A comprehensive structural model of factors affecting online consumer travel purchasing

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A COMPREHENSIVE STRUCTURAL MODEL OF FACTORS AFFECTING ONLINE
CONSUMER TRAVEL PURCHASING

by

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A dissertation submitted in partial fulfillment
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ABSTRACT

A Comprehensive Structural Model of Factors Affecting Online Consumer Travel Purchasing

By

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The purpose of this research was to develop a comprehensive model to study consumers’ online purchase intention of travel products. Related literature reviews suggested antecedents of consumers’ online purchase intention including EC travel website design, past purchase experience, consumer trust, consumer’s attitudes toward online shopping of travel products.

The model was developed by integrating one existing theoretical model (Shim’s Online Pre-purchase Intentions Model) with several important factors which were guided by theories: (1) social cognitive theory, (2) self-efficacy theory, (3) theory of planned behavior (TPB), (4) attitude-behavior consistency theory, (5) theory of consumer trust, and (6) communication theory. As a prior attempt to integrate these theories in the context of hospitality industry, the scope of this study was limited to empirically test the model with data collected from leisure travelers in United States. The study proposed
seven hypotheses. The data was collected via Internet survey. A structural equation modeling analysis revealed that six hypotheses hold true in this study.

The overall results indicated that the Theory of Planned Behavior, attitude-behavior consistency theory, theory of consumer trust, and communication theory provide a good understanding those factors. The results revealed a strong support for the importance of designing a travel Web site. In consumers’ perspective, a good travel Web site should provide consumers with detailed, timely, and accurate information, reliable system operation, and excellent service quality. A well design e-travel agency can significantly influence consumers’ attitude, purchase experience, consumer trust, and online purchase intention. The findings also showed the significance of managing consumers’ attitude by creating convenience perception, good merchant image, and value perception in consumers’ mind. The importance of previous online shopping experience illustrates the strategic point of turning existing online consumers into repeat customers by providing them with satisfying online shopping experience. Although there is one contradicting finding in the hypotheses, this study still provided a more comprehensive model to explore consumers’ online purchase intention of travel products.

Future researches can use result of this study to create a new model to explore customer’s repurchase intention and to develop an effective consumer loyalty program.
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CHAPTER 1

INTRODUCTION

In the last decade, information and communication technology (ICT) has caused a revolution in many industries. Numerous research studies have focused on the impact of ICT. Including "impoverish service relationship" (Meyronin, 2002), general business impact of ICT (Koutsoutos & Westerholt, 2005), and "perfect market" (Hoffman & Novak, 1996; Kiani, 1998; Lal & Sarvary, 1999; Rayport & Sviokla, 1995). Among various impacts of ICT, the Internet and its use in marketing have received unprecedented interests. According to Peterson, Balasubramanian, & Bronnenberg (1997), the notable impact of the Internet is the one on the marketing channels. The unique characteristics of the Internet such as interactivity between manufacturer and consumer, addressability for individual consumer, and the ability to distribute digital goods immediately are the reasons that the Internet offers potential competitive advantages over the traditional marketing medium.

Pitt, Berthon, and Berthon (1999) claimed that the Internet will significantly influence distribution process and possibly eliminate existing distribution channel. Because the Internet lacks distance and time constraints, sellers can internalize the transaction function previously handled by intermediaries. Based on Hoffman and Novak (1996), the communication channel intermediaries are probably the ones which will be most affected.
by the Internet. In terms of the communication channel, Hoffman and Novak (1996) suggested that the Internet has changed a traditional one-way mode of communication to a many-to-many mode. The Internet has been designed to deliver information efficiency and foster connectivity. Also, the Internet is more flexible than any existing media channel; therefore, it is superior in targeting individual buyers and prospective buyers, and it clears the road block of direct interaction.

In the context of the hospitality industry, the popularity of the Internet based distribution channels has created both opportunities for as well as challenges to the hospitality industry management practices. The potential to reduce distribution costs using internet channels has made hospitality companies more conscious of the need to maximize contributions to gross profit rather than just the revenue obtained from a given travel product sale. In order to reap the benefits of market efficiency, more and more hospitality companies chose to set up a direct channel with their buyers and potential buyers. However, hospitality companies are facing tough challenges brought by the Internet.

The challenges confronting the hospitality industry are cost transparency, price competition, and deteriorated consumer loyalty. According to Sinha (2000), the threat of the Internet on price is what economists call cost transparency. As cost transparency increases, so will the problem it causes for companies. Those problems usually take four forms: (1) severely impairs a seller’s ability to obtain high margin, (2) transforms products and services into commodities, (3) weakens customer loyalty to both brand and intermediaries, and (4) damages companies’ reputations by creating perceptions of price unfairness to consumer. In order to deal with the issue of cost transparency, Hax (2005)
suggested that an effective strategy in E-Commerce should be the quest of a strong collaboration between the companies and its customers. The primary goal is to establish customer bonding. It is to establish a constructive and enduring relationship based on mutual trust, collaboration, and joint benefits. Sheth and Parvatiyar (1995a) asserted that relationship marketing is the only way to achieve the objectives above.

Currently, more and more customers choose to buy travel products through such online travel agencies as Expedia.com, Travelocity.com, and Hotel.com rather than through direct channels with suppliers. Most of academic and practitioner studies focus on two areas. One is documentation of the efficiencies gained by those companies that practice Internet marketing. The other one is discussions surrounding the process as employed by marketing managers. Although a lot of researchers concern the effect of E-distribution on consumer market, fewer researchers dig into this topic in more detail. Also, as E-commerce grows in size and importance, researcher should consider applying consumers’ behavior into the research related to marketing strategy to their e-distribution channel.

Goldsimit (2002) explained his concerns in his research. First of all, when managers understand why consumers buy online, they can develop effective strategies to encourage consumers to access their web sites to spend time and money (Aldridge, Forcht, & Pierson 1997; Wysocki 2000). Then, consumer behavior researchers and theorists need to study consumer Internet behavior in order to determine how well existing consumer theory can be applied to E-commerce and where new theories and models need to be developed. Goldsimit (2002) also mentioned: Once consumers have been enticed to buy online, they are likely to continue to do so. The evidence clearly shows that satisfied
buyers will be more likely to return to a web site and purchase again, while dissatisfied buyers will look elsewhere. Therefore, in context of e-commerce, marketing effort should focus on consumers' perceptions, web site designs and order fulfillment efforts in order to enhance customer satisfaction.

Problem Statement

Recently, literature reviews have suggested that the Internet and the World Wide Web as a business tool provides both firms and consumers with various benefits including but not limited to lower transaction cost, lower search cost, higher convenience, and greater selections of goods (Bakos, 1997, 1998; Jarvenpaa & Todd, 1996). These advantages may motivate companies to participate in conducting electronic commerce (EC) over the Internet. Forecasts indicating extraordinary growth rates continue to emerge. The use of the Internet for a shopping and purchasing has seen unprecedented growth. According to VISA®, it estimated that global e-commerce sales volume to exceed US$150 billion by the end of the year, a 56 percent increase over volume of US$96 billion a year ago (Anonymous, 2004). Many experts expect that the global electronic market to dramatically impact commerce in the twenty first century. Despite huge investments and proliferation of EC applications and a growing number of users of the Internet, the observation project conducted by Jarvenpaa and Todd (1996) has indicated that serious conduct of EC on the World Wide Web by individual consumers does not appear to have taken root may still be true.
Information security and privacy concerns continue to prevail and have been pointed to as the key factors inhibiting the rate of growth of online shopping (Kiely, 1997). While these concerns do exist, they may have more to do with consumer perceptions than to inadequacy of technology, and may fade away as consumers become accustomed to online shopping. At the same time, it seems that the current EC systems do not satisfy varying levels of user needs and requirements (Jarvenpaa & Todd, 1996). Most current systems appear to share certain common characteristics such as lack of sufficient product descriptions in an easy-to-understand format, extreme difficulty in navigating, lack of interactive communication functions, lack of reliable online functions, inefficient search, limited payment options, and ill-designed help functions (Liu, 1997; Martin, 1996). This suggests that the current design of EC systems is not user-oriented in terms of providing appropriate information and supporting decision making.

The fundamental question of this research is what factors affect consumers’ online purchasing intentions of travel products. In the past, several researchers have focused on exploring consumers’ online purchase intention in the context of retailing business. For example, Shim, Eastlick, Sherry, and Warrington (2001) proposed an online pre-purchase intentions model. The model is proposed and empirically tested in the context of search goods. This study focuses on the importance of the outline search process by developing a model designed to explore the role of online search intentions as a predictor of online purchasing intention. According to Shim et al. (2001), there are two goals in the study. One goal of this research is to understand better the relationship between intentions to use the Internet both for information search and purchasing. Another goal is to examine the respective roles of consumer attitude and other relevant variables in predicting both
Internet searching and purchasing intentions. In order to achieve the objectives above, they developed an online pre-purchase intentions model that integrates an interaction model of pre-purchase consumer information search (Klein, 1998) with the Theory of Planned Behavior (Ajzen, 1985, 1991). Klein’s (1998) Interaction Model highlights the important role of information search in consumers’ Internet purchase behavior in the context of goods that differ based on the type of information sought prior to purchase (i.e., search vs. experience goods).

