data. Technology Acceptance Model and Elaboration Likelihood Model were integrated in this research. Causal research design was used to investigate the structural relationship among the constructs (central route factors, peripheral route factors, perceived usefulness, perceived credibility, perceived ease of use, attitude toward e-WOM and adoption of e-WOM); descriptive analysis was used to analyze travelers' demographic characteristics.

Instrument

Survey Questionnaire

An online self-administered and close-ended questionnaire was used for the survey. There were five sections of instruments composing the questionnaire: 1) central route processing factors; 2) peripheral route processing factors; 3) technology acceptance constructs, 4) moderators (e-WOM involvement and receiver expertise), and 5) demographic information. All items and

measurement scales were adapted from the previous studies (C. M. K. Cheung & Thadani, 2012;Davis, 1989; Ohanian, 1990; Wang & Strong,1996; Wixom & Todd, 2005) . The proposed measurement items for each section are presented as following.

Table 1. Proposed Measurement Items

Section I: Central route processing factors (Total: 12 items)

Construct	**Items**	**References**
Information relevance	1. The information I got through online hotel reviews was relevant to my needs for the hotel I was interested in. 2. The information I got through online hotel reviews was appropriate for satisfying my needs for the hotel I was interested in. 3. The information I got through online hotel reviews was applicable to match my needs for the hotel I was interested in.	Wixom & Todd (2005)
Information Timeliness	1. The online hotel reviews I referred to were current at that time. 2. The online hotel reviews I referred to were timely at that time. 3. The online hotel reviews I referred to were up-to-date at that time.	Wixom & Todd (2005)
Information Completeness	1. The online hotel reviews included necessary information about the hotels. 2. The online hotel reviews covered enough detailed information about the hotels. 3. The online hotel reviews had sufficient information about the hotels.	Wang & Strong (1996)

As shown above, the first section of this questionnaire was designed to collect information about the consumers' e-WOM elaboration in the central route. Three dimensions of argument quality are measured in this section: information relevance, information timelines, and information completeness, The instruments were adapted from Wixom & Todd (2005), Wang & Strong (1996), and Cheung et al.(2012), and modified to be applicable to the e-WOM context.

The respondents were asked to rate their agreements of the statements on a seven-point Likert-type scale from "Strongly Disagree" to "Strongly Agree".

Section II. Peripheral route processing factors (Total: 12 items)

Construct	Items	References
Information Sidedness	1. The online hotel reviews included both pros and cons on the discussed hotel. 2. The online hotel reviews included both positive and negative comments on the discussed hotel. 3. The online hotel reviews included only one-sided comments (positive or negative). 4. The online hotel reviews were biased toward one side or the other.	Cheung et al.(2012)
Information Consistency	1. Comments in online hotel reviews are consistent with each other. 2. Comments in online hotel reviews are similar to each other 3. Comments in online hotel reviews match each other	Cheung et al.(2009)
Review Rating	1. The online hotel reviews are highly rated by other audience. 2. The online hotel reviews were found to be favorable by other audiences. 3. The online hotel reviews were found to be approving by other audiences.	Cheung et al.(2009)
Product Rating	1. Travelers' overall ratings on hotels are important to evaluate the hotel which I am interested. 2. Travelers' overall ratings on hotels are useful to improve my understanding of the hotel which I am interested. 3. Travelers' overall ratings on hotels are helpful to learn about the hotel which I am interested.	Cheung et al.(2009)

The second section of the questionnaire was designed to collect information about the consumers' e-WOM elaboration in the peripheral route. 13 items are used to measure the constructs: information sidedness, information consistency, review rating and product rating. The item measurements were adapted from Cheung et al.(2009) and Ohanian (1990), and modified to

be applicable to the e-WOM context. All of the items were measured using the seven-point Likert-type scale (1= strongly disagree; 7= strongly agree).

Section III: Technology acceptance constructs (18 items)

Construct	Items	References
Perceived Usefulness	1. Online hotel reviews are useful. 2. Online hotel reviews make my hotel booking decision easier. 3. Online hotel reviews improve my hotel booking process. 4. Online reviews enable me to decide for a hotel reservation more quickly.	Davis (1989)
Perceived Credibility	1. I consider the online hotel reviews on TripAdvisor.com to be factual. 2. I think online reviews on TripAdvisor.com are credible. 3. In my opinion, the online hotel reviews on TripAdvisor.com are believable.	Cheung et al.(2009)
Perceived ease of use	1. Online hotel reviews are easy to use. 2. The process of using online reviews is clear and understandable. 3. It would NOT require much effort to obtain information from online hotel reviews.	Davis (1989)
Attitude toward the e-WOM	1. In general, I prefer to read online hotel reviews before booking a hotel. 2. I have a favorable attitude towards online hotel reviews. 3. It is a good idea to use online hotel reviews.	Davis (1989)
Adoption of e-WOM	1. Online hotel reviews would influence my purchasing decision (e.g., to book or not book a hotel). 2. I would like to follow the suggestions of online hotel reviews (e.g., to book or not book a hotel). 3. Online reviews motivated me to take action (e.g., to book or not book a hotel.	Cheung et al.(2009)

The third section of the questionnaire was designed to collect information about the technology acceptance constructs. The technology acceptance includes consumers' perceived usefulness, perceived ease of use, perceived credibility, attitude toward the e-WOM and e-WOM

adoption. 16 items from Davis (1989) and Cheung et al. (2009) were adapted to be applicable to the e-WOM context. All of the items were measured using the seven-point Likert-type scale (1= strongly disagree; 7= strongly agree).

Section IV: Moderators (6 items)

Construct	**Items**	**References**
Involvement	1. I have experience searching online hotel reviews. 2. I have experience writing online hotel reviews. 3. I know how online hotel reviewers make recommendations.	Johnson and Russo (1984)
Receiver expertise	1. How knowledgeable are you about the Hotels' services (Including rooms, restaurant, service staff, amenities, etc.)? 2. To what extent are you experienced at using the Hotels' services (e.g., rooms, restaurant, service staff, amenities, etc.)? 3. To what extent are you an expert on Hotels' services (e.g., rooms, restaurant, service staff, amenities, etc.)?	Sussman & Siegal, (2003)

In the fourth section, respondents were asked to indicate their e-WOM involvement and expertise in hotels. The items of e-WOM involvement were measured using the seven-point Likert-type scale (1= strongly disagree; 7= strongly agree). An example question of receiver expertise is: "How knowledgeable are you about the Hotels' services (Including rooms, restaurant, service staff, amenities, etc.)". The answer could be from "Novice (1)" to "Expert (7)".

Finally, in section V, participants were asked to provide their demographic information including gender, age range, education, occupation, annual income, and race group. Multiple choice questions were designed for this section.

Pilot test

A pilot test is a small scale version or trial run of a full scale study, which is useful to pre-test or try out a research instrument prior to the main study (Polit et al., 2001). The purpose of conducting a pilot test is to further refine the questionnaire and to increase the likelihood of success in the major study.

There are several reasons for pilot tests: first, conducting a pilot study can check whether proposed instruments are presented in an appropriate and clear way; second, it is important to assess the reliability and validity of the measurement items; third, it might give warning about where the main study could fail (Van Teijlingen & Hundley, 2001).

In this study, prior to the pilot test, three faculty members at the university were invited to review the survey questionnaire and evaluate the content validity of the questions. The appropriateness, clarity, and wording of items, the format of the scales and the order of the questions were revised based on their comments to make it more readable.

A pilot test was conducted by conveniently distributing questionnaires to 32 students at OSU. The reliability of the scales was assessed by Cronbach's alpha using SPSS software. According to Kline (2011), Cronbach's alpha measures internal consistency, the degree to which responses are consistent across the items within a measure. It is suggested that the value above 0.7 for the reliability coefficient can be considered as adequate (Kline, 2011). As shown in Table 2, all values of Cronbach's alpha ranged between .717 and .938. Therefore, the instruments of this study had sufficient reliability.

Table 2. Reliability of Instrument Items

Construct	Number of item	Cronbach's plan
Information Relevance	3	.842
Information Timeliness	3	.938
Information Completeness	3	.839
Information Sidedness	4	.819
Review Consistency	3	.728
Review Rating	3	.890
Product Rating	3	.855
Perceived Usefulness	4	.879
Perceived ease of use	3	.717
Perceived Credibility	3	.708
Attitude toward e-WOM	3	.861
Adoption of e-WOM	3	.929

Sampling Plan

Study Context

The present study chose TripAdvisor which is a third-party review website for trip planning as the e-WOM context. TripAdvisor is the world's largest and most widely recognized, used and trusted travel website (TripAdvisor, 2015). Around 83% of leisure travelers agree that TripAdvisor reviews make them more confident in their travel decisions; about 77% of respondents usually or always read reviews before choosing a hotel; half of them usually or always refer to reviews for choosing a restaurant; and 44% of respondents usually or always refer to reviews before choosing an attraction (Rowell, 2014). Therefore, given the awareness and prevalence of online reviews on TripAdvisor among travelers, it is suitable to test the research model and objectives of this study on this popular user-generated platform. Also, this study expects to provide significant implications to facilitate marketing practitioners by better understanding travelers' e-WOM adoption process.

Population

The target population of this study was American leisure travelers who read online hotel reviews on TripAdvisor.com within the past six months, and recruited from Amazon Mechanical Turk ("MTurk"). A self-administrated, convenience sampling method was used to collect data in this study.

MTurk is an Internet marketplace that enables the human intelligence to perform tasks (i.e., surveys, experiments, etc.). Individuals registered as "requesters" can create tasks, and the "workers" who complete the task can be compensated upon their quality of task submission. Requesters can specify certain qualifications of workers to ensure high quality respondents. Given the demographic diversity of the large participant pool in MTurk, qualified workers can be recruited rapidly and inexpensively (Buhrmester, Kwang, & Gosling, 2011).

Sample size

This study used structural equation modeling (SEM) to test conceptual model and examine the relationships among investigated constructs. An appropriate sample size was required. According to Kline (2011), SEM is a large-sample technique, and sample size is an important issue based on the complexity of model and the communalities in each factor. It is suggested that sample size may exceed 500 when the number of factors is more than six (Hair, Black, Babin, Anderson, & Tatham, 2006). There is a useful rule of thumb called "N:q rule" suggested by Jackson (2003), and this rule indicates that the minimum sample size can be calculated by the ratio of cases (N) to the number of model parameters (q). Kline (2011) recommended the ratio of 10:1as an ideal minimum sample size, while Bentler and Chow (1987) argued that 5:1 is good enough.

Considering the suggestions in previous literature and the time consuming nature of collecting data, this research followed Bentler and Chow (1987)'s rule of 5 cases for each model parameter. In this study, there are a total of 12 constructs with 38 variables included in the conceptual model. The total number of estimated parameters in the model is 88 calculated based on variances, regression coefficients, and covariance among variables. Therefore, the estimated sample size would be 440 (88 parameters times 5 responses).

Data Collection

An online self-administered survey was distributed to collect data through MTurk (www.mturk.com). The electronic survey method was chosen for this study due to the following reasons: 1) the research subject of e-WOM is related to the Internet use; 2) minimal cost of time and quick response; 3) easy access to distribution and managing data; and 4) convenience for respondents in unrestricted geographic positions.