The model also suggests other variables such as past experiences as important antecedents of search. Ajzen’s (1985, 1991) Theory of Planned Behavior expands the application of a traditional attitude-behavioral model by incorporating the concept of perceived behavioral control, that is, the perception of whether one possesses necessary resources and opportunities to perform a behavior as a direct predictor of behavioral intentions (Ajzen, 1985). The concept of perceived behavioral control is useful where the achievement of behavioral goals is contingent on external and internal resources.

However, recent research has suggested that a comprehensive model of studying consumers’ online purchase intention should incorporate those concepts such as trust (Gefen, Karahanna, & Straub, 2003; Jahng, et al., 2000) and a well design e-commerce web site (Jahng, Jain, & Ramamurthy, 2000; Liu, 1997; Liu, Arnett, & Litecky, 2000; Turban, Lee, King, & Chung, 2000).

Basically, this study is building on the foundation of the Shim et al. (2001) online pre-purchase intentions model. In addition, two important concepts, consumer trust and consumers’ perception about quality of EC Web site design, will be incorporated. Then,
a new and comprehensive model will be proposed and tested in the context of the hospitality industry.

Purpose of the Study

The purpose of this research is to develop a comprehensive model to study consumers’ online purchase intention of travel products. In this study, the researcher will explore consumers’ perceptions of EC travel website design, consumer trust, their attitudes toward online shopping of travel products, and antecedents of consumers’ online purchase intention of travel products. The researcher will examine the impact of quality of EC travel website in relation to consumers’ attitude toward online shopping for travel products, trust, and their purchase intentions. In relation to quality of EC travel Web site, only business to consumer online intermediaries will be included in this study.

Although this research is not the first attempt in the research field of consumer behavior in the E-commerce environment, it is the first one to incorporate the Theory of Planned Behavior with consumer trust as well as quality of EC Web site design. The scope of this dissertation is limited to leisure and unrestricted travelers’ perception of an Internet-based travel agency. In general, most business travelers purchase travel products through corporate travel manager. This kind of behavior violates the assumptions of the Theory of Planned Behavior. Therefore, business traveling is excluded from the study.
Research Questions

Based on the problem statement and purpose of research, the research questions are developed as follow:

1. What is the relationship between consumer’s online purchase intention and its antecedents?
2. Is there any relationship between consumer trust and the quality of EC travel Web site design?
3. Does E-intermediaries Web site design have an impact on, consumer trust, purchase experience, and attitude toward online shopping?
4. Do the empirical linkages between consumer’s online purchase intention found in Shim’s et. al. (2001) model hold up in the context of the hospitality industry?
5. Has the impact of the quality of EC-Web site design on consumer purchase intention been mediated by consumer trust, purchase experience, and attitude toward online shopping?

Significance of Study

This study will help the hospitality industry and academic researchers by developing a comprehensive model and validating empirical links. Those links had been suggested and tested in different business environments rather than in the context of the hospitality industry. In E-Commerce environment, the only surviving strategy is to create the bond with consumers. The foundation of bonding with consumers is to understand what factors affect consumers to buy travel products online. In the hospitality industry, few
have studied this issue. The comprehensive model will be developed by incorporating two important concepts with the Theory of Planned Behavior. By suggesting an appropriate structural equation model, and empirically testing associate effects of antecedents of consumers’ purchase intention, the hospitality company can understand what factors affect leisure and unrestricted travelers’ purchase intention. With understanding of consumer behavior, those companies can develop a marketing strategy to create the bond with consumers; thus, they will achieve advantages over their competitors.

Definition of key terms

Cost transparency: Cost transparency is a situation made possible by the abundance of free, easily obtained information on the Internet. All that information has a way of making a seller’s cost more transparent to buyers. It lets consumers see through those costs and determine whether they are in line with the prices being charged (Sinha, 2000).

Consumer trust: It is consumer’s willingness to rely on an exchange partner in whom one has confidence. Trust is at the centre of E-Commerce with much academic discourse surrounding security, promise fulfillment and confidence (Lynch & Lundquist, 1996).

Distribution channel: The distribution channel includes consortia, affiliations, reservations companies, representation companies, incentive houses, travel agents, tour operators and wholesalers, discount brokers, and global distributions. It is the term which
represents different distribution system that can, at the same time, be both quite different and quite similar (Kotler, Bowen, & Makens, 2003).

Distribution strategy: It is the process by which a hospitality company determines its options for channels of distribution (Kotler et al. 2003).

E-Commerce (EC): It is the conducting of business communication and transactions over networks and through computers (Anonymous, 2005a). As most restrictively defined, electronic commerce is the buying and selling of goods and services, and the transfer of funds, through digital communications. However EC also includes all inter-company and intra-company functions (such as marketing, finance, manufacturing, selling, and negotiation) that enable commerce and use electronic mail, EDI, file transfer, fax, video conferencing, workflow, or interaction with a remote computer. Electronic commerce also includes buying and selling over the Web, electronic funds transfer, smart cards, digital cash, and all other ways of doing business (OECD, 1999).

ICT: It means information and communications technology. ICT is a common term used in most of European countries (Anonymous, 2005b).

Information quality: Information quality means the desired characteristics of information produced by an information system. It consists of five information characteristics which are related to information value. Those five characteristics include accuracy, timeliness, relevance, aggregation, and formatting (Ives, Olson, & Baroudi, 1983).
Intermediary: Firms that help the company to promote, sell, and distribute its goods to final buyers. Intermediary includes middleman, physical distribution firms, marketing-service agencies, and financial intermediaries (Kotler, 2000). In the context of the hospitality industry, an intermediary is a third party involved in the marketing function and distribution process of inventory of travel products from the service providers to the end customers. Traditional travel agencies and online travel agencies (e.g., Expedia, Travlocity, Orbitz, and hotel.com) are third parties that fulfill this role.

Internet: It is an intercontinental network of networks originally based on military and academic systems but increasingly used for commercial and private communications. It is the vast global web of computer networks with no central management or ownership. World Wide Web is one application of the Internet used to retrieve information from computers on the Internet (Gupta, 2000).

Leisure and unrestricted travelers: Leisure tourists, in contrast with business travelers, travel for pleasure and thus are not under any obligations to frequent specific destinations or facilities. They tend to be price and fashion conscious, concentrate their touristic activities to specific (vacation) times, and are influenced by marketing and publicity. Leisure tourism is heavily influenced by living standards, discretionary income levels and vacation entitlements (Anonymous, 2005c).
Online/Internet based travel agency: It refers to an EC-Web site that provides customers with the same services offered by a traditional travel agency. Sometime, those agencies are also called third party intermediaries (Green, 2005).

Revenue management/yield management: It is the concept of maximizing the revenue yield by raising or lowering prices depending upon the demand. This is the art and science of managing room inventory and rates in order to optimize hotel revenue given the constraints of competitive supply in the marketplace with the flow of demand at every rate level (Green, 2005).

Quality of an EC-Web site design: It is the consumers’ perception about an EC-Web site design. In general, the measure of an EC-Web site design includes three dimensions i.e. information quality, service quality, and system quality. In consumers’ perspective, a good EC-Web site design should be equipped with desired characteristics in information quality, service quality, and system quality (DeLone & McLean, 1992).

Relationship marketing: It is “an integrated effort to identify, maintain, and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualized and value-added contacts over a long period of time” (Shani and Chalasani, 1992, p. 42).
Service quality: Service quality is the ability of a service provider to produce a service which is predominantly intangible, requires customer participation. It is based on specific customer needs and expectations and permits customer judgment (Langer, 1997).

System quality: System quality means desired characteristics of the information system. The desired characteristics of an information system include the content of the data base, aggregation of details, human factors, response time, system accuracy (Emery, 1971), data currency, response time, turnaround time, data accuracy, reliability, completeness, system flexibility, and ease of use (Hamilton & Chervany, 1981).

Traditional travel agency: It is the so-called brick-and-mortar travel agency. It is a business that attends to the details of transportation, itinerary, and accommodations for travelers. In other word, the individual business who sells travel services, issues tickets and provides other travel services to the traveler at the retail level (Anonymous, 2005c).

Travel product: Travel product is a genuine term of service product including an airline ticket, a hotel room, a car rental, a cruise line or any combination of those products above (PhoCusWright, 2000).
CHAPTER 2

REVIEW OF RELATED LITERATURE

The Impact of ICT on Business

Information and communication technology (ICT) has initiated a revolution in various industries. There are many academic publications focusing on the impact of ICT. Meyronin suggested that the increasing use of information and communication technology can ‘impoverish’ service relationship (Meyronin, 2002). Koutsoutos & Westerholt (2005) is the one presenting the general business impact of ICT in particular on productivity, business models, investment activities, sectorial value chains, employment, and skills. Other academic publications focus on the impact of ICT on different areas of business. For example, several authors talked about a paradigm in marketing, some of a ‘new economy’, and the others of the ‘perfect market’ (Hoffman & Novak, 1996; Kiani, 1998; Lal & Sarvary, 1999; Rayport & Sviokla, 1995). In relation to the impact of ICT on business, interest in the Internet is unprecedented, and its use in marketing is increasing exponentially. Therefore, it is necessary to explore the Internet in order to develop a conceptual framework of this research.

Internet

The Internet is an information infrastructure comprised of thousands of computers connected by thousands of paths—a global ‘network of networks,” a Metanetwork (Carr
& Snyder, 1997). More specially, the Internet is a loosely configured web of corporate, educational, and research computer networks around the world (Tetzeli, 1992). There is no doubt that the Internet is most powerful driving force among the various innovations of ICT in today’s business environment.

According to Peterson, Balasubramanian, and Bronnenberg (1997), the Internet has two sets of characteristics in the role of a marketing channel. One is unique, and the other one shares with other marketing channel. Peterson et al. (1997) suggested those characteristics in the following:

1. The ability to inexpensively store vast amounts of information at different virtual locations
2. The ability of powerful and inexpensive means of searching, organizing, and disseminating such information
3. Interactivity and the ability to provide information on demand
4. The ability to provide perceptual experiences that are far superior to a printed catalog, although not as rich as personal inspection
5. The ability to serve as a transaction medium
6. The ability to serve as a physical distribution medium for certain goods (e.g., software)
7. Relatively low entry and establishment costs for sellers. (p. 333)

Currently, no other marketing channel that can possesses all of these characteristics. However, several researchers have argued that the Internet’s capabilities as a communication, transaction, and distribution channel are not uniform for all types of
products and service (Alba, Lynch, Weitz, & Janiszewski, 1997; Figueiredo, 2000; Palmer & Griffity, 1997; Peterson et al., 1997; Rosen & Howard, 2000). They concluded that the type of products and services are the determinants of Internet’s capabilities as a multi-function channel (Alba, Lynch, Weitz, & Janiszewski, 1997; Figueiredo, 2000; Palmer & Griffity, 1997; Peterson et al., 1997; Rosen & Howard, 2000).

Nevertheless, the use of the Internet as a shopping and purchasing medium has seen unprecedented growth. According to VISA®, it is estimated that global e-commerce sales volume will exceed US$150 billion by the end of 2004, a 56 percent increase over volume of US$96 billion in 2003 (Anonymous, 2004). Many experts expect that the global electronic market to dramatically impact commerce in the twenty first century.

The possibilities offered by Internet can be double edged for business actors in today’s environment. Indeed, there are a lot of competitive advantages brought by the Internet. For example, establishing a multiple channel (adding an e-channel) can help suppliers increase market share as well as to reduce cost (Frazier & Antia, 1995). By using the communication capabilities offered by the Internet, marketers can enhance abilities to build and maintain relationship with the end-customer (Alba et al., 1997; Iacobucci, 1998; Peterson et al., 1997; Pitt, Berthon, & Berthon, 1999). Also, firms can use the Internet as an effective marketing tool (McGaughey & Mason, 1998). However, the Internet does bring some threats to firms in relation to marketing. Such threats are price competition, cost transparency, and weakened loyalty (Riquelme, 2001; Sinha, 2000). Peterson et al. (1997) suggested that “as a start point for a comprehensive analysis of the impact of the Internet on consumer marketing, it is first necessary to specify the characteristics of the Internet as a marketing channel and examine two broad
categories of factors: channel intermediaries and product and service characteristics” (p. 333). In the next section, two issues mentioned by Peterson et al. (1997) will be explored. Then, those effects and threats brought by the Internet will be presented in the following section.

Impact of Internet on marketing channels

Generally speaking, marketing activities occur through three types of channels: distribution channels, transaction channels, and communication channels (Peterson et al., 1997). The function of distribution channels is to distribute product and service. Transaction channels focus on generating sales activities between buyers and sellers. Communication channels facilitate the exchange of information between buyers and sellers.

Typically, the distribution channel not only facilitate physical exchanges but also incorporate functions such as sorting, inventory holding, allocation, breaking bulk, and building up assortment (Alderson, 1965). Stern, El-Ansary, and Coughlan (1996) explained the existence of intermediaries is because of efficiency. Traditionally, intermediaries can increase the distribution efficiency because they carry out functions that are expensive or difficult to perform by producers and consumers.

The Internet’s a highly structured distribution networks, are structured in terms of one-to-many, many-to-many, and many-to-one types of connections, whereas traditional channels are characterized by mass marketing and manufacturer or retailer centric connections (Iacobucci, 1998). Unique characteristics of the Internet are the reason that the Internet offers potential competitive advantages over the traditional channel. Those unique characteristics include interactivity between manufacturer and consumer,
addressability for individual consumer, and the ability to distribute digital goods immediately. Peterson et al. (1997) found that “the logistic functions of distribution intermediaries are probably the least dependent on the existence of a flexible, interactive, and efficient informational exchange between buyers and sellers” (p. 334). However, there is one exception about this fact, i.e. information goods. The information goods can be distributed through the Internet. Rayport and Sviokla (1995) mentioned that the Internet can be the ideal distribution channel for goods consisting of digital assets because the variable cost of distributing them is close to zero. Therefore, there is no doubt that the Internet will significantly influence distribution processes and possibly eliminate existing distribution channels (Pitt, Berthon, & Berthon, 1999).

Different from the distribution channels, the transaction channel is to facilitate economic exchange between buyers and sellers. The transaction channels exist because of the efficiency they provide. The main difference between distribution channels and transaction channels is that transaction channels assume some strategic control over marketing variables such as price and merchandising.

Transaction channel intermediaries will be affected by the existence of the Internet if sellers create the direct channel with the buyers and potential buyers. Because the Internet lacks distance and time constraints, sellers can internalize the transaction function previously handled by intermediaries. Peterson et al. (1997) analyzed the internalization of the transaction function and suggested that “Internalization of the transaction function will be mediated by the characteristic of the products and service marketed” (p. 334). Suppliers are motivated to set up multi-channels in order to increase market share and to reduce cost (Frazier & Antia, 1995). The use of a multiple channels
can improve market coverage. However, addition of a multi-channel doesn’t guarantee the increasing market share because of overlap in the market segments (Frazier & Antia, 1995). Frazier (1999) suggested consequences of adding a channel which are due to technology. Those consequences include both rising of market segmentation and increased competition. Brought by the Internet, the potential of interactive marketing and individual customer accessibility is the source of fierce competition (Blattberg & Deighton, 1991). In terms of a distribution in multi-channel environment, a hybrid distribution strategy is necessary for suppliers to gain competitive advantage (Webb & Hogan, 2002).

Finally, the main function of communication channels is to inform buyers and prospective buyers about availability and features of a seller’s product or service. Meanwhile, the communication channels allow buyers to communicate with sellers. Generally speaking, communication channel intermediaries create information for, and deliver information to buyers and prospective buyers. Similar to two channels mentioned above, the communication channels offer expertise and efficiencies.

Communication channel intermediaries are the ones which will be the most affected by the existence of the Internet. Hoffman and Novak (1996) mentioned that ICT has changed a traditional one-way mode of communication to a many-to-many mode. The Internet operates a model of distributed computing that facilitates interactive multimedia many-to-many communication (Hoffman & Novak, 1996). The Internet has been designed to deliver information efficiency and foster connectivity. Internet is more flexible than any existing media channel. It is superior in targeting individual buyers and prospective buyers, and it clears the road of direct interaction.
In short, the Internet is causing tremendous changes in the areas of marketing channels. Several scholars say that the emergence of the Internet has lead to more direct channel approaches (Anonymous, 2000; Ghosh, 1998; Robert, 2000). Rosenbloom (1999) suggested that Internet-based technology extends the functions traditionally offered by intermediaries to bridge the gap between the sellers’ offers and the customers’ wishes in the transaction process. Notably, it is possible that middle man functions between producers and consumers are being eliminated through digital networks. This process of elimination of middlemen due to direct online channels is termed disintermediation (Potzl, 2000; Tapscott, 1996). Given equipping upstream parties with better visibility into market demand, Tsay and Agrawal (2004) thought the disintermediation should improve supply chain efficiency. Roche (1996) also recognized the possibility of major changes in distribution channel due to electronic commerce. However, he suggested that the age of electronic commerce might bring to an end the intermediate enterprise. It is possible to eliminate some intermediaries such as wholesalers but it is impossible to get rid of their functions (Stern, El-Ansary, & Coughlan, 1996).

Benjamin and Wigand (1995) analyzed the effect of electronic markets on the value chains of a company and conclude that ‘electronic markets lower coordination costs for producers and retailers, lower physical distribution costs, or eliminate retailers and wholesalers entirely, as consumers directly access manufacturers’ (p. 62). Given the tremendous impact of the Internet, scholars suggest it is necessary to change marketing strategy in the electronic market (Aldridge et al., 1997).
Suitable product and service in e-commerce

Several researchers have argued that the Internet’s capabilities as a communication, transaction and distribution channel are not uniform for all types of products and services (Alba et al., 1997; Figueiredo, 2000; Palmer & Griffity, 1997; Peterson et al., 1997; Rosen & Howard, 2000). Peterson et al. (1997) first developed a three dimensional scheme in order to identify products and services that are suitable for electronic retailing. Based on the result in their article, some products, such as homogeneous, commodity-type, or completely substitutable goods, are suitable in E-Commerce. Tirole (1989) also pointed out that the Internet generally facilitates Bertrand-type competition.

Subsequent to Peterson’s study, Vijayasarathy (2003) indicated that consumers would be inclined to use the Internet to shop for intangible rather than tangible products. Vijayasarath (2003) suggested two reasons for this. First, the Internet is better suited for the sampling and distribution of intangible products and services. The second possible reason could be the competitive prices offered by online providers of intangible products and services such as airline tickets, travel packages, insurance, financing, and brokerage. The motivation of those providers to offer attractive prices or lower transaction costs and fees is the desire of eliminating or reducing the number of intermediaries in the distribution channel. However, when service providers eliminate the intermediaries in the traditional channel, they create new intermediaries in the electronic channel (Potzl, 2000).