The questionnaire was created on Qualtrics (Qualtrics.com), which provided a survey link for respondents. A recruitment letter which presented a brief purpose of this study, voluntary participation, compensation, and confidentiality was posted to potential respondents. In addition, a screening question "Have you read online hotel reviews on *TripAdvisor.com* for trip planning in the past 6 months" was presented and only respondents who answered yes were linked to the survey. As compensation, $1 was provided to respondents who successfully completed the survey.

As a result, a total of 531 potential respondents were collected for further data examination.

Date Analysis

Data examination

After the data is collected, before proceeding to primary data analysis, data preparation is necessarily conducted to evaluate the missing data, to identify the outliers, and to test the assumptions underlying structural equation modeling.

Missing data refers to missing observations, where valid values on one or more variables are not available for analysis (Hair et al., 2006). The impacts of missing data include the reduction of the sample size available for analysis and biased statistical results. Therefore, it is important to identify and remedy missing data. The methods for dealing with missing observations fall into the following four categories: a) available case methods; b) single-imputation methods; c) model-based imputation and d) a special form of full-information ML estimation (Vriens & Melton, 2002). In this study, among 551 responses collected originally, two cases were eliminated because they contained substantial missing values.

Outliers are extreme observations which may influence the outcome. The methods used in detecting outliers involve univariate detection and multivariate detection (Hair et al., 2006). Once the outliers are identified, the researcher can decide whether to retain or delete each of them. In this study, univariate outliers were identified by using box plot (Hair et al., 2006) and multivariate outliers were identified by Mahalanobis distance (D) statistics (Kline, 2011). As a result, a total of 18 extreme outliers were eliminated from the data.

Next, in order to test the assumptions underlying SEM analysis, univariate normality, multivariate normality and multicollinearity were examined in this study. To be specific, univariate normality was tested by examining skewness and kurtosis. As a rule of thumb, the

absolute value of skewness index less than 3.0 and kurtosis index less than 10.0, is used to indicate the univariate normality (Kline, 2011). In this study, the absolute values of skewness ranged between 0.195 to 1.486, and those of kurtosis were between 0.023 and 4.511, indicating that none of the items had univariate normality issue. Multivariate normality was examined by inspection of univariate distribution (Kline, 2011). Therefore, the assumption of univariate normality and multivariate normality were satisfactory.

Multicollinearity among all the variables was examined by the value of tolerance values or variance inflation factor (VIF). Tolerance values less than .10 or variance inflation factors (VIF) greater than 10 may indicate extreme multivariate multicollinearity (Kline, 2011). High multicollinearity indicates redundant dependent measures (Hair et al., 2006). In this study, multiple regressions with one variable as criterion and the others as predictors were run several times to obtain the VIF values. All of the VIF values were less than the cutoff value of 10, which indicated less likelihood of serious multicollinearity issue. Finally, a total of 531 responses were used for data analysis. The number fulfilled the expected sample size (i.e., 500) in this study.

Descriptive Data Analysis

Descriptive statistics was performed to get a general idea of the respondents' demographic profiles. The characteristics such as gender, age range, education, occupation, annual income and race group were identified. To be specific, respondents' characteristics were classified as Gender (female and male), Age range (18-24 years; 25-34 years; 35-44 years; 45-54 years; 55-64 years; 65 or above), Education (less than high school; high school; 2-year college; 4-year college; master degree; doctoral degree), Occupation (management; technical worker; government; professional; self-employed; service worker; housewife; student; retired/not in workforce; others), Annual Income (less than $25,000; $25,000-49,999; $50,000-$74,999;

$75,000-99,999; $100.000 or more), and Ethnicity (Caucasian; Hispanic; African American; Asian; Pacific Islander; American Indian; Others).

Common Method Variance

Given the self-report survey method was used for this study, a potential problem is "variance that is attributable to the measurement method rather than to the constructs that measures represent" (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p.879), known as common method variance (CMV). Common method biases result from a variety of factors. Podsakoff et al. (2003) summarized the potential sources that cause common method biases into four effects: 1) common rater effects; 2) item characteristic effects (item ambiguity); 3) item context effects; and 4) measurement context effects (predictor and criterion variables measured at same time and/or same location).

To ensure that CMV is not an issue that causes validity of the findings of this study, it is necessary to conduct statistical analysis to diagonal common method bias. A Harman's single-factor test using exploratory factor analysis (EFA) was suggested (Podsakoff et al., 2003). According to Podsakoff et al.(2003), CMV is assumed to be a serious concern in an EFA procedure when 1) only one factor was generated from the factor analysis or 2) one general factor accounts for the majority of the covariance among measurement items. The EFA results generated seven factors with eigenvalues greater than one rather than single dominant factor. The result of Harman's single-factor test reported that one general factor explains 41% of the explained variance. Therefore, CMV bias is less likely to be a serious concern in the data.

Structural Equation Modeling

Structural equation modeling was used to examine the explanatory power of a series of dependent relationships in the hypothesized model. According to Hair et al., (2006), structural

equation modeling is useful in explaining the relationships among multiple constructs by examining the structures of all interrelationships. Approximate fit indices were used to evaluate how well the overall model was, as well as the statistical significance of each specific hypothesis.

In this study, the proposed integrated model was conducted following the recommended six-stage procedure (Hair et al., 2006) as shown in figure 11. Specifically, the six stages include: 1) defining individual constructs; 2) developing the overall measurement model; 3) designing a study to produce empirical results; 4) assessing the measurement model validity; 5) specifying structural model; and 6) assessing structural model validity. The software of AMOS 20.0 were used for SEM analysis.

Stage 1: Defining the individual constructs

The first stage began with defining and operationalizing the constructs by selecting measurement scale items and scale types. Constructs can be utilized from prior research scales or be developed (Hair et al., 2006). In order to assure the measurement quality of this study, the researcher derived the definitions and items of twelve constructs in the proposed model from previous literature. Pilot test was performed among respondents similar to the target population to examine the appropriateness of the measurements. Items that were not expected were refined or deleted in the final model.

Stage 2: Developing and specifying the measurement model

The second stage aims to specify the measurement model by identifying the latent constructs and the measured indicator variables assigned to each latent construct. The validity and unidimensionality in a specific context are important issues of measurement model (Hair et al., 2006). It is suggested that all the indicators of one construct should only measure one common latent variable in regards to the unidimensionality; and at least three measured variables should be

used for each construct for identification. In this study, the constructs of perceived usefulness, perceived ease of use, and perceived sidedness have four measured variables. The other nine constructs have three measured variables respectively.

Stage 3: Designing a study to produce empirical results

The third stage involves the issues of research design and estimation. For the research design, this study used a covariance matrix as input due to more flexibility and greater information content provided compared to a correlation matrix. Besides, the sample size of SEM models is also a critical issue and must be sufficient for the model. As mentioned earlier, this study got 550 responses representing the population of interest. The maximum likelihood estimation was used for estimation method.

Stage 4: Assessing measurement model validity

After the measurement model specification and estimation, the confirmatory factor analysis (CFA) is used in the fourth stage to test the measurement model validity. According to Hair et al.(2006), measurement model validity can be evaluated by 1) the acceptance level of goodness-of-fit (GOF) for the overall model, and 2) specific evidence of construct validity (convergent validity and discriminant validity).

GOF indicates how well the theoretical model fits to the reality. Researchers have refined a number of GOF measures which reflect the model's ability and can be classified into following groups: absolute measures, incremental measures, and parsimony fit measures. In this study, multiple fit indices were employed to assess the measurement model validity and the recommended cutoff values for them are summarized in Table 3.

Table 3. Cutoff Values for Goodness-of-fit Indices

Group	Fit indices	Cutoff Value
Absolute fit measures	χ^2/df	< 5.0
	Goodness-of-fit Index(GFI)	≥.90
	Root Mean Square Error of Approximation (RMSEA)	≤ .10
	Standardized Root Mean Square Residual(SRMR)	≤ .10
Incremental measures	Normed Fit Index (NFI)	≥.90
	Comparative Fit Index (CFI)	≥.90
Parsimony fit measures	Adjusted Goodness of Fit Index (AGFI)	≥.90

Source: Hair et al.(2006) and Kline (2011)

Convergent validity indicates the extent to which the indicators of a specific construct share a high proportion of variance in common. It can be evaluated by factor loadings, average variance extracted (AVE) and composite reliability (CR) estimates. According to Hair et al.(2006), a cutoff level of .7 was recommended for satisfactory factor loading; the recommended value for composite reliability is higher than .7; and AVE is suggested to be above .5.

Discriminant validity is the extent to which a construct is different from other constructs, and discriminant validity also means individual measured items should only represent one latent construct (Hair et al., 2006). CFA can assess this by a rule of thumb which is that all construct AVE estimates should be larger than the corresponding squared inter-construct correlation estimates (Kline, 2011).

Stage 5: Specifying the structural model

The purpose of the fifth stage is to assign relationships among constructs based on proposed theoretical model. In this study, structural model specification can be represented as Figure 9 which includes all the paths of casual relationships among constructs. In other words, the

hypotheses identified by dependence relationships among constructs are specified in the structural model. After specifying the structural model, it can be seen as ready for estimation and evaluation to test the overall theory.

Stage 6: Assessing the structural model validity

The final stage is to test the validity of the structural model and the proposed hypothesized relationships. The process of assessing validity is similar to that in stage 4 and the overall fit can use the same criteria as the measurement model shown in Table 2. It is suggested that the closer the structural model GOF comes to the measurement model, the better the structural model fit (Hair et al., 2006). After the model validity is established, competitive fit needs to be examined to ensure that the proposed model is better than some alternative models. A comparison of chi-square difference statistics can be used for competing models assessment.

GOF is not sufficient to support a proposed theory. In addition, the proposed structural theory needs to be further examined by considering the individual parameter estimate which represents each specific hypothesis. Specifically, statistically significance of path estimates should also be checked for the acceptance of structural model.