Consumer decision making in e-commerce

There are five stages in the classical buyer decision-making process. Those five stages include problem recognition, information search, evaluation of alternatives,
purchase decision, and post-purchase behavior (Engel, Kollat, & Blackwell, 1973; Howard & Sheth, 1972; Nicosia, 1982). The following sections offer an overview of each stage.

The whole buyer decision-making process starts with the problem recognition. Problem recognition happens when a consumer senses a disparity between his or her actual state and his or her desired state (Bruner, 1987). Problem recognition can be activated when a consumer is exposed to external stimuli. For example, the view of a destination site, which activates a need, such as traveling. In this case, the presence of external stimuli made the consumer become aware of an unmet need. Being aware of this need, the consumer becomes more desiring of products or services that may satisfy the need.

Internet users usually 'surf' the Internet to look for information about specific areas of interest. In order to accomplish this goal, users typically use search engines and type in keywords or phrases to search the information of interest. In the searching process, a user may encounter some stimuli that activate or create a need. From a promotional perspective, the marketers for travel products need to ensure that an Internet search for information about travel products will lead to useful and favorable information about their company’s product. In most cases, the search would lead the consumer to the company’s Web site. In that site, the consumer can find relevant information about company products. Promotional information available from that Web site can help to create interest in any or all product offered by the company.

To create a favorable image about the company’s offerings, the information encountered by the consumer should create awareness and interest. McGauhey and
Mason (1998) suggested that ‘hit list position’ can be an important factor in creating awareness and interest. A hit list is the list of relevant sites or Web pages, which contains the work that match with the one the user employed in the information search. The order of appearance on a hit list is very important. It has the same impact as shelf position in a supermarket. McGauhey and Mason (1998) described the importance of the order of appearance on a hit list that “The more favorable the position on the hit list, the greater the likelihood of attracting the consumer’s attention” (p. 4). It is critical to marketers to achieve favorable placement with various search engines though it may be quite expensive. The Internet can be used effectively as a marketing tool. However, marketers need to know Internet users’ search behavior in order to achieve that goal.

When a consumer is aware of an unmet need, he or she is motivated to gather information concerning a way to satisfy his or her need. The information searching process will help consumers become aware of competing products or services and their features. If the consumer has low involvement with the products that can satisfy the perceived need, he or she will put little effort in the process of information search. For instance, the consumer processes information through surrounding routes. He or she will rely more heavily on cues as opposed to detailed and elaborate product/service specific information (Cacioppo, Petty, & Kao, 1986). In the environment of the Internet, marketers can use a wide assortment of cues, i.e. colors, images, and sounds to attract and influence consumers.

With high involvement, the consumer is likely to conduct a more active role in the process of information search. In this context, the consumer may be more willing to seek out detailed information from private or public sources. Or, the consumer will take
opportunities to acquire information through product trial experiences (Beatty & Smith, 1987). The consumer might want to seek ways to initiate a dialogue and interact directly with marketers. With proper designs of Web sites, marketers can use the Internet to provide an abundance of relevant product/service information from various private, commercial or public sources.

Effective tools of Internet marketing for reaching consumers at lower levels of arousal might include banners, or unique pictures and sounds to draw attention to a simple emotional message. For highly involved consumers, a company should provide hyperlinks to detailed product specifications, pictures, and testimonials from a satisfied user through its Web site. McGaughey and Mason (1998) concluded: “It is very important to establish numerous electronic paths (Web page address, E-mail address, through key word search) that will help consumers acquire information about one’s company and its products” (p. 4).

The process of information search identifies a set of alternative products that will reduce or eliminate a felt need (Howard & Sheth, 1972). The consumer will attempt to identify product/service features and characteristics to determine the likely consequences of purchasing from the considered set of alternative products/services (Phillips, Olson, & Baumgartner, 1995). Using internal available memory and external information, the consumer may process information by attributes, by product/service to develop a set of beliefs, or ‘product/service image’ about a product with regard to its ability to deliver the desired benefits (Bettman, 1979).

There are a number of different decision heuristics available for consumer to evaluate alternative products. Some scholars identified those heuristics as compensatory rule, the
lexicographic rule, and the conjunctive rule (Srinivasan, 1987; Wright, 1972). Using the compensatory rule, the consumer decides the importance of a set of attributes and then rates each considered product across the set of attributes in an attempt to identify the product with the best performance rating. With lexicographic rule, the consumer is looking for the product that rates the best on attributes which the consumer views as most important. When a consumer is afraid of making a bad decision, he or she may use the conjunctive rule to get rid of a number of products that rate poorly on a give attribute. Generally speaking, consumers will use various combinations of the rules above to evaluate products.

Combining with other media sources, Internet advertisings can be designed to provide general information about the product, transform beliefs about the product or competitors' products, alter consumers' impressions of the importance of specific product attributes, or increase awareness about the neglected attributes of a product (Boyd, Ray, & Strong, 1972). However, McGaughey and Mason (1998) mentioned a challenge for marketers. Marketers need to make sure that Internet searches will lead to favorable information that will encourage the purchase of their company’s products. Hyperlinks that lead to sources of favorable information about a company’s products can create in the consumer a favorable bias toward the company’s product and encourage consumers to purchase.

After considering and evaluating various options, consumers typically form product preferences and purchase intentions about the most desirable products. In the stage of purchase decision, several sub-decisions may be involved with the final purchase decision. Those sub-decision factors include brand choice, vendor selection, quantity to
purchase, timing of purchase, payment method, and so on. The purchase decision can also be influenced by some factors such as perceived risk (Hawes & Lumpkin, 1986). The source of consumer risk can come from a fear that a product or service may not perform as desired. This risk may reduce the likelihood that the consumer will purchase that product (Roselius, 1971). In order to reduce consumer’s perceived risk, marketers need to provide consumers with positive product information. Positive information about product can give consumers more confidence in their purchase decision.

In the stage of post-purchase of a product, consumers experience a certain level of satisfaction or dissatisfaction. Marketers always strive to satisfy consumers to enhance their relationship with consumers (Spreng, MacKenzie, & Olshavsky, 1996). Satisfaction is a function of the extent to which buyer’s perception of the product’s performance meets the buyer’s product expectations (Barbera & Mazursky, 1983). Basically, consumer expectations are largely from the messages received from sellers, friends, and other information sources. Sometimes, they are results of previous experience. Therefore, when product performance meets or exceeds expectations, consumers will be satisfied; thus, they are more likely to buy the product again or pass word of mouth to others (Cadotte, Woodruff, & Jenkins, 1987). Since consumers tend to regard information obtained by “word of mouth” as more objective and possibly more accurate (Taylor, 1974), consumers’ comment can be a source of powerful influence on the purchase decision of others. Eventually, post sales effort can influence post-purchase behavior and customer satisfaction (Donnelly & Ivancevich, 1970). Those sales efforts involve communication between marketers and consumers. Because of the unique
characteristics of the Internet, the Internet can be an effective tool for increasing consumers’ post-purchase satisfaction.

According to Porter and Miller (1985), companies can gain competitive advantages by creating value for customers at a lower cost than their competitors (a low cost strategy), creating products which are more valuable than competitors (a differentiation strategy), or some combination of the two. Two important ‘primary’ value adding activities include: 1) efficient marketing and delivery of products to buyers, and 2) support and service after the sale (Porter & Miller, 1985). Because the Internet can facilitate more efficient marketing, the Internet can assist companies in achieving a cost advantage.

Efficient market theory

The efficient market theory hypothesizes that under perfectly operating markets, the market price a supplier will charge will equal to its marginal cost (Brigham & Pappas, 1976). There are two issues facing the existing firms in the industry as well as prospective players when the condition of the efficient market exists. For all companies in the industry, new companies are not encouraged to enter the industry nor are existing firms pressured into leaving the industry. Economists describe the several characteristics in order to have a perfectly operating market (Browning & Zupan, 1999). First of all, there are a large number of producers willing to offer the products. The products are homogeneous (commodity alike). Also, there is wide availability of information for all participants, and resources are highly mobile.

In contrast to market efficiency, market inefficiency is said to occur when suppliers/producers can achieve a positive economic profit by setting a price above the
marginal cost (Lancaster, 1973). Intermediation, high barriers of entry, and lack of information are three possible sources from which market inefficiency emanates. However, if consumers could bypass intermediaries and get access to a large number of suppliers in the market, they could find better deals pushing the market closer to an efficient market. Therefore, price dispersion, different prices charged for the same products/service at the same time, should not exist.

How can we be sure that electronic markets would be close to an efficient market? According to Brynjolfsson and Smith (2000), the Internet is a more efficient channel in terms of price levels and menu cost. Several academic authors suggest several characteristics of the Internet make electronic markets more efficient than traditional markets. Those characteristics include the ubiquitous availability of information and the reduction in search costs for such information contains the answers for this issue (Brynjolfsson & Smith, 2000; Dolan & Moon, 2000; Grover & Ramanlal, 1999; Smith, Bailey, & Brynjolfsson, 2000).