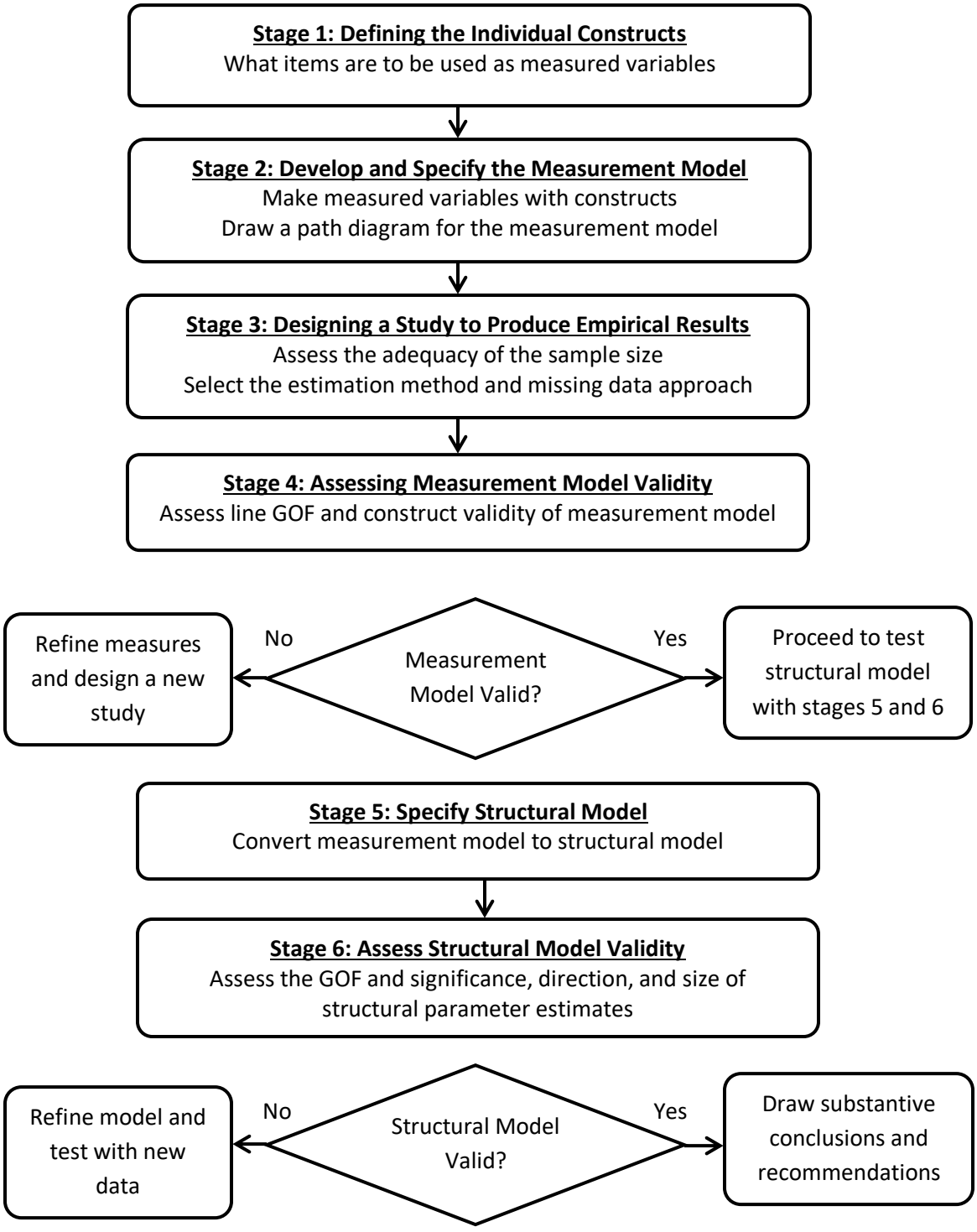


Figure 12. Six-stage Process for Structural Equation Modeling (Hair et al., 2006 p.759)

Moderating Effects Testing

A moderator is an independent variable that affects the strength of the relationship between another independent variable and a dependent variable (Baron and Kenny, 1986). Hierarchical multiple regression and multiple-group analysis are two statistical strategies for testing a moderator effect. When the nature of a moderator is categorical, a multiple-group approach can be used (Frazier, Tix, & Barron, 2004). Specifically, a constrained model is compared with a baseline (unconstrained) model through Chi-square difference tests. If the Chi-square difference statistics is shown significant, there is evidence of moderation.

This study employed multiple-group analysis to test two moderators: 1) the moderating effect of e-WOM involvement on the relationship between seven elaboration factors and two belief factors (perceived usefulness and perceived credibility), and 2) the moderating effect of receiver expertise on the relationship between attitude toward e-WOM e-WOM adoption. AMOS was utilized to conduct the moderating effects.

CHAPTER IV

RESULTS

This chapter presents the results of this study, including demographics profile, evaluation of the measurement model using Confirmatory Factor Analysis (CFA), the results of the Structural Equation Modeling, and the results of moderating effects testing.

Demographic Profile

The respondents' demographic profile is summarized as shown in Table 4. Of the 531 respondents, 57.4% of them are males and 42.6% are females. About half of the respondents (52.5%) are aged from 25-34 years old, 24.1% of the respondents 35-44 years old. The percentage of respondents who have college degree or above is 78.3%, which includes 2-year college degrees (22.2%), 4-year college degrees (42.9%), master degrees (10.2%) and doctoral degrees (3.0%). In terms of occupation, 23.9% of the respondents are professional, 16.6% are self-employed, 12.6 % are technical workers, and 11.1% are service workers. Regarding income, 31.8% of the respondents have an annual income between $25,000 and $49,999, and 29.9% of them have an annual income between $50,000 and $74,999. The majority of the respondents are Caucasian (70.8%), followed by Asian (11.5%) and African American (8.91%).

Table 4. Respondents' profile (N=531)

Category		Frequency	%
Gender	Female	226	42.6%
	Male	305	57.4%
Age	18-24 years old	53	10.0%
	25-34 years old	279	52.5%
	35-44 years old	128	24.1%
	45-54 years old	46	8.7%
	55-64 years old	19	3.6%
	65 years old or older	6	1.1%
Education	Less than High School	1	0.2%
	High School	114	21.5%
	2-year college	118	22.2%
	4-year college	228	42.9%
	Master degree	54	10.2%
	Doctorate degree	16	3.0%
Occupation	Management	80	15.1%
	Technical worker	67	12.6%
	Government	24	4.5%
	Professional	127	23.9%
	Self-employed	88	16.6%
	Service worker	59	11.1%
	Housewife	16	3.09%
	Student	34	6.4%
	Retired/Not in workforce	11	2.1%
	Others	25	4.7%
Annual Household Income	Less than $25,000	81	15.43%
	$25,000-$49,999	169	31.8%
	$50,000-$74,999	159	29.9%
	$75,000-$99,999	53	10.0%
	$100,000 or more	69	13.0%
Ethnic	Caucasian	376	70.8%
	Hispanic	33	6.2%
	African American	47	8.91%
	Asian	61	11.5%
	Pacific Islander	3	0.6%
	American Indian	4	0.8%
	Others	7	1.3%
	Total	531	100.0%

Measurement Model

Overall Model Fit

Confirmatory factor analysis (CFA) was performed to assess the overall measurement model fit. The validity and the relationship between variables and latent factors can be evaluated by measurement model (Hair et al. 2006). The overall model fit was assessed by several model fit indices, including $\chi 2/df$, GFI, RMSEA, SRMR, NFI, CFI, and IFI. The results are shown in Table 5, and the fit indices indicated that the measurement model fit was acceptable.

Table 5. Fit Indices of the Full Measurement Model

Fit indices	Results	Cutoff Value
χ^2/df	2.655	< 5.0
GFI	.856	≥.90
RMSEA	.056	≤ .10
SRMR	.0379	≤ .10
NFI	.891	≥.90
CFI	.928	≥.90
IFI	.929	≥.90

Source: Hair et al.(2006) and Kline (2011)

In order to further improve the model fit, a detailed look of model output was checked. According to Hair et al.(2006), standardized factor loading indicates the item reliability for indicators, and SMC is the total amount of variance an indicator has in common with the construct upon what it loads. The value of standardized loading is expected to be greater than 0.7 and the SMC is expected to be greater than 0.5. In this study, the standardized factor loadings of the indicators showed good item reliabilities except IS3(.539), IS4(.516) and PEOU3(.565). The squared multiple correlation (SMC) coefficients of the indicators were above 0.5 except IS3(.290), IS4(.267) and PEOU3(.320). Therefore, IS3, IS4and PEOU3 were deleted due to their poor item reliability. After modification, the re-specified model presented a slightly improved fit (χ^2/df =2.804, GFI=.864, RMSEA=.058, SRMR=.0354, NFI=.899, CFI=.932, IFI=.933)

Convergent Validity

Convergent validity measures the reliability of all indicators of a factor taken together or internal consistency (Hair et al. 2006). Standardized factor loadings of each indicator, the composite reliability (CR), and average variance extracted (AVE) estimates were used to evaluate the convergent validity. As shown in Table 5, all the standardized factor loadings were statistically significant at $p<.001$ in the range from .677 to 916. The SMC of all indicators ranged between .458 and .838. The composite reliability (CR) measures the reliability of all indicators of a factor taken together. In this study, the CR value of each construct ranged from .776 to .901, which exceeded the recommended value of 0.7(Hair et al. 2006). Average variance extracted (AVE) was calculated by the sum of the standardized squared loading divided by the number of items under each construct. The AVE values of all constructs ranged from 0.594 to 0.753, which is higher than the rule of thumb 0.5 (Hair et al. 2006). Therefore, the convergent validity for this measurement model is satisfactory.

Table 6. The Results of confirmatory factor analysis for the measurement model

	Std.loadings	SMC	CR	AVE
Information Relevance (IR)			.862	.676
IR1	.813	.661		
IR2	.808	.653		
IR3	.845	.715		
Information Timeliness(IT)			.888	.726
IT1	.841	.707		
IT2	.798	.637		
IT3	.914	.835		
Information Completeness (IC)			.834	.628
IC1	.677	.458		
IC2	.842	.709		
IC3	.846	.716		

Information Sidedness (IS)			.845	.732
IS1	.879	.772		
IS2	.832	.692		
IS3*	—			
IS4*	—			
Review Consistency (RC)			.813	.594
RC1	.862	.742		
RC2	.686	.470		
RC3	.754	.569		
Review Rating (RR)			.901	.753
RR1	.799	.639		
RR2	.916	.838		
RR3	.884	.781		
Product Rating (PR)			.888	.726
PR1	.845	.714		
PR2	.891	.793		
PR3	.818	.669		
Perceived Usefulness (PU)			.858	.602
PU1	.779	.606		
PU2	.839	.704		
PU3	.761	.579		
PU4	.721	.575		
Perceived ease of use (PEOU)			.776	.634
PEOU1	.759	.575		
PEOU2	.832	.692		
PEOU3*	—			
Perceived Credibility (PC)				.692
PC1	.777	.604		
PC2	.874	.763		
PC3	.841	.707		
Attitude toward e-WOM			.866	.684
ATT1	.789	.707		
ATT2	.845	.637		
ATT3	.846	.835		
Adoption of e-WOM			.847	.649
ADOP1	.781	.609		
ADOP2	.832	.692		
ADOP3	.803	.644		

Note. Std. loadings=standardized loadings; SMC=squared multiple correlation; CR= composite reliability; AVE= average variance extracted; *: dropped items

Discriminant Validity

Discriminant validity analysis refers to measuring whether two constructs differ (Hair et al.2006). This study employed two methods to assess the discriminant validity: (a) average variance extracted (AVE); (b) chi-square difference test. For the AVE method, the rule of thumb is that the square root of AVE should be greater than any corresponding inter-construct correlation estimate (Hair et al. 2006). That indicates the measured variables have more in common with the construct that they are associated with than they do with the other constructs. As shown in Table 7, a majority of the constructs supported good discriminant validity. However, the results indicated that the discriminant validity was not good for 3 constructs: ATT (Attitude toward e-WOM), PU (Perceived usefulness) and ADOP (Adoption of e-WOM).