Riquelme (2001) has explained the search cost: “Consumers, if they want to obtain information about prices and other product characteristics (brand image, color, texture, after sale service), must bear some search cost” (p. 264). In the economic literature, it is assumed that the higher the search costs of information, the greater the price dispersion; or, the more uninformed the consumers the more dispersion of prices; thus attesting to an inefficient market (Varian, 1980). In the context of E-Commerce, the search cost is close to zero, and there are a lot of informed consumers in the market; thus, the market efficiency of E-Commerce has been justified.
According to Riquelme (2001), a logical alternative approach to studying the effect of the Internet on prices is information search theory. The information search theory was developed by Stigler (1961). It was then modified by several academic scholars (Diamond, 1971; Stahl, 1989; Varian, 1980). Information search theory suggests that price sensitivity depends on several issues. Those issues are benefits (such as economic and enjoyment), cost of information search, price and other product attributes (e.g., color, smell, quality, image) (Srinivasan & Ratchford, 1991). From the consumer’s perspective, the higher the expected benefits of looking for information, the lower is the focus on prices; thus, the lower is the price sensitivity. In contrast to phenomenon above, the higher the search costs of searching for price information, the lower is the price sensitivity. Therefore, sellers can charge the premium price which is higher than their margin costs. Eventually, it will result in market inefficiencies. Finally, the higher the cost of searching for non-price information, the higher the price sensitivity is.

**Impact of Internet on prices**

However, in the consumer market, the most concern about ICT is related to prices. Cost transparency on the Internet is a real threat to prices and brands. In his article, Sinha (2000) noted the threat of the Internet on prices: “The real threat to suppliers is what economists call cost transparency, a situation made possible by the abundance of free, easily obtained information on the Internet” (p. 43). It seems clear that the Internet works to lower search costs compared to conventional channel (Bakos, 1997, 1998). The huge information about prices, competitors, and features that is readily available on the Internet helps buyers ‘see through’ the costs of products and services. Sinha (2000)
explained this issue further that: “As cost transparency increases, so will the problem it causes for companies” (p. 45). These problems usually take the following four forms.

First, cost transparency severely impairs a seller’s ability to obtain high margin. Given the telephone utility as an example, when MCI and Sprint first offered calling plans, they drastically undercut AT&T’s rate. AT&T claimed the higher rates were justified by superior service. However, customers could not see the real value offered by AT&T’s service. Since then, customers had new information about the costs associated with long distance calling. In their perspective, the real costs of such service were lower than they had previously imagined. After that, AT&T re-planned its strategy and began competing with other carriers on price, matching deal for deal.

Second, cost transparency transforms products and services into commodities. A noted example is online brokerages service. In the online brokerage market, there are several stock-trading companies offering the similar brokerages service. Those companies include Ameritrade, E-Trade, National Discount Brokers, MyDiscount Broker, and Datek. It has become impossible to distinguish among those companies. They all provide almost same the financial information and brokerage service while collecting commissions. As a matter of fact, the general public has become suspicious about the rationale for traditionally high commissions charged by Merrill Lynch and A.G. Edwards. In consumers’ mind, the commissions don’t match with the inferred cost. Under this circumstance, more and more people are viewing stock trading as a commodity, an undifferentiated service.

Third, cost transparency weakens customer loyalty to both brands and intermediaries. Several companies learned this from experience. Procter & Gamble (P & G) is one of
them. Between 1980s and early 1990s, Procter & Gamble relied heavily on the sales promotions to increase market share. When consumers used the manufacturer’s coupons or took advantage of the intermediaries’ discount, they inferred that the reduced sales prices still allowed the company to profit. Consumers thought that the lower prices were fair reflections of company costs. When such a promotion deal was gone, customers believed that the regular prices were excessive and switched to other brands. In order to repair the damaged brought by that, P&G tried using everyday-low-price strategy on many of its well-known products and cutting back sharply on its coupons and trade allowance.

Fourth, cost transparency can damage companies’ reputations by creating perceptions of price unfairness to consumers. Given that the cost becomes clearer, the general public may come to believe that the seller of their favorite brands have been ripping them off. This perception can damage the trust which customers held to the companies. It is very difficult for a company to win back their old customers. The automobile industry in the 1970s was one good example. When high quality, low priced Japanese cars flooded the U.S. market, many car buyers thought American car manufactures had been overcharging for vehicle of inferior quality, and some of them continue to avoid U.S. models to now. In short, the Internet represents the biggest threat to a company’s ability to brand its products, extract price premiums from buyers and generate sales.

Riquelme (2001) adhered to Sinha’s claimed and further suggested that ICT has posed a threat to business suppliers as well as to intermediaries because it is said to increase price sensitivity among consumers thereby reducing suppliers’ margins as well as weaken the brand/store loyalty.
Is the lower price the only solution to survive in the new economy? Riquelme (2001) offered some solutions in his article:

Perhaps the more remarkable finding is that despite the presence of substantial price and non-price information, and the ease with which consumers can search for such information, some products and companies are still obtaining a surplus from the consumers. According to this study, this comes from the differentiation that these companies have created in terms of quality product, delivery service, image, etc......

Facing the threats of price sensitivity, cost transparency brought by the Internet, the best strategy for both traditional and online companies is ‘differentiation’. (p. 276)

Hax (2005) argued that the old paradigm of perceiving the ultimate goal of strategy as achieving competitive strategy. He further explains his arguments:

It is a dangerous fallacy that asserts, either explicitly or implicitly, that strategy is war and that the way to win it is to beat our competitors, usually by offering superior products. This kind of behavior often leads to the commoditization of the product offering. By being obsessed about competitors, we tend to imitate them, and this leads to the convergence of an industry where all of the key players begin to respond by following in each other’s footsteps. Imitation leads to sameness and sameness will never lead to greatness, which is the required characteristic of an outstanding company......With a commodity business you will never enjoy outstanding economic performance, you will never provide unique offerings to your customers, and, most importantly, you will never be able to attract and retain the most valuable talent. (p. 19-20)
In his point of view, strategy is the quest of a strong collaboration between the companies and its logical partners which leads to a strong bonding with its customers (Hax, 2005). The primary goal is to establish customer bonding. It is to establish a constructive and enduring relationship based on mutual trust, collaboration, and joint benefits. In order to deal with the dilemma facing commodity businesses, Sheth and Parvatiyar (1995a) suggested: the relationship marketing, a re-conceptualization in marketing orientation, is the only way to achieve objectives above.

*Impacts of Relationship Marketing on Consumer Markets*

Generally speaking, several areas of marketing have been the focus of relationship marketing. There are a lot of publications in the recent past. Some scholars are talking about international issues in the context of a buyer-seller partnership (Dwyer, Schurr, & Oh, 1987; Johanson, Hallen, & Seyed-Mohamed, 1991), some of network structures and arrangements (Anderson, Hakansson, & Johanson, 1994), some of channel relationships (Boyle, Dwyer, Robicheaux, & Simpson, 1992; Ganesan, 1994), some of sales management (Swan & Nolan, 1985), some of service marketing (Berry, 1983; Crosby, Evans, & Cowles, 1990; Crosby & Stephens, 1987), and others of business alliances (Bucklin & Sengupta, 1993; Heide & John, 1990; Sheth & Parvatiyar, 1992). Also, some researchers have focused on developing a theory of successful and efficient management of relationships (Heide & John, 1992; Morgan & Hunt, 1994). Although those studies have significantly contributed in the knowledge of relationships, the subject of relationship marketing is still in the stages of development.

As widely known, relationship marketing affects both business to business market (B2B) and consumer market (B2C) in practice. In academic research, there is a lacking
of studies on relationship marketing, especially for consumer products and consumer services. Although much of literature considers relationships, especially in consumer markets, to be a completely new phenomenon, academic scholars have challenged this contention (Annual Meeting of American Marketing Association). The direct buyer-seller relationship is actually an old-fashioned way to do business (Sheth & Parvatiyar, 1995a). Sheth and Parvatiyar (1995b) believed that “Advantages of relationship marketing can accrue to a firm if, and only if, consumers are willing and able to engage in relationship patronage” (p. 255) If relationship marketing implies an happening cooperative marketing behavior between the suppliers and consumers (Gronroos, 1990; Shani & Chalasani, 1992), it mirrors some kind of a commitment made by the consumer to continue to patronize the particular business despite numerous choices that exist for him or her. A company’s motivation to engage in relationship marketing is encouraged by consumers’ motivation to reduce their choice set to be in relationship with the company or the brand. Sheth and Parvatiyar (1995b) concluded that “Being in a relationship over time construes brand, product, or service patronage, and unless consumers are motivated to reduce their choice set, they will not be inclined to manifest brand, store, or product/service loyalty” (p. 256). Therefore, it is very important to take the consumer perspective and understand what motivates consumers to become loyal.

Consumer choice reduction theory

Sheth and Parvatiyar (1995b) asserted the fundamental axiom of relationship marketing should be that “consumers like to reduce choices by engaging in ongoing loyalty relationships with marketers” (p. 256). It means the continuity of patronage and maintenance of ongoing connectedness over time with marketers. Once consumers make
this form of commitment, they will continue to patronize selected products, services, and marketers rather than exercise market choice. In this situation, consumers give up the opportunity to choose other marketers or products and services that would also serve their needs. In other words, engaging in relationships means that consumers reduce their choices purposefully even when there is choice and when they engage in choice situations such as buying and consuming foods, beverages, convenience products, and service products in general. Therefore, in consumer perspective, reduction of choice is a vital axiom of relationship marketing behavior. Sheth and Parvatiyar (1995b) referred to this kind of marketing behavior as relational market behavior.