Another method to test discriminant validity is Chi-square difference test (Segars, 1997). As recommended by Segars (1997), if the chi-square difference test is significant then discriminant validity exists. CFA was used to test the paired constructs that we suspected to have problems with discriminant validity. Two models were created and performed with CFA. By comparing two models, one in which the constructs are correlated and the other one in which they are not correlated, discriminant validity is supported if the chi-square test is significant (Zain and Bertea, 2011). In this study, three paired constructs were tested by chi-square difference test (ATT-ADOP; ATT-PU; ADOP-PU). Table 8 shows the result of chi-square difference for ADOP and ATT, and the result was significant ($p=.000 <.05$) which indicates that the two constructs present good discriminant validity. Similarly, Table 9 and 10 show the results of chi-square difference for ATT and PU, ADOP and PU, and the results were both significant ($p=.000 <.05$), which indicates that the two paired constructs present good discriminant validity as well.

As a result, all the constructs in the measurement model presented good evidence of discriminant validity.

Table 7. AVE and Discriminant Validity

Construct	AVE	1	2	3	4	5	6	7	8	9	10	11	12
1.ATT	0.684	**0.827**											
2.IR	0.676	0.760	**0.822**										
3.IC	0.628	0.620	0.726	**0.792**									
4.IS	0.732	0.468	0.586	0.555	**0.856**								
5.IT	0.726	0.583	0.620	0.622	0.423	**0.852**							
6.PR	0.726	0.719	0.649	0.557	0.475	0.509	**0.852**						
7.RC	0.594	0.370	0.345	0.477	0.273	0.446	0.432	**0.771**					
8.RR	0.753	0.408	0.401	0.453	0.316	0.427	0.334	0.488	**0.868**				
9.ADOP	0.649	0.889	0.683	0.645	0.516	0.533	0.702	0.424	0.472	**0.806**			
10.PEOU	0.634	0.654	0.643	0.597	0.447	0.573	0.623	0.339	0.378	0.701	**0.796**		
11.PU	0.602	0.850	0.702	0.649	0.487	0.574	0.789	0.490	0.429	0.846	0.618	**0.776**	
12.PC	0.692	0.776	0.627	0.653	0.459	0.632	0.660	0.578	0.490	0.748	0.580	0.748	**0.832**

Note. Bold: square root of the AVE. ATT=attitude toward e-WOM; IR=information relevance; IC=information completeness; IS=information sidedness; IT=information timeliness; PR=product review; RC= review consistency; RR=review rating; ADOP= adoption of e-WOM; PEOU=perceived ease of use; PU= perceived usefulness; PC= perceived credibility

Table 8. Chi-square Difference Test for ADOP-ATT

Model 1	Model 2
Chi-square = 507.5 Degrees of freedom = 9	Chi-square = 45.6 Degrees of freedom = 8
$\chi 1 - \chi 2 = 461.9$	
df1 - df2 =1	
p=0.000<0.05	

Table 9. Chi-square Difference Test for ATT-PU

Model 1	Model 2
Chi-square = 473.2 Degrees of freedom = 14	Chi-square = 55.9 Degrees of freedom = 13
$\chi 1 - \chi 2 = 417.3$	
df1 - df2 =1	
p=0.000<0.05	

Table 10. Chi-square Difference Test for ADOP-PU

Model 1	Model 2
Chi-square = 435.5 Degrees of freedom = 14	Chi-square = 35.1 Degrees of freedom = 13
$\chi 1 - \chi 2 = 400.4$	
df1 - df2 =1	
p=0.000<0.05	

Structural Model

The structural equation modeling (SEM) was performed to empirically test the proposed research model. The model fit indices of the overall model was reasonable (χ^2/df = 3.178, GFI = .84, RMSEA=.064, SRMR=.054, NFI= .88 CFI=.91, IFI=.92) as shown in Table 11. The relationship (direction, size and significance) among constructs of the model was estimated by path analysis with AMOS 22.0. Figure 13 presents the path diagram for the structural model.

Table 11. Fit Indices of the Structural Model

Fit indices	Results	Cutoff Value
χ^2/df	3.178	< 5.0
GFI	.844	≥.90
RMSEA	.064	≤ .10
SRMR	.054	≤ .10
NFI	.880	≥.90
CFI	.914	≥.90
IFI	.915	≥.90

Table 12 presents the structural path estimates, including the standardized coefficients and significance level for all hypotheses. As a result, thirteen of fourteen paths reached statistical significance, and only one of the fourteen hypotheses was not significant and not supported.

H_1, H_2 and H_3 postulated positive relationships between three antecedents (perceived usefulness, perceived credibility and perceived ease of use) and attitude toward e-WOM. The results supported all three hypotheses and the squared multiple correlations showed that 78% of the variance of attitude toward e-WOM was explained. The findings showed that the level of travelers' perceived usefulness (β=.545, p <0.001) of e-WOM had significant positive relationship with attitude toward e-WOM. Perceived credibility (β=.302, p <0.001) of e-WOM had significant positive relationship with their attitude toward e-WOM, and perceived ease of use (β=.183, p <0.001) had significant influence on attitude toward e-WOM. In particular, perceived

usefulness and perceived credibility were revealed to be much stronger predictors. This indicated that travelers' attitudes toward e-WOM were mainly influenced by their perception of the helpfulness of e-WOM and the credibility of e-WOM. In other words, the more useful and more credible a traveler perceives e-WOM to be, the more positive the attitude that traveler has toward e-WOM. Perceived ease of use was also positively related to attitude toward e-WOM. However, compared with the other two competent constructs, it showed less significant path coefficient. This is understandable because travelers' knowledge of online information searching has increased, and their familiarity with e-WOM also become much more than before.

According to technology acceptance model, H_4 and H_5 postulated that travelers' perceived usefulness and attitude toward e-WOM positively related with their adoption of e-WOM. The results of this study supported that perceived usefulness (β=.291, $p < 0.001$) had a significant positive influence on e-WOM adoption; and attitude toward e-WOM (β=.568, $p < 0.001$) had a significant positive influence on e-WOM adoption. The findings indicated that when a traveler with more positive attitude toward e-WOM, he/she is more likely to adopt e-WOM. When travelers perceived high level of helpfulness or usefulness of e-WOM, they are more likely to adopt e-WOM.

In addition, Hypothesis 6 postulated that perceived credibility of e-WOM positively influences e-WOM adoption. The path analysis result supported this and showed that perceived credibility (β=.120, $p < 0.01$) had significant positive relationship with e-WOM adoption. The findings indicated that the high level of a traveler's perceived credibility of e-WOM leads to more intention to adopt e-WOM. This finding is very encouraging for the integrated model, because it suggested the importance for the dimension of perceived credibility in the extended technology acceptance model. It is good to know that, considering all three hypotheses (H_4, H_5 and H_6), 82% of the variance of e-WOM adoption was explained shown by the squared multiple correlations.

Hypothesis 7 proposed that perceived ease of use had positive influence on perceived usefulness of e-WOM. The results supported that there was a significant positive relationship between perceived ease of use and perceived usefulness (β=.296, $p < 0.001$), supporting Hypothesis 7. When travelers perceive the ease of receiving or sending e-WOM for products or services, they tend to find e-WOM more useful.

H_8, H_9 and H_{10} proposed that there were significant positive relationships between three dimensions of information argument in the central route and the perceived usefulness. The results supported that there was a significant positive relationship between information relevance (β=.402, $p < 0.001$) and perceived usefulness, and information completeness (β=.154, $p < 0.05$) and perceived usefulness. The findings indicated that the high level of information relevance and information completeness makes travelers perceive e-WOM as more useful. However, no significant relationship was found between information timeliness (β=.059) and perceived usefulness. Timeliness of information was not treated as important as the other two dimensions of online hotel reviews. This may be related to the unique nature of the hotel industry where services or product comments are not as time sensitive as other topics. As a result, H_8 and H_{10} were supported, but H_9 didn't get empirical support in this study.

H_{11}, $H_{12,}$ H_{13} and H_{14} postulated that four antecedents (information sidedness, review consistency, review rating and product rating) in the peripheral route have significant relationships with perceived credibility of e-WOM. Indicators in the peripheral route do not generally related to the information quality. The findings showed how perceived credibility was predicted. The path analysis results supported that all these four factors: information sidedness (β=.142, $p < 0.001$), review consistency (β=.263, $p < 0.001$), review rating (β=.178, $p < 0.001$), and product rating (β=.442, $p < 0.001$) have significant positive influence on perceived credibility of e-WOM. Interestingly, product rating was shown as the strongest factor that positively influences travelers' perceived credibility. This finding suggested that travelers perceive product rating as an

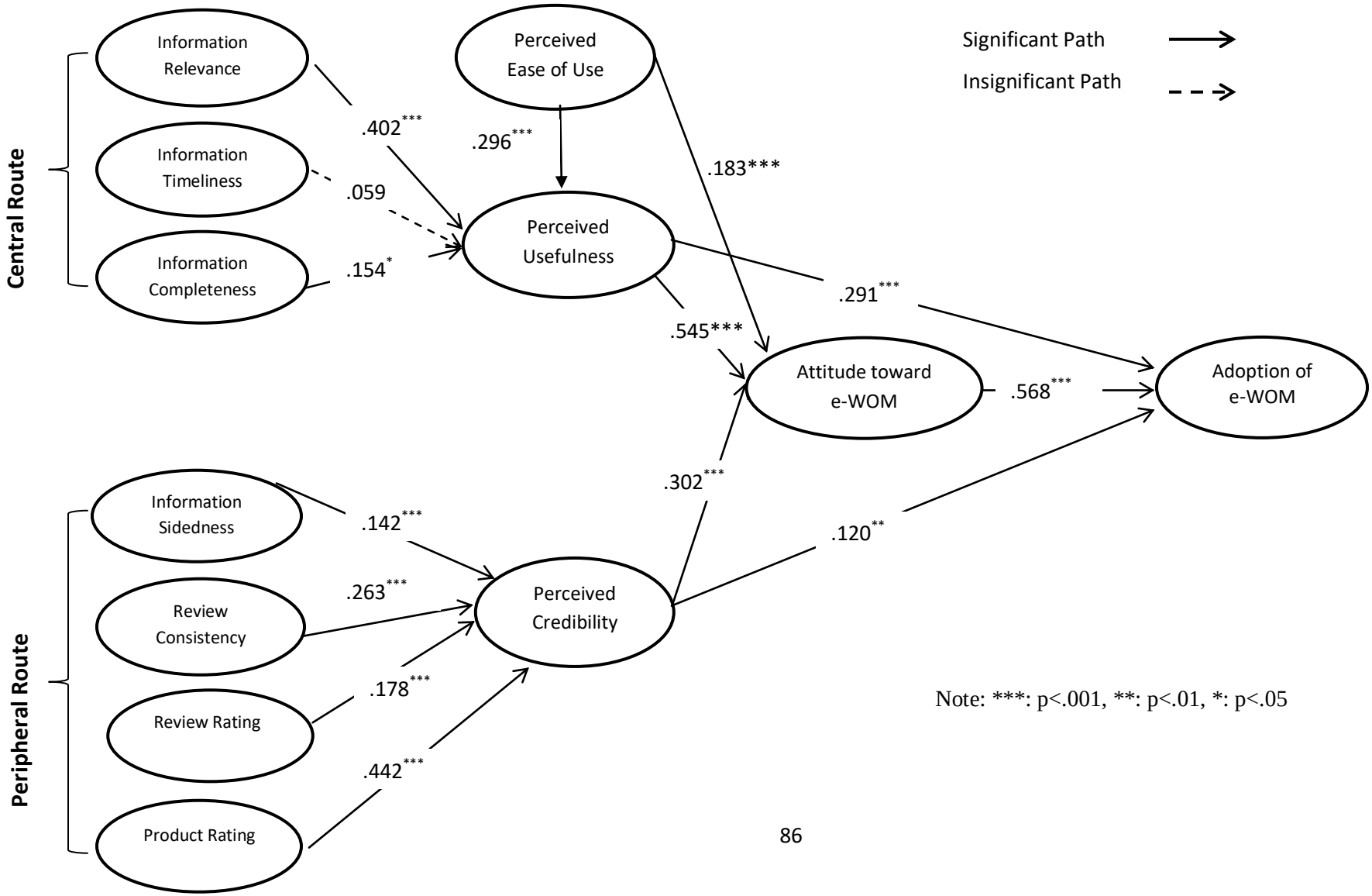
important cue. Considering the characteristics of hotel, travelers tend to trust experienced customers on the hotel products or service. The higher the product rating, the more credible travelers perceive the e-WOM is. In addition, the findings also indicated that when the online reviews have both positive and negative sides, they are perceived more credible than only compliments or criticism. As for review consistency, travelers are more likely to trust the online reviews which are more consistent with other reviews. Last but not least, review rating was suggested as another significant indicator. The online reviews with more approval by other travelers are considered more credible by e-WOM readers.

Table 12. Summary of the Structural Paths Estimates

H0	Paths from	Path to	Standardized estimate	Results
H1	Perceived usefulness	Attitude toward e-WOM	.545***	Supported
H2	Perceived credibility	Attitude toward e-WOM	.302***	Supported
H3	Perceived ease of use	Attitude toward e-WOM	.183***	Supported
H4	Perceived usefulness	Adoption of e-WOM	.291***	Supported
H5	Attitude toward e-WOM	Adoption of e-WOM	.568***	Supported
H6	Perceived credibility	Adoption of e-WOM	.120**	Supported
H7	Perceived ease of use	Perceived usefulness	.296***	Supported
H8	Information relevance	Perceived usefulness	.402***	Supported
H9	Information timeliness	Perceived usefulness	.059	Not Supported
H10	Information completeness	Perceived usefulness	.154*	Supported
H11	Information Sidedness	Perceived credibility	.142***	Supported
H12	Information Consistency	Perceived credibility	.263***	Supported
H13	Review Rating	Perceived credibility	.178***	Supported
H14	Product Rating	Perceived credibility	.442***	Supported

Note. ***:$p<.001$; **:$p<.01$; *$p<.05$

Figure 13. The Result of Structural Model



Note: ***: p<.001, **: p<.01, *: p<.05

Moderating Effects Testing

This study had two moderators, including expertise and involvement. Multiple group SEM was applied to test 1) moderating effects of expertise on the relationship between attitude toward e-WOM and adoption, and 2) moderating effects of involvement on the relationships between central route factors (information relevance, information timeliness, and information completeness) and perceived usefulness, 3) moderating effects of involvement on the relationships between peripheral route factors (information sidedness, review consistency, review rating and product rating) and perceived credibility.

Moderating effects of Expertise

The moderating effects of receivers' expertise were tested using multi-group SEM approach. The expertise scales were summed and averaged, then categorized into two sub groups: novice and expert. The unconstrained model (baseline model) was to allow all the hypothesized paths to vary across from novice and expert. Then the constrained model allowed only the hypothesized path constrained to be equal between novice and expert groups. Chi-square difference test was used to see if there was significant difference between the unconstrained and constrained model. If significant result is shown, then it could be concluded there are moderating effects on the proposed relationship.

Table 13 summarized the results of moderating effect of expertise on the relationship between attitude toward e-WOM and adoption. The chi-square difference test was showed significant ($\Delta\chi2=7.095$, $p<0.1$). Therefore, expertise was found to moderate the relationship between attitude toward e-WOM and e-WOM adoption, which supported H_{15}. The standardized coefficients showed that attitude toward e-WOM had much stronger significant influence on e-WOM adoption among travelers who perceive themselves as novice on hotels ($\beta=.74$, $p<0.001$), than travelers who perceive themselves as experts on hotels ($\beta=.52$, $p<0.001$). This may be

because travelers with more expertise on hotels can get professional information due to their ability and knowledge. Therefore, experts are less likely to search or adopt e-WOM for their travel planning than travelers with less expertise, even though they have positive attitude toward e-WOM.

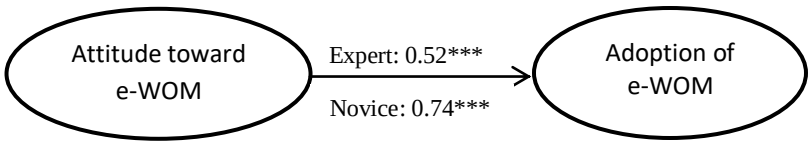
Table 13. Moderating effect of Expertise

Model	**Chi-square Statistics**	**Chi-square Difference (df=1)**	**Coefficients**		**Result**
			Expert	Novice	
Baseline Model	2717.2				
Attitude toward eWOM → Adoption of eWOM	2724.3	7.095**	0.52***	0.74***	Supported

Note. ***:p<.001; **:p<.01; *p<.05

The following Figure 14 illustrates how expertise moderated the relationship between attitude toward e-WOM and adoption of e-WOM.

Figure 14. Moderating Effects of Expertise



Note. ***:p<.001; **:p<.01; *p<.05

Moderating effects of Involvement

Furthermore, the moderating effects of e-WOM involvement were also tested using multi-group SEM. The involvement scales were summed and averaged, then divided into two sub groups: high e-WOM involvement and low e-WOM involvement. The unconstrained model (baseline model) was to allow all the hypothesized paths to vary across from high e-WOM involvement travelers and low e-WOM involvement travelers. Then the constrained model, which allowed only the hypothesized path constrained to be equal, was compared with baseline model between the high e-WOM involvement and low e-WOM involvement subgroups. Chi-square difference test was thereafter estimated to see if there was significant difference between these two models. If none significant result is shown, then it could be concluded that moderating effects don't exist on proposed relationship.

Moderation effects of involvement on the central route

The chi-square difference test between the baseline and constrained model was examined to test the moderation effects of e-WOM involvement on the relationship between the central route factors (information relevance, information timeliness and information completeness) and perceived usefulness. Table 14 summarizes the results of moderation effects.

As a result, involvement was found to moderate the relationship between information relevance and perceived usefulness ($\Delta\chi2=4.078$, $p<.01$). The standard coefficients showed that information relevance had a significant influence on perceived usefulness for high e-WOM involvement travelers ($\beta=.32$, $p <.001$), but didn't have a significant influence on low e-WOM involvement travelers ($\beta=.42$, $p >.05$). This supported $H_{16\text{-}1}$, travelers who have a high level of involvement are more likely to use information relevance to perceive eWOM usefulness. This finding supported the assumption that travelers with high e-WOM involvement would use central route more than low e-WOM involvement travelers.

Table 14. Moderating effect of Involvement on central route

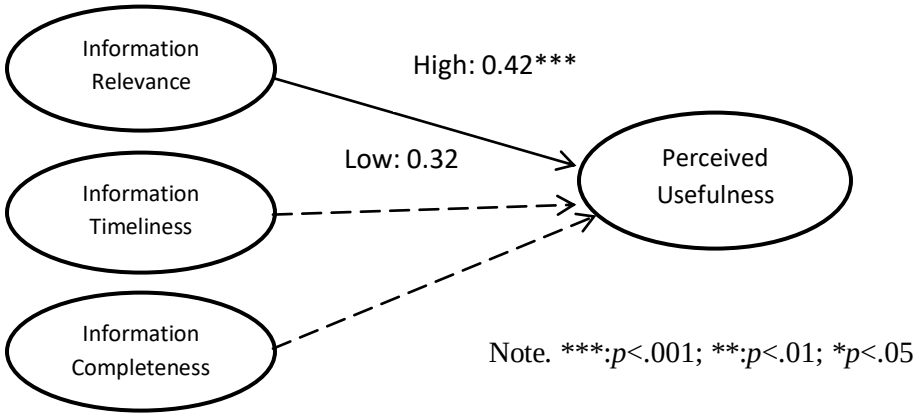
Model	**Chi-square Statistics**	**Chi-square Difference (df=1)**	**Coefficients**		**Result**
			High	Low	
Baseline Model	2659.1				
Information Relevance → Perceived Usefulness	2633.1	4.078*	0.32***	0.42	Supported
Information Timeliness → Perceived Usefulness	2659.5	0.437	0.061	0.057	Rejected
Information Completeness → Perceived Usefulness	2659.2	0.153	0.16*	0.18*	Rejected

Note. ***:p<.001; **:p<.01; *p<.05

The Chi-square difference test between the baseline and constrained model of path from information timeliness and perceived usefulness was not statistically significant ($\Delta\chi2=0.437$, $p > .05$). The similar situation was examined for the path from information completeness and perceived usefulness ($\Delta\chi2=0.153$, $p>.05$). Therefore $H_{16\text{-}2}$ and $H_{16\text{-}3}$ were rejected. E-WOM involvement didn't have moderating effects on relationships between information timeliness and perceived usefulness, and information completeness and perceived usefulness. In details, travelers (for both high and low involvement) didn't perceive information timeliness as an important indicator of e-WOM usefulness. However, they all perceived information completeness as an important indicator for e-WOM usefulness.

Figure 15 illustrated how e-WOM involvement moderated the relationships between these three central route factors and perceived usefulness.

Figure 15. Moderating Effects of Involvement on Central Route



Moderation effects of involvement on the peripheral route

The moderation effects of involvement on the peripheral route factors were also tested by multi-group SEM with the chi-square difference test. As a result, the moderation effects of involvement were found on the relationship between information sidedness and perceived credibility ($\Delta\chi2=4.698$, $p<0.1$). This supported $H_{17\text{-}1}$ that Involvement moderates the relationship between information sidedness and perceived credibility. The standardized coefficients showed that information sidedness had a significant influence on perceived credibility for low e-WOM involvement travelers ($\beta=.12$, $p<0.001$), but didn't have significant influence on high e-WOM involvement travelers ($\beta=.15$, $p>0.05$). A similar situation happened with the path information relevance to perceived credibility. The moderation effects of involvement were found on the relationship between review consistency and perceived credibility ($\Delta\chi2=5.884$, $p<0.1$). This supported $H_{17\text{-}2}$ that Involvement moderates the relationship between review consistency and perceived credibility. The standardized coefficients showed that review consistency had a significant influence on perceived credibility for low e-WOM involvement travelers ($\beta=.25$, $p<0.001$), but didn't have significant influence on high e-WOM involvement travelers ($\beta=.26$,

p >0.05). These findings supported the assumptions that travelers with low e-WOM involvement would like to use more peripheral cues than high e-WOM involvement travelers.

However, the Chi-square difference test between the baseline and constrained model of path from review rating and perceived credibility was not statistically significant ($\Delta\chi2=0.180$, $p > .05$). The similar situation was examined for the path from product rating and perceived credibility ($\Delta\chi2=2.182$, $p>.05$). Therefore $H_{17\text{-}3}$ and $H_{17\text{-}4}$ were rejected. E-WOM involvement didn't have moderating effects on relationships between review rating and perceived credibility, and product rating and perceived credibility. In details, all travelers (for both high and low involvement) perceive review rating and product rating as two important indicator of e-WOM credibility.