According to Sheth and Parvatiyar (1995b), it is a prevalent, natural, and normal consumer behavior for consumers reducing choices and thereby engaging in relational market behavior. As a conventional wisdom, consumers consistently buy the same products or services, use the same process of shopping, and patronize the same store. Therefore, a lot of academic research in consumer behavior has been focused on repeat-purchase behavior and customer loyalty (Dick & Basu, 1994; Enis & Paul, 1970; Howard & Sheth, 1969; Jacoby & Chestnut, 1978; Sheth, 1967). Jacoby and Kyner (1973) argued, “Brand loyalty is essentially a relational phenomenon” (p. 2). The rationale of relational phenomenon is also true of store loyalty, personal loyalty, process loyalty, and other forms of committed behavior (Sheth, 1982).

In the consumer market, some products or services and the provider are inseparable. Those products or services include health care and doctors or hotel room and hotel property. In such cases, consumers also develop relationships with the product-service providers. On the other hand, when it is impossible to have direct contact between
consumers and marketers, consumers develop relationships with products or their symbols. In this case, brand loyalty and brand equity are major measurements of the relationships that consumer develop with a company’s products and symbols.

However, Sheth and Parvatiyar (1995b) argued that relationship marketing went beyond repeat purchase behavior and inducements. Webster (1992) pointed out that repeated transactions are only a precursor of relationships. Marketers can develop greater and more valuable relationships with the consumers when they get consumers actively involving in the decisions of the company (Webster, 1992). Sheth and Parvatiyar (1995b) explained this issue further:

Any relationship that attempts to develop customer value through partnering activities is, therefore, likely to create greater bonding between consumers and marketers (their products, symbols, processes, stores, and people). The greater the enhancement of the relationship through such bonding, the more committed the consumer becomes to the relationship and hence the less likely he or she is to patronize other marketers” (p. 256).

Next, why do consumers engage in relational market behavior? Sheth and Parvatiyar (1995b) asserted that “consumers engage in relational market behavior to achieve greater efficiency in their decision, to reduce the task of information processing, to achieve more cognitive consistency in their decision, and to reduce the perceived risks associated with future choice” (p. 256). Also, there are some motivations that push consumers to engage in relational market behavior. As Sheth and Parvatiyar (1995b) suggested, the possible motivations can be: (a) norms of behavior set by family member; (b) the influence of peer groups; (c) government mandates; (c) religious tenets; (d) employer influences; and (c)
marketer induced policy. In the next section, the consumer behavior literature will be explored in order to develop insights to the question above, i.e. why do consumers engage in relational market behavior? Since this research focused an individual consumer behavior, the following literature will be limited to personal motivations to engage in relational market behavior.

**Consumer behavior theory**

In order to understand consumer motivations to engage in relational market behavior, Sheth and Parvatiyar (1995b) suggested the first step is to look at theoretical propositions and constructs of consumer behavior theories that are anchored to personal factors influencing consumer behavior. In the subsections, we will discuss those specific theoretical propositions and constructs such as consumer learning, memory and information processing, perceived risk, and cognitive consistency.

**Consumer Learning Theory**

In the past, several scholars have proposed a lot of consumer behavior models which are anchored to learning theory (Andreasen, 1965; Engel, Blackwell, & Miniard, 1986; Hansen, 1972; Howard & Sheth, 1969; Nicosia, 1966). Those models focus on how consumers make choice decision over time. Basically, the purpose of those models is trying to explain how consumers reduce choices regarding purchase and consumption. According to Howard and Sheth (1969), consumers like to simplify their extensive and limited problem solving situation into routinizing behavior. Generally speaking, consumers can achieve the objective above by learning to reduce the number of products and brand under consideration into an evoked set which is a fraction of the alternatives available and familiar to the consumers (Reilly & Parkinson, 1985). Several scholars...
tried to discover the motivation of this behavior. Sheth and Parvatiyar (1995b) suggested that “The underlying motivation for reducing choices into an evoked set is the consumer’s desire to reduce the complexity of buying situation” (p. 257). Consumer can process information easily, and this simplifies the task of choosing by limiting the choice to the evoked set (Hoyer, 1984; Shugan, 1980). Sheth and Parvatiyar (1995b) concluded, “In addition, consumers also routinize other shopping and consuming tasks, such as where to shop, how to pay for what they buy, where and when to consume what they buy, how to reorder, and so on. The routinization of tasks results in habitual action and loyalty behavior” (p. 257). Thus, Sheth and Parvatiyar (1995b) proposed the following proposition, “In buying and consuming situations, wherever there is a greater need to routinize choices because of the efficiency potential, consumers will engage in relational market behavior” (p. 257).

Although consumers seek to routinize their shopping behavior, they may exit the relationship if they become bored or satiated. They will deliberately try to seek variety by exiting the relationship. Howard and Sheth (1969) referred this phenomenon to as “psychology of complication”. In those cases, consumers would seek additional alternatives and information and change their relationships. They could either change into new forms and processes or with new parties. Nevertheless, the academic evidence shows that routinization and variety-seeking behavior become cyclical over time. Those cycles are asymmetric in favor of longer duration of routinized behavior (McAlister & Pessemier, 1982; Raju, 1980; Sheth & Raju, 1973). In short, Sheth and Parvatiyar proposed, “When consumers are satiated due to lack of novelty or variety in the
relationship, they will disengage from the relational market behavior, including exiting the relationship” (Sheth and Parvatiyar, 1995b, p. 257).

As a subject of consumer behavior, the form of learning has being investigated over several decades (for a comprehensive review, see McSweeney & Bierley, 1984; Shimp, 1991). Sheth and Parvatiyar (1995b) suggested that ongoing transactions with the same marketers offer consumers learned experience. With the learned experiences, consumer can store, process, and retrieve to use in following problem situations and other similar situation. Repeated learning experiences help consumers to condition in stimulus generalization and stimulus discrimination (Berlyne, 1960). In other words, consumers can learn how to generalize from the stimulus and respond effectively to similar purchase and consumption circumstance. And, they can develop the ability to discriminate from other stimuli they may receive in the future, and respond accordingly. Hence, the proposition: “The greater the opportunity for consumers to generalize response to other purchase and consumption situations, the greater will be consumer propensity to engage in relational market behavior” (Sheth & Parvatiyar, 1995b, p. 257).

According to Dawson, Schell, Beers, & Kelly (1982), the conditioning is a kind of cognitive associate learning. However, it is the focus on repeated learning episodes that have tremendous effect for explaining consumer motivation for relational marketing behavior. When intermittent reinforcements are promised and provided, consumers will show a strong form of conditioning that persists for long periods of time. Therefore, Sheth & Parvatiyar (1995b) indicated that, “The consumer’s motive to engage in relationships with marketers is the consumer’s expectation of future positive reinforcements that such relationships are likely to bring” (p. 257). And, they concluded
the greater the expectations for future positive reinforcements, the greater will be consumer propensity to engage in relational market behavior.

Sheth & Parvatiyar (1995b) further discussed the conditioning issue. It is said that conditioning also creates consumer inertia. Consumer inertia suggests that consumers are unwilling to switch to other choices. This kind of inertia can come from several different sources. They either come from the low valence of motivation intensity for change, given the conditioned behavior. Or, they can from the low level of consumer involvement in a decision process (Jacoby & Chestnut, 1978). Based on the rationale above, the following proposition has being proposed, “The greater the potential for consumer inertia, the greater will be consumer propensity to engage in relational market behavior” (Sheth & Parvatiyar, 1995b, p. 258).

Information Processing Theory

Generally speaking, consumers can improve the efficiency of the decision making process when they simplify and bond with the information-processing task (Sheth & Parvatiyar, 1995b). With the concept of “bounded rationality”, Simon (1955) has argued that decision markers have set limitations on their abilities to process information. In contrast to maximizing self-interest, it will result in satisfying. By drawing upon this concept, some researchers have studied how consumers process information to make decision choices. The central part of those theories is that consumers will use a variety of heuristics to simplify their decision making tasks and manage information load because they have limited capacity for information processing (Bettman, 1979; Jacoby, Speller, & Kohn, 1974). In fact, consumers can simplify the processes by the use of memory with which they store information for subsequent decisions (Biehal & Chakravarti, 1986).
Because the size of human memory is limited in capacity, consumers usually retain a few important attributes and alternatives in memory in order to retrieve for future use (Miller, 1956; Simon, 1974). As Alba, Hutchinson, and Lynch (1991) observed, memory plays an important role in information of the consideration set. Therefore, there are several functions of continuity of relationship. First of all, it helps consumers to rehearse their memory and to develop expertise with that decision problem. Then consumers become skilled at using retrieval cues, and thereby, to manage all future decisions (Katona, 1975; Keller, 1987). Sheth and Parvatiyar (1995b) concluded, “The greater the need for information, knowledge, and expertise in marking choices, the greater will be consumer propensity to engage in relational market behavior” (p. 258).

**Perceived Risk Theory**

The reduction of risk is another motivation for consumers to engage in relational market behavior (Bauer, 1960). Perceived risk is related to the uncertainty and magnitude of outcomes. In order to reduce the perceived risk, consumers usually have a set of strategies in their mind. Based on the results of academic research, two general strategies consumers will use are as follow. First, they will engage in external searches for information. There are various approaches with which they can search for information. The notable one is through word-of-mouth communication; then, they develop greater confidence in their own ability to judge and evaluate choices. Or, they become more loyal to brands, products, stores, or marketers (Beatty & Smith, 1987; Dowling & Staclin, 1994).