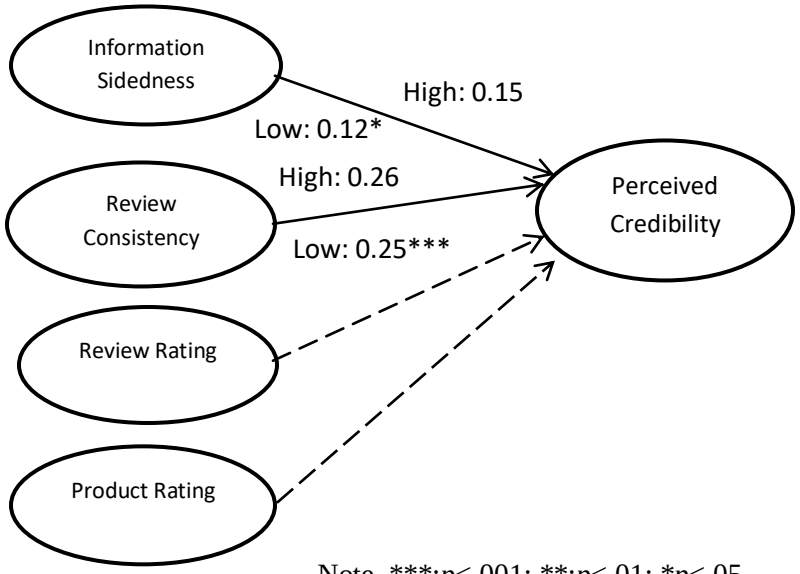
Table 15. Moderating effect of Involvement on peripheral route

Model	**Chi-square Statistics**	**Chi-square Difference (df=1)**	**Coefficients**		**Result**
			High	Low	
Baseline Model	2659.1				
Information Sidedness → Perceived Credibility	2663.8	4.698*	0.15	0.12***	Supported
Review Consistency → Perceived Credibility	2664.9	5.884*	0.26	0.25***	Supported
Review Rating → Perceived Credibility	2659.2	.180	0.21***	0.18***	Rejected
Product rating → Perceived Credibility	2661.2	2.182	0.51***	0.38***	Rejected

Note. ***:$p<.001$; **:$p<.01$; *$p<.05$

Figure 16 illustrated how e-WOM involvement moderated the relationships between these four peripheral route factors and perceived credibility.

Figure 16. Moderating Effects of Involvement on Peripheral Route



Note. ***:p<.001; **:p<.01; *p<.05

Summary of Hypotheses Testing Results

Table 16 presents the results of all the hypotheses testing using structural equation modeling (SEM). As shown in the table, except for the relationship between information timeliness and perceived usefulness (H9), all the other structural paths were empirically supported. The findings revealed that perceived credibility was an important factor influencing attitude toward e-WOM. Perceived usefulness and perceived ease of use were found to influence attitude toward e-WOM as claimed in technology acceptance model (TAM). Perceived usefulness, perceived credibility and attitude toward e-WOM were found to influence e-WOM adoption. For the central route processing factors, information relevance and information completeness were found to affect perceived usefulness of e-WOM. For the peripheral route processing, the findings supported that information sidedness, review consistency, review rating and product rating were four important antecedents for perceived credibility.

Furthermore, a multi-group SEM tested the moderating effect of expertise on the relationship between attitude toward e-WOM and adoption of e-WOM, and a series of multi-group SEM were used to test the moderating effects of involvement on the travelers' choice of processing route (central or peripheral route). The results supported that there was a moderating effect of expertise on the relationship between attitude toward e-WOM and adoption of e-WOM (H_{15}). For the choice of processing route, the findings indicated that there were moderating effects of involvement on the relationship between central route factor (information relevance) on perceived usefulness($H_{16\text{-}1}$), and between peripheral route factors (information sidedness and review consistency) on perceived credibility($H_{17\text{-}1}$ and $H_{17\text{-}2}$).

Table 16. Summary of Hypotheses Testing Results

	Paths from	Path to	Result
Structural Paths			
H1	Perceived usefulness	Attitude toward e-WOM	Supported
H2	Perceived credibility	Attitude toward e-WOM	Supported
H3	Perceived ease of use	Attitude toward e-WOM	Supported
H4	Perceived usefulness	Adoption of e-WOM	Supported
H5	Attitude toward e-WOM	Adoption of e-WOM	Supported
H6	Perceived credibility	Adoption of e-WOM	Supported
H7	Perceived ease of use	Perceived usefulness	Supported
H8	Information relevance	Perceived usefulness	Supported
H9	Information timeliness	Perceived usefulness	Not Supported
H10	Information completeness	Perceived usefulness	Supported
H11	Information Sidedness	Perceived credibility	Supported
H12	Information Consistency	Perceived credibility	Supported
H13	Review Rating	Perceived credibility	Supported
H14	Product Rating	Perceived credibility	Supported
Moderating Effect of Expertise			
H15	Attitude toward e-WOM	Adoption of e-WOM	Supported
Moderating Effect of Involvement			
H16-1	Information Relevance	Perceived Usefulness	Supported
H16-2	Information Timeliness	Perceived Usefulness	Not Supported
H16-3	Information Completeness	Perceived Usefulness	Not Supported
H17-1	Information Sidedness	Perceived Credibility	Supported

H17-2	Review Consistency	Perceived Credibility	Supported
H17-3	Review Rating	Perceived Credibility	Not Supported
H17-4	Product Rating	Perceived Credibility	Not Supported

CHAPTER V

CONCLUSION AND IMPLICATIONS

Summary of Findings

The primary two purposes of this study were to (a) propose and test an integrated theoretical model of the e-WOM adoption process based on technology acceptance model (Davis, 1989) and elaboration likelihood model (Petty & Cacioppo, 1986), and (b) provide implications and suggestions for marketing practitioners and researchers in the hospitality and tourism industry. In particular, this study aimed to investigate the relationships among perceived usefulness, perceived credibility and perceived ease of use towards travelers' attitudes of e-WOM and e-WOM adoption. In addition, this study attempted to examine the effects of central route factors (information relevance, information timeliness and information completeness) on perceived usefulness of e-WOM; the effects of peripheral route factors (information sidedness, review consistency, review rating and product rating) on perceived credibility of e-WOM. This chapter summarizes the findings of this study, and then discusses the theoretical and practical implications based on the findings. Lastly, limitations of this study and suggestions for future research are concluded.

Perceived values and attitude toward e-WOM

In this study, Hypotheses 1, 2 and 3 proposed that perceived usefulness, perceived credibility and perceived ease of use positively influence attitude toward e-WOM, and all of three hypotheses were supported. In particular, the coefficients indicated that perceived usefulness was the most important factor, followed by perceived credibility and then perceived ease of use. The results are consistent with extant findings in the TAM literature, in that perceived usefulness exerts substantial impacts on attitude (Ayeh et al., 2013; Chang & Caneday, 2011). In addition, this study newly postulated Hypothesis 2, which identified the role of perceived credibility on attitude toward e-WOM based on information adoption model (Sussman & Siegal, 2003). That is, travelers tend to have positive attitudes toward e-WOM when they perceive the online reviews are credible. This relationship between perceived credibility and attitude toward e-WOM is new in the e-WOM adoption context. The statistic results showed that perceived credibility, as well as the perceived usefulness and perceived ease of use can significantly affect attitude toward e-WOM, this supported H_2 and this finding confirmed the validity of our extended model. The finding indicated that travelers' perceived credibility of e-WOM also play a vital role in their attitude toward e-WOM adoption.

Perceived values and e-WOM adoption

This study extended TAM by adding the construct of perceived credibility, which was noted important in e-WOM adoption (Fang, 2014). Hypotheses 4, 5and 6 proposed that perceived usefulness, attitude toward e-WOM, and perceived credibility have positive relationships with travelers' adoption of e-WOM. The results supported all of these hypotheses and the coefficients indicated that attitude toward e-WOM was the most influential factor, followed by perceived usefulness and then perceived credibility. The findings indicated that e-WOM adoption is highly affected by attitude toward e-WOM. This result is quite consistent with the findings of TAM,

which conclude that attitude is a key role in adoption behaviors. In addition, this study provided evidence that perceived usefulness and perceived credibility of e-WOM were significantly associated with travelers' adoption of e-WOM, which is consistent with the findings of previous research (Sussman & Siegal, 2003). In other words, travelers will evaluate both e-WOM usefulness and e-WOM credibility for e-WOM adoption, thus both kinds of information can take significant role during their decision making processes.

Perceived ease of use and perceived usefulness

As hypothesized in Hypothesis 7, perceived ease of use is positively related to perceived usefulness. This result is consistent with technology acceptance model (Davis, 1989), indicating that perception of perceived ease of use enables individuals to estimate the performance of specific tasks. In this study, it is also supported in the e-WOM context. Internet technology is becoming more accessible, easy to learn and easy to use. If online reviews become more user-friendly than before, travelers tend to perceive e-WOM useful.

The effects of central route factors on perceived usefulness

According to Elaboration Likelihood Model (Petty & Cacioppo, 1986), people who have the motivation and ability are inclined to process the message itself in a cognitive effort (central route).This study investigated the precursors to information usefulness: H_8, H_9 and H_{10} proposed that, in the e-WOM context, argument quality factors including information relevance, information timeliness and information completeness were positively related with travelers' perceived usefulness of e-WOM. As a result, these three dimensions of information quality explained 62% of the variance for perceived usefulness. It is supported that positive relationships exist between information relevance and perceived usefulness, and information completeness and perceived usefulness, with relevance having the stronger effect. Thus, the more relevant and complete the information provided is, the more travelers will perceive it as useful. These findings

are consistent with previous study (Cheung, Lee and Rabjohn, 2008). It is easy to understand that, when reading the content of online reviews, travelers focus on relevant and comprehensive information to determine the usefulness of the information.

However, information timeliness was not found to have a significant positive relationship with perceived usefulness. In other words, information timeliness did not play an important role in influencing perceived usefulness in this study. Online reviews about hotel products or services that are not up-to-date won't impact the usefulness of the information. This may be due to the characteristic of hotel products. In the online context, comments about hotel products like rooms and services may not be as time sensitive as other topics such as upcoming events or offering expiration information. Online reviews from the past may even be useful as travelers could see an ongoing reputation for the hotels.

The effects of peripheral route factors on perceived credibility

Furthermore, people who are less motivated or unable to process the argument are inclined to use cues instead of the message itself, taking the peripheral route (Petty & Cacioppo, 1986). H_{11}, H_{12}, H_{13} and H_{14} proposed that, peripheral cues factors: information sidedness, review consistency, review rating and product rating were positively related with travelers' perceived credibility of e-WOM. The results reported that all the hypotheses were significant and supported. These four factors on the peripheral route explained 63% of the variance for perceived credibility.

After analyzing each path relation, it showed that product rating has the strongest effect on perceived credibility of e-WOM, followed by review consistency, review rating and information sidedness. The reason why product rating was presented as the strongest antecedent of perceived credibility of e-WOM may be because of the number and variety of hotels available online. It is often difficult to sort out all the online reviews and obtain an unbiased evaluation of hotel products, and product ranking can provide the average travelers' evaluation of

accommodation. For example, Tripadvisor.com adopts a five-point scale to rate the hotels, from 1(terrible) to 5(excellent). Thus, travelers may prefer to consider this kind of information shortcuts to save effort and time. They might only check the product ranking instead of reading the entire list of online reviews, and the product ranking enables their adoption of e-WOM.

In addition, review consistency was found to have significant impacts on perceived credibility of e-WOM. That is, readers are more likely to believe similar experience that was repeatedly reported. As for the review rating, the findings indicated that the higher the rating of an online review by past readers, the more confidence or credibility travelers have in the review. On Tripadvisor.com, reviews are allowed to be voted whether they are helpful or not. This is an easy way for travelers to evaluate the credibility of e-WOM. Lastly, information sidedness was also proven to be significantly related with perceived credibility. In the mind of travelers, information with both positive and negative comments was perceived as more credible than one-sidedness information. In other words, these two-sided reviews were found to be more persuasive than positive or negative only reviews, because they enable travelers to get a more comprehensive description of hotels by knowing not only their strengths but also weaknesses.

Moderating effects of involvement and expertise

Expertise and involvement were proposed as two important moderators according to the elaboration likelihood model (ELM). In this study, H_{15} postulated that receivers' expertise had a moderating effect on the relationship between attitude toward e-WOM and e-WOM adoption. The findings in this study supported this hypothesis, indicating that receiver expertise plays a significant role in transmitting the effect of attitude toward e-WOM on the e-WOM adoption. Specifically, receivers' expertise on hotels was shown to negatively influence the relationship between attitude toward e-WOM and the e-WOM adoption. That is, the higher degree of expertise a traveler obtains, the less likely that attitude significantly influences his or her adoption

of e-WOM. Having the relevant knowledge on hotels, an expert traveler is able to make the final decision independently. However, a novice traveler who knows little about hotels may favor to get more suggestions from online reviewers, therefore adopt e-WOM information. This finding is consistent with previous studies which supported that the more expertise an individual has, the less he or she would search information due to their ability and knowledge (Brucks, 1985; Gilly et al., 1998).

Involvement is another important moderator for information elaboration process according to ELM (Petty & Cacioppo, 1986). Previous studies proposed that high involvement or motivated individuals would engage in high level cognitive thinking or information quality, and rely less on the peripheral cues (Sussman and Siega, 2003). In this study, the moderation effects of involvement were investigated, upon both the relationships between antecedents and perceived usefulness in the central route, and the influence of peripheral factors on perceived credibility. As suggested from ELM, hypotheses 16-1, 16-2 and 16-3 postulated that travelers with high e-WOM involvement would use central route or message quality more than low e-WOM involvement travelers. The findings partly supported Hypothesis 16. In detail, for the central route, involvement was reported to have significant positive influence only on the relationship between information relevance and perceived usefulness ($H_{16\text{-}1}$). That is, travelers who are highly involved in e-WOM are more likely to use information relevance to perceive e-WOM usefulness than those with low e-WOM involvement.

However, the moderation effects of involvement didn't show on the relationships between information timeliness and perceived usefulness ($H_{16\text{-}2}$), and information completeness and perceived usefulness ($H_{16\text{-}3}$). The influence of information timeliness on perceived usefulness did not significantly vary across different levels of involvement. This may be due to hotel products or services are not time sensitive. Therefore, neither motivated nor unmotivated travelers perceive up-to-date online reviews as important indicator for usefulness. Besides, the reason why

$H_{16\text{-}3}$ was not supported may be explained by the fact that travelers typically make a deliberate choice to search for information to facilitate their travel planning. The complete or comprehensive reviews on hotels provided online contain a lot of information. A high e-WOM involvement traveler may tend to use the cognitive information to decide the significance of reviews to facilitate whether to purchase a particular hotel product. However, a low e-WOM involvement traveler who knows little about online reviews may also favor complete reviews due to his or her need for the information validity. Therefore, either high or low e-WOM involvement travelers consider information completeness as an important indicator for perceived usefulness of e-WOM.

While travelers rely on central route factors to evaluate online reviews, they also rely on peripheral route cues, such as information sidedness, review consistency, review rating and product rating. ELM suggests that, when a recipient's involvement level is low, he or she would rely more on the peripheral route. In this study, hypotheses 17-1, 17-2, 17-3 and 17-4 postulated that travelers with low e-WOM involvement would use peripheral route more than high e-WOM involvement travelers. The findings showed that involvement had significant moderation effects on the relationship between information sidedness and perceived credibility ($H_{17\text{-}1}$), and review consistency and perceived credibility ($H_{17\text{-}2}$). These are consistent with ELM, which strongly advocates that travelers with low involvement in e-WOM are more likely to use peripheral cues. The findings indicated the greater impact of review sidedness at a low involvement level. For travelers who were not motivated to elaborate, online reviews were perceived more credible when they have both the positive and the negative sides because that seemed to be fair. Our findings also suggested that travelers appear to rely more on review consistency in the evaluation of perceived credibility when their involvement level is low. In the context of online reviews, review consistency served more as a peripheral cue, which is consistent with what information adoption literature suggests.

In this study, the moderation effects of involvement didn't show on the relationships between review rating and perceived credibility (H_{17-3}), or product rating and perceived credibility (H_{17-4}). In other words, the results indicated that the influence of review rating and product rating on perceived credibility did not significantly vary across different levels of involvement. In the context of hotel industry, this may be because there are a large number of online reviews on various kinds of hotels. When evaluating online consumer reviews, travelers also rely on other review cues such as product rating and review rating to save effort and time, regardless their different levels of e-WOM involvement.

Theoretical Implications

This study proposed and tested an integrated theoretical model of e-WOM adoption based on technology acceptance model (TAM) and elaboration likelihood model (ELM). The research model was supported by theory of reasoned action and dual-process theory. By examining how the determinants influence the perceived usefulness and perceived credibility, this study provided enhanced insight into e-WOM adoption mechanism on ELM theory. In addition, this study introduced a new factor (perceived credibility) into the conventional technology acceptance model (TAM) to investigate the process of e-WOM adoption.

One of the main theoretical contributions of this study was providing a different conceptual basis by integrating two theoretical foundations (TAM and ELM model) to investigate the e-WOM adoption process. Although numerous studies have been conducted on e-WOM communication, the scope of published studies is fragmented and inconclusive (Cheung and Thadani, 2010). A research gap exists for the antecedent mechanism of e-WOM adoption in the hotel context. To fill this research gap, this study introduced the factor of perceived credibility into TAM, and investigated the relationships among perceived credibility, perceived usefulness, attitude toward e-WOM and e-WOM adoption. As a result, perceived credibility positively affects

travelers' attitude toward e-WOM and e-WOM adoption. Given the path coefficients, perceived credibility (β=.302) suggested a stronger impact on attitude toward e-WOM than perceived ease of use (β=.183). In addition, the perceived credibility was shown as an additional crucial driver of e-WOM adoption. Therefore, it is fruitful to take perceived credibility into account by extending TAM for the explanation of e-WOM adoption. Overall, the combining consideration of both perceived credibility and TAM factors (perceived usefulness and perceived ease of use) accounts for a very substantial amount of variance in adoption (R^2=0.82).

Beyond adding perceived credibility to TAM model, this study proposed and empirically tested which determinants or external factors influence the perceived usefulness and perceived credibility of e-WOM. Various previous studies (Cheung, Lee, & Rabjohn, 2008; Luo et al.2014; Fang, 2014) have explored the antecedent factors of information usefulness or perceived credibility from cognitive or affective path respectively. However, few researchers have explored the antecedents in hotel context (Filieri and McLeay, 2013). In addition, most of the previous studies only focused on one path for e-WOM adoption, either information usefulness or perceived credibility. This study considers that insufficient since travelers who adopt information from online reviews will incorporate both aspects into their mental processing for decision making. Therefore, this study identified both the factors that influence perceived usefulness and perceived credibility upon ELM theory, and empirically tested them in the hotel context. The results of the findings are consistent with previous studies (Cheung et al., 2008), supporting that some information quality dimensions (information relevance and information completeness) are positively related to perceived usefulness. Information timeliness displayed no significant relationship to perceived usefulness. This indicates hotel reviews that are not up-to-date may not have timeliness impact on the travelers' perceived usefulness of information. Some antecedents of perceived credibility, (product rating, review consistency, review rating and information

sidedness) are shown highly influential on perceived e-WOM credibility. As a result, this presents evidence of elaboration through two routes according to ELM.

This study also contributes to the literature by testing several moderation effects, including 1) the role of two routes at different levels of the travelers' e-WOM involvement; and 2) the moderating influence of expertise on the relationship between attitude toward e-WOM and e-WOM adoption. In the hotel context, few studies investigated the moderation effects of these two moderators. The findings partially supported the assumptions proposed by the author in this study. By adding moderators in the integrated model, this study provided a more detailed picture of the e-WOM adoption process and enriched the existing literature on ELM studies.

Overall, this study contributes to the knowledge of e-WOM literature by providing a comprehensive model of e-WOM adoption by combining TAM and ELM. By presenting the e-WOM adoption process along with empirical evidence, this study contributes to researchers and practitioners for future research and practical implications.

Practical Implications

The general ELM does not identify specific cues for the central or peripheral route in the information elaboration process. This study has applied the ELM model and combined it into TAM in the context of online hotel reviews. Furthermore, this study has identified seven specific information cues that travelers use when evaluating the perceived usefulness and credibility of online hotel reviews. The findings of this study provide some managerial implications.

First, from the e-WOM receivers' perspective, this study presents a model which could explain or improve understanding of the travelers' e-WOM adoption process. The empirical results would show hotel marketers and administrators of review forums how travelers process e-WOM information for their decisions related to online hotel booking. In this study, we clearly

find that not only information usefulness, but also information credibility and perceived ease of use had strong and significant impact on travelers' attitudes toward e-WOM, which mainly leads to e-WOM adoption. Therefore, we suggest practitioners pay more attention to the design of the e-WOM exhibition system. For example, persuasive e-WOM information with complete and relevant reviews of the product or service could be recommended in a prominent location on their website, helping travelers more easily acquire useful information. In addition, practitioners may use the meta-data techniques to show frequently mentioned strengths and weaknesses of a particular hotel to facilitate travelers' trip planning.

Another important implication of this study is that the specific four dimensions (information sidedness, review consistency, review rating and product rating) were identified to have significant influence on information credibility. From the managers' perspective, more peripheral cues should be provided by the administrators of the review forums.

The findings suggest that product rating can facilitate travelers to make a better judgement of hotels. Since product rating is a type of categorical information provided by experienced travelers, it indicates the overall evaluation for a product from other travelers. In fact, compared with the rankings provided by business-oriented groups, travelers might be more willing to trust other travelers' ranking. This result helps the hotel marketing managers or editors of third party review forums to be aware that a form of bottom-up evaluation of products and services based on customer evaluations is emerging.

Review rating and information sidedness are also easy cues for e-WOM receivers. Accordingly, a well-designed e-WOM website should a) enhance the visibility of review rating by using a floating panel so that people can always see the information and, b) allow travelers to sort and filter reviews by their valence (positive or negative). A recommendation about information sidedness for hotel marketers from this study is that marketing websites should be

more in line with the real quality of the product they offer. Since travelers are interested in getting both the negatives and positives of accommodations, "hidden weaknesses" may cause travelers to rate a product or service negatively.