Conducted by some researchers, empirical studies have shown that in cases of some products and services, consumers find brand loyalty to be the best risk reducer (Derbaix,
1983; Punj & Staelin, 1983). Kiel (1977) has analyzed how past purchase experience reduces the probability of customers’ searching for external information in future similar circumstance. It is said that the greater the customer satisfaction with past buying or consuming experience, the lower the probability of the customers’ searching for external information in future similar situations (Kiel, 1977). However, Shimp and Bearden (1982) proposed inconsistent argument. It is said that it is likely to encourage transaction behavior if the perceived risk of marketing choices is reduced by an industry through service guarantees, quality assurance, and customer integrity. To summarize the relationship between perceived risk and relational market behavior, they proposed that:

The greater the perceived risk in future choice making, the greater will be consumer propensity to reduce choices and engage in relational market behavior. However, as the perceived risk reduces over time with increased self-confidence, consumer propensity to manifest transactional market behavior will increase (Shimp & Bearden, 1982, p. 258).

Cognitive Consistency Theory

Balance theory (Heider, 1946) and congruity theory (Osgood & Tannenbaum, 1955), two kinds of cognitive consistency theory, suggest that consumers desire for harmonious relationships in their beliefs, feelings, and behaviors (McGuire, 1976; Meyers-Levy & Tybout, 1989). The possible cause of psychology tension is inconsistency in this cognitive system. Thus, consumer will choose alternative or information that would be consistent with their current belief systems. In consumer’s perspective, they will intentionally put more attention to products, information, and persons toward which they have positive attitudes.
Based on studies conducted by Fazio and Zanna (1981), descriptive beliefs are a result of direct experience with an object. Those descriptive beliefs are often held with much certainty and predict behavior relatively well (Fazio & Zanna, 1981). Those descriptive beliefs are usually shaped by consumers' direct experiences with product, service, persons, or process. Several authors have confirmed that consumers are likely to act in consonance with their descriptive beliefs (Bagozzi, Baumgartner, & Yi, 1992; Mano & Oliver, 1993). According to Westbrook and Oliver (1991), when consumers have positive experience and positive descriptive attitudes, they are more satisfied and more likely to engage in relational market behavior. It is said that such cognitively consistent behavior is believed to reduce consumers' psychological intention. In short, they summarized the cognitive consistency theory: “the greater the potential for market choice to upset cognitive consistency, the greater will be consumer propensity to engage in relational market behavior with choices that are consistent with their current belief system” (Sheth & Parvatiyar, 1995b, p. 259).

Sheth & Parvatiyar (1995b) summarized the relationship between consumer behavior theory and relational marketing. They said:

In essence, consumer decision, learning, information-processing, and cognitive consistency theories support our contention that consumers are naturally inclined to reduce choices and engage in ongoing relationships. This is so because (a) reduction of choices helps reduce perceived risks associated with future decisions, (b) consumers like to optimize their learning experiences and reward themselves with reinforced positive behavior, (c) reduction of choices reduces psychological tension...
and cognitive dissonance, and (d) consumers expect future gains from reinforced behavior (p. 259).

Based on literature in the past, it is no doubt that relationship marketing is very important. The next question will be: What kind of consequences will relationship marketing bring in the consumer market? In the subsequent sections, we will discuss the effects of relationship marketing in the consumer market.

**Effects of relationship marketing**

By making marketing more effective and efficient, there is no doubt that relationship marketing, a new-old phenomenon, will lead to greater marketing productivity (Sheth & Parvatiyar, 1995b). Marketing productivity is always the focus of top management level in business environment (Sullivan, 1991). Under critical examination by business specialists, a lot of criticisms of marketing productivity have being proposed. According to Sheth & Parvatiyar (1995b), those criticisms include unnecessary marketing expenditure, ill focus, overindulgence of the competitive pricing and advertising wars, as well as the lack of innovative marketing practices (Sheth & Parvatiyar, 1995b). With relationship marketing, it is possible for companies to improve their marketing productivities. Indeed, relationship marketing can make a lot of improvement in marketing productivity. Those improvements include achieving marketing effectiveness, practice individual marketing, consumer involvement, minimization of the negative image of marketing, and achieving marketing efficiency (Sheth & Parvatiyar, 1995b).

**Information Technology and Relationship Marketing**

Information is very important to all marketing fields. However, effective relationship marketing demands a more highly enriched stream of information than does traditional
product or transaction driven marketing. Therefore, we will discuss IT’s role in building, maintaining, and enhancing relationships in the following section.

Based on numerous researches, Clancy and Shulman (1991) have argued that the solution for the biggest challenges marketing faces today is neither the data in the IT systems nor the computer system. The solution is how to use IT to manage the relationships effectively. In fact, the relationship marketing requires more complex information system than does traditional marketing because of increased intimacy among providers, channel clientele, and consumers. In the era of transaction marketing, consumer information is been gathered on a sampling basis. Then, marketers would generalize the averaged messages which are applied in a context of broad market. In relationship marketing, the collection of information about consumers and players is shifted from sampling basis to an individual basis. And, the information is used for tailoring products, product distribution, and marketing messages. On the other hand, in transaction marketing, suppliers usually push distributors and retailers into taking their products, and they doesn’t have concern for channel clients or consumers’ preferences. In relationship marketing, suppliers usually collaborate with distributors and retailers on an individual basis because it is necessary to set up alignment of the information system between suppliers and their channel customers.

Many marketing researchers (McKenna, 1991; Mitchell, 1996; Sheth, Gardner, & Garrett, 1988; Sheth & Parvatiyar, 1995b) have argued that marketing needs to abandon many of its long-standing practices and operating mode, and move toward a relational paradigm that is based on repeated market transactions and mutual gain for buyers and sellers alike. As information technology continues to evolve, knowledge is replacing
natural resources and money as capitalism’s basic resources. The IT revolution has shifted the balance of power away from marketers and toward consumers. Thus, the new power is reshaping marketing from mass marketing to one-to-one marketing, and from monologue to dialogue. Moving from push marketing (product-driven) to pull marketing (consumer-driven), marketing dynamics involves more intimate and intense relationships among provider, channel clientele, and consumers. All marketing is moving toward relationship marketing.

Among those technological changes, the Internet has emerged to allow marketers to implement many essential aspects of relationship marketing. With other affordable technologies, marketers can use them more widely across a broader spectrum of customers. Sisodia and Wolfe (2000) have proposed a “virtuous cycle” between IT and Relationship marketing. According to Sisodia and Wolfe (2000), “The impetus for relationship marketing comes only partly from development in information technology; it has been driven primarily by the dysfunctionality of traditional marketing, the risking expectations of customers, and greater competitive pressures” (p. 528). In this “virtuous cycle”, both push and pull effects are at work. The growing of relationship marketing approaches is in turn giving the rise to the development of technological innovations specifically geared toward improvements in relationship marketing. For instance, Webcasting can facilitate relationship marketing by enabling marketers proactively to push the relevant information to customers. Also, content-focused matchmakers use techniques of deep interviewing to match customers with exactly the right products. Therefore, those approaches can initiate relationships with a high likelihood of success and endurance.
As Sheth and Parvatiyar (1995b) mentioned before, relationship marketing is not a new paradigm but a re-conceptualized concept. Grant and Schlesinger (1995) pointed out the reasons of lack application of relationship marketing in the past. In the past, marketers lacked the technological capability to be able to maximize profitability from customer relationships. Currently, new information and technology tools enable marketers to link their investments in customer relationships more directly to the return that customers generate. Companies can maximize the value exchange between company’s financial investment in customer relationships and the return that customers generate in responding to that investment (Sisodia & Wolfe, 2000).

According to Larson (1996), increasing evidence suggested that product attributes became less important in determining customer preference. It does not mean that consumers don’t care about product quality or capability any more. It shows that most new attributes can be readily copied and improved upon by competitors. In fact, the marketing success will primarily rely on company’s proximity to its customer and its ability to understand their changing needs.

Among various concepts in relationship marketing, one-to-one marketing is a notable idea worth our attention. Rogers and Peppers (1997) suggested that “instead of selling one product at a time to as many customers as possible in a particular sales period, the one-to-one marketer use customer databases and interactive communications to sell one customer at a time as many products and services as possible, over the lifetime of that customer’s patronage” (p.63). In the past, traditional marketing focused on how to get the largest possible number of customers. In contrast to this notion, one-to-one marketing emphasizes retaining the most valuable customers and growing them. Rogers
and Peppers (1997) also advocated one important concept i.e. “learning relationship”. They asserted that learning relationships can enhance customer convenience by maintaining a memory of customer preferences and tastes (Rogers & Peppers, 1997). According to them, the transition to one-to-one marketing should be done customer by customer rather than by product or division. A company should identify a handful of its most valuable customers. Then, the company assigns them to some of the most talented employees in the company who would be designated as customer managers. In this way, the company should expand the number of customers served in this manner.

Hospitality Industry

In 2004, international tourism receipts reached a new record value of US$ 622 billion as expressed in absolute figures. According to the latest edition of the WTO World Tourism Barometer, worldwide tourism earnings grew by an extraordinary 10.3%, a rate practically equal to that of international tourist arrivals which increased last year by 10.7% (World Tourism Organization [WTO], 2005). Among the various destinations of global tourism industry, United States is the most important market segment. In 2003, United States receipted $64,509 million, and it counted as 56.4 % market share of global tourism industry (WTO, 2004). Therefore, by studying development of US travel industry, we can get general clues about the development of global travel industry.