Information relevance is another important cue for perceived credibility. Thus, travelers don't want to spend time or effort on irrelevant information. Therefore, online review websites should provide options to sort information according to travelers' needs. For instance, the websites can provide information for the target group such as family, solo traveler or friends.

Limitations and Future Research

There are a few limitations that should be noted in this study. First, since this study used self-reported data during a period of time, common method bias may be a potential problem (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Such bias results are from the respondent providing the measure of both the predictor and criterion variables and includes a tendency to maintain consistency in their responses (Podsakoff & Organ, 1986). Future research could design experimental study to verify causal interrelationships among these constructs.

Second, the use of convenient self-administrated sampling method with online survey might be a source of bias. By limiting the U.S. leisure travelers who can be recruited from MTurk, this study has limited control over the final sample. However, convenient sampling method is appropriate for the purpose by testing the hypothesized relationships among constructs. The results interpreted in this study should only explain the e-WOM adoption process of current travelers who can be recruited from MTurk. Future research could test and generalize the hypotheses proposed in the integrated model by collecting data from multi-sources.

Third, all measures used in this study relied on respondents' perceptions of their memories of recent online reviews. The accuracy of the respondents' answers may cause concern.

Future studies may use not only subjective but also objective measures to confirm the findings of this study. A longitudinal study would be suggested to take into account the travelers' actual behavioral changes over time.

Fourth, given that TripAdvisor.com is one of the most popular review websites, the brand equity of it might affect travelers' perceptions of the online reviews. The generalization of the results of this study might be exercised with caution. Nevertheless, for the similar consumer-generated media of e-WOM forums, the findings should be applicable. Future research could test the integrated model proposed in this study in different online communities. As noted in the conclusion section, the nature of hotel information is not as time sensitive as other topics are. Therefore, an interesting area for future research is to apply this theoretical model to investigate different contexts for e-WOM adoption process.

Lastly, the integrated model examined several external factors on the central route and the peripheral route. However, some of the important predictors may be missing. This is because previous research on the topic has covered multiple indicators of usefulness and credibility. For example, information persuasiveness, information quantity, and source credibility may be added to test whether they have significant relationship with perceived credibility of e-WOM and inherently information adoption. Adding antecedents may also enhance the variance of information adoption.

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APPENDICES

APPENDIX A.

Survey Questionnaire

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Screening question: Have you read online hotel reviews on ***TripAdvior.com*** in the past six (6) months when planning a trip?

a) Yes (If yes, please continue to participate in the survey)

b) No (If no, then this is the end of the questionnare)

Section I

Instructions: Please recall your most recent experience of reading online hotel reviews on ***TripAdvior.com.*** The following statements relate to your opinions on the content of online hotel reviews you have read. Please indicate your level of agreement for each of the following statements by clicking the number.

Statement	Strongly Disagree →						Strongly Agree
1. The information I got through online hotel reviews was relevant to my needs for the hotel I was interested in.	1	2	3	4	5	6	7
2. The information I got through online hotel reviews was appropriate for my needs for the hotel I was interested in.	1	2	3	4	5	6	7
3. The information I got through online hotel reviews was applicable to my needs for the hotel I was interested in.	1	2	3	4	5	6	7
4. The online hotel reviews included necessary information about the hotels.	1	2	3	4	5	6	7
5. The online hotel reviews covered enough detailed information about the hotels.	1	2	3	4	5	6	7
6. The online hotel reviews had sufficient information about the hotels.	1	2	3	4	5	6	7
7. The online hotel reviews I referred to were current at that time.	1	2	3	4	5	6	7
8. The online hotel reviews I referred to were timely at that time.	1	2	3	4	5	6	7
9. The online hotel reviews I referred to were up-to-date at that time.	1	2	3	4	5	6	7
14. The online hotel reviews were highly rated by other audience.	1	2	3	4	5	6	7

15. The online hotel reviews were found to be favorable by other audiences.	1	2	3	4	5	6	7
16. The online hotel reviews were found to be approving by other audiences.	1	2	3	4	5	6	7

Section II

Instructions: The following statements relate to your **general opinions** on some other aspects of online hotel reviews on ***TripAdvisor.com***. Please indicate your level of agreement for each of the following statements by clicking the number.

Statement	Strongly Disagree →						Strongly Agree
1. The online hotel reviews had sufficient information about the hotels.	1	2	3	4	5	6	7
2. The online hotel reviews included both pros and cons on the discussed hotel.	1	2	3	4	5	6	7
3. The online hotel reviews included both positive and negative comments on the discussed hotel.	1	2	3	4	5	6	7
4. The online hotel reviews included only one-sided comments (positive or negative)	1	2	3	4	5	6	7
5. Comments in online hotel reviews are consistent with each other.	1	2	3	4	5	6	7
6. Comments in online hotel reviews are similar to each other.	1	2	3	4	5	6	7
7. Comments in online hotel reviews match with each other.	1	2	3	4	5	6	7
8. The online hotel reviews were highly rated by other audience.	1	2	3	4	5	6	7
9. The online hotel reviews were found to be favorable by other audiences.	1	2	3	4	5	6	7
10. The online hotel reviews were found to be approving by other audiences.	1	2	3	4	5	6	7
11. Travelers' overall ratings on hotels are important to evaluate the hotel which I am interested.	1	2	3	4	5	6	7
12. Travelers' overall ratings on hotels are useful to improve my understanding of the hotel which I am interested.	1	2	3	4	5	6	7
13. Travelers' overall ratings on hotels are helpful to learn about the hotel which I am interested.	1	2	3	4	5	6	7

Section III

Instructions: Based on your experience, below are a number of statements describing your personal opinion on online hotel reviews. Please indicate your level of agreement for each of the following statements by clicking the number.

Statement	Strongly Disagree →						Strongly Agree
1. Online hotel reviews are useful.	1	2	3	4	5	6	7
2. Online hotel reviews make my hotel booking decision easier.	1	2	3	4	5	6	7
3. Online hotel reviews improve my hotel booking process.	1	2	3	4	5	6	7
4. Online hotel reviews enable me to decide for a hotel reservation more quickly.	1	2	3	4	5	6	7
5. I consider the online hotel reviews on TripAdvisor.com to be factual.	1	2	3	4	5	6	7
6. I think the online hotel reviews on TripAdvisor.com are credible.	1	2	3	4	5	6	7
7. In my opinion, the online hotel reviews on TripAdvisor.com are believable.	1	2	3	4	5	6	7
8. Searching online hotel reviews is easy for me.	1	2	3	4	5	6	7
9. The process of using online hotel reviews is clear and understandable.	1	2	3	4	5	6	7
10. It would **NOT** require much effort to obtain information from online hotel reviews.	1	2	3	4	5	6	7
11. In general, I prefer to read online hotel reviews before booking a hotel.	1	2	3	4	5	6	7
12. I have a favorable attitude towards online hotel reviews.	1	2	3	4	5	6	7
13. It is a good idea to use online hotel reviews.	1	2	3	4	5	6	7
14. Online hotel reviews would influence my purchasing decision (e.g., to book or not book a hotel).	1	2	3	4	5	6	7
15. I would like to follow the suggestions of online reviews (e.g., to book or not book a hotel).	1	2	3	4	5	6	7
16. Online reviews would motivate me to take action (e.g., to book or not book a hotel).	1	2	3	4	5	6	7

Section IV

Instructions: The following statements are about your familiarity with online hotel reviews. Please indicate your level of agreement for each of the following statements by clicking the number.

Statement	Strongly Disagree →						Strongly Agree
1. I have experience searching online hotel reviews.	1	2	3	4	5	6	7
2. I have experience writing online hotel reviews.	1	2	3	4	5	6	7
3. I know how online hotel reviewers make recommendations.	1	2	3	4	5	6	7

Section V

Instructions: Please click the number that best represents your response to each of the following statements regarding the **general Hotels' services.**

How knowledgeable are you about the Hotels' services (Including rooms, restaurant, service staff, amenities, etc.)?

Novice 1 2 3 4 5 6 7 Expert

To what extent are you experienced at using the Hotels' services (e.g., rooms, restaurant, service staff, amenities, etc.)?

Not at all 1 2 3 4 5 6 7 To a great extent

To what extent are you an expert on Hotels' services (e.g., rooms, restaurant, service staff, amenities, etc.)?

Not at all 1 2 3 4 5 6 7 To a great extent

Section VI

What is your gender?

1) Male 2) Female

What is your age group?

1) 18-24 years old
2) 25-34 years old
3) 35-44 years old
4) 45-54 years old
5) 55-64 years old
2) 65 years or older

What is your highest level of education completed?

1) Less than High school
2) High school
3) 2-year College
5) 4-year College
5) Master degree
6) Doctorate degree

What's your current occupation?

1) Management
2) Technical worker
3) Government
4) Professional

5) Agricultural worker

6) Self-employed

7) Service worker

8) Housewife

9) Student

10) Retired/Not in workforce

11) Other, (please specify):_____

What is your approximate gross annual household income?

1) Less than $ 25,000

2) $ 25,000 to $ 49,999

3) $ 50,000 to $ 74,999

4) $ 75,000 to $ 99,999

5) $ 100,000 or more

What is your ethnic group?

1) Caucasian

2) Hispanic

3) African American

4) Asian

5) Pacific Islander

6) American Indian

7) Other, please specify: _____

Thank you very much for your participation!

APPENDIX B.

Oklahoma State University

Institutional Review Board (IRB) Approval

Oklahoma State University Institutional Review Board

Date:	Wednesday, April 13, 2016
IRB Application No	HE1623
Proposal Title:	An integrated theoretical model of e-WOM adoption
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/12/2019

Principal Investigator(s):

Wenjing Zou
91 S. University Pleace Apt. 4
Stillwater, OK 74075

Hailin Qu
148 HES
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1.Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2.Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3.Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4.Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Scott Hall (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Hugh Crethar, Chair
Institutional Review Board

VITA

WENJING ZOU

Candidate for the Degree of

Doctor of Philosophy

Dissertation: AN INTEGRATED THEORETICAL MODEL OF E-WOM ADOPTION —A CASE IN HOTEL INDUSTRY

Major Field: HUMAN SCIENCES WITH A SPECIALIZATION IN HOSPITALITY ADMINISTRATION

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Human Sciences with a Specialization in Hospitality Administration at Oklahoma State University, Stillwater, Oklahoma in May, 2019.

Completed the requirements for Master of Science in Tourism Management at Xiamen University, Xiamen, China in 2011.

Completed the requirements for the Bachelor of Science in Tourism management at Beijing Forestry University, Beijing, China in 2008.

Experience:

Teaching Assistant, School of Hotel and Restaurant Administration (HARD), Oklahoma State University (OSU), United States, Fall 2014-Spring, 2015;
Research Assistant, HARD, OSU, Fall 2011-Fall 2013;
Treasurer, Graduate and Professional Student Government Association, OSU, Fall 2014-Spring 2015;
Instructor, Xiamen Nanyang University, China, Spring 2010
Instructor, Xiamen City University, China, Fall 2009

Professional Memberships:

Golden Key Honor Society by Oklahoma State University