According to PhoCusWright, travel products sold in U.S. travel industry continue to take different routes of development. The whole travel industry has recovered slowly (achieving growth rates of 2-3%), while the Internet distribution channel has been
feasting on annual increases of more than 30%. PhoCusWright (2004) estimated that this
trend is expected to continue at declining but still substantial rates through 2006. Given
travel industry’s global orientation, fragmented structure, and demanding consumers,
hospitality firms increasingly rely on information and communications technology to
remain competitive and profitable (Dunn, 2002).

In the context of the hospitality industry, the Internet is probably the strongest driving
force for changes with the hospitality industry. Koutsoutos and Westerholt (2005)
explained the business impact of ICT on the travel industry:

The tourism sector is seen as one of the forerunners in the usage of Internet, both as a
promotion tool and as a support to e-business. The main factor driving e-business
solution is competitive pressure. Where the adoption of e-business methods did have
a significant impact was on the relations with intermediaries. There was a consensus
among companies irrespective of their primary line of business, that, to a limited
extent, e-business and the internet are reducing intermediary costs which are the most
critical cost factors in the travel and tourism industry. Traditional intermediaries,
such as the travel agents, complain about this ‘new’ competition from suppliers while
web-based travel agencies, the new e-intermediaries, make their way into the travel
and tourism business, aiming to compete on equal terms with service suppliers. (p. 32)

Indeed, ICT played an important role in previous and current stages of the
development of tourism. The noted example is computerized reservation systems (CRS),
originally developed and operated by airlines in order to cope with the increasing volume
of passengers and the related logistic and operational problem. CRS was among the first
worldwide applications of information technology which led to systems with several ten-
thousand participating companies. At the same time period, similar ICT application with same size of participating company could only be found in the financial sector of other industries.

After application of CRS in 1950s, the Global Distribution Systems (GDSs) became popular in 1980s. Hotel property management system (PMSs) and hotel CRS system appeared shortly afterward bringing switch companies into market as well in order to improve interconnectivity and interoperability. However, it is the development of the Internet that brought the revolutionary changes to the structure, by providing tourism principals, airlines and hoteliers an opportunity to sell travel products directly. The implication of ICTs on distribution system of hospitality industry has been discussed thoroughly and extensively in many published studies including (Buhalis, 1993, 2003; Cooper, 2000; Inkpen, 1998; Lang, 2000; O’Connor, 1999, 2000; Palmer & McCole, 1999; Sheldon, 1997; Standing & Vasudavan, 2000). Confronting the new networking economy, we cannot ignore the impact of ICTs.

As today, the World Wide Web is the most important ICT application in the hospitality industry. The Internet becomes a multi-function channel of communication, transaction, and distribution in the travel industry. Today, there are 63.8 million travelers who are online are actually using the Internet for information search as well as travel planning (Travel Industry Association of America [TIA] 2004). Also, more and more people prefer booking or making reservations on line. According to TIA report (2004), 31% of all travelers in United States are actually booking or making travel reservations online. For those online travel bookers, airline tickets continue to be the most purchased travel products (estimate 82%), followed by reserving hotel rooms (67%). Car rental is
the third product which travelers most-often purchased online. Other travel-related products most often bought online include cultural even tickets (23%) and travel packages (16%). In terms of function of distribution, many travel product suppliers are choosing to directly compete with their sales channel; meanwhile, they continue to offer product through that sales channel (Carroll and Siguaw, 2003). The Internet, an important application of ICT in the hospitality industry, is spinning the travel industry.

*Distribution Channel in the Hospitality Industry*

A distribution channel is a set of independent organizations involved in the process of making a product or service available to the consumer or business (Stern & El-Ansary, 1988). In the hospitality industry, the distribution network comprises both contractual agreements and loosely organized alliance between independent organizations (Kotler, Bowen, & Makens, 2003). In marketing, distribution channel systems perform the work of moving goods from producers to consumers. In contrast to other industries, distribution systems in the hospitality and tourism industry are used to move customers to the products such as the hotel, restaurant, cruise line, or airplane.

Distribution channel systems move goods from producer to the consumers. They overcome the time, place, and possession gaps that separate goods and services from those who would use them. According to Kotler (2000), members of marketing channels perform various functions:

1. Information gathering: channel members gather and distribute marketing research and intelligence information about the market environment.

2. Sales promotion: producer joins with members to develop and spread persuasive communications about an offer.
3. Contact: finding and communicating with potential buyers.
4. Matching: shaping the offer to best fit the buyer’s needs.
5. Negotiation: agreeing on price as well as other terms of sale so that ownership or right to use can be transferred.
7. Financing: acquiring and using funds to cover the costs of channel work.
8. Risk taking: members need to assume financial risks such as the inability to sell inventory at full margin.

The concept of marketing channel is not limited to the distribution of physical goods. It can be applied to the service industry such as banking, insurance, and hospitality industry as well. Given the different channel levels, a hospitality or travel distribution system consists of the following component: travel agents; tour wholesalers; specialists, hotel representatives; national, state, and local destination agencies; consortia and reservation systems; global distribution systems; the Internet; and concierges. As Internet technology advances, the rise of internet-based reservation systems presents the whole industry with the strategic challenge of controlling their distribution while also working with intermediaries that can help sell travel products (Carroll & Siguaw, 2003).

_E-distribution Channel in the Hospitality Industry_

Information systems and information technology are viewed as the most influential competitive method for the hospitality industry, and many hospitality executives consider e-business initiatives to be the number one area for the strategic success (Connolly & Olsen, 2001). Among those e-business initiatives, the e-distribution channel system is receiving a lot of attention. The traditional distribution channels for airlines industry,
hotel properties, and car rental companies include travel agents, toll free reservation numbers, convention bureaus, corporate meeting planners, and travel services. As a matter of fact, these channels are being reshaped as a result of technological advancements, new and emerging players, and a shift in the balance of power between buyers, suppliers, and intermediaries (Connolly 1999).

In year 1999, the revenues generated from online travel bookings surpassed those of computer software and hardware, the previous largest category in the online consumer segment. In year 2000, the US travel market generated an estimated $193 billion in booking revenues, with the minority ($13 million or 7%) going to online agencies (PhoCusWright 2000). It seems that the percentage of online booking is small but it is increasing every year. Jupiter Research (2002) estimated that total online leisure travel booking in the US hit $24 billion in year 2002, and it will hit nearly $64 billion (22% of all travel bookings) by 2007. Jupiter also estimates that managed business travel bookings hit $12 billion in 2002 and will jump to over $32 billion by 2005 (Jupiter, 2003).

In fact, much of the increased use of electronic reservations is reflected in GDS activity that has more than doubled since 1995. The Hotel Electronic Distribution Network Association (HEDNA) reported that a survey of hotel reservations through Global Distribution System (GDS) including Amadeus, Galileo, Sabre, Sahara, and Worldspan, a total of 46,753,000 reservations for hotels were delivered in 2001 which were converted to over 103 million room nights and more than $ 12.9 billion in global hotel revenue (Boud & Tanner, 2002). Jupiter analysts forecast hotel reservations booked online will triple between 2001 and 2007 from $5 billion to $ 15 billion. With the
increasing importance and online booking activities, e-distribution channel is an important issue for the hospitality industry.

However, there is a phenomenon we should explore i.e. the Alternative Distribution System (ADS) that plays an important role in the increasing of online booking. ADS is a segment of GDS, and includes WorldRes, Priceline, Hotels.com, Travelocity, Expedia, and many other Internet based travel agencies. Recently, more and more individual travelers book their hotel room through those third party online agencies. Although the percentage of online booking of ADS is not really big so far, it is increasing fast. Experts estimate that ADS will be a major segment of GDS in the short future. Facing the threats such as cost transparency, price competition, and low consumer loyalty, the relationship marketing is the only solution for the whole industry to deal with the issues above (Hax, 2005; Sheth & Sisodia, 1995).

Relationship Marketing in the Hospitality Industry

Is the relationship suitable in the hospitality industry? Based on various researches in relationship marketing (Gilpin, 1996; Juttner & Wehrli, 1994; Lewis & Chambers, 1989; Reichheld, 1993), a relationship marketing paradigm is most suitable when:

1. There is an ongoing or periodic desire for the service on the part of the customer.
2. The service customer controls the selection of the service supplier.
3. There exists alternative choice of suppliers
4. Brand switching is a common phenomenon
5. Word-of-mouth is an especially potent form of communication about a product.
6. There is an ability to cross-sell products.
There is no doubt that the relationship marketing is suitable in the hospitality industry. In addition to the notions above, there is one reason for suitability of relationship marketing for the hospitality industry i.e. the ease with which relationship marketing can be practiced within the industry. Generally speaking, the hospitality industry already possesses certain information on customers from the booking and registration process. By using database marketing, companies can find our more valuable information such as frequency of stay and spending behavior through company record. The valuable information can be brought together on a database system and manipulated to identify and target the more profitable customers, and develop a relationship with customers.

So, what are the mechanisms for hotel and tourism industry to install in order to build long-term relationships with customers? Several scholars (Gilbert, 1996; Gilpin, 1996; Haywood, 1988; Lewis & Chambers, 1989) have proposed alternative strategies for achieving customer retention. Gilbert (1996) proposed that the long-term retention of customers requires the following five incremental mechanisms:

1. Identify more about the customer through database analysis. A company can use its Web site to compile information on what an individual purchases. Also, the Web site can be used to track and measure customer’s reactions to different offers posted on its EC-Web site. Thus, the company can create customer profiles.

2. Improve and make the product/service more attractive. By using an incentive marketing program, hospitality companies can target frequent guest, and collect their attitudes to services or loyalty programs. The information can be used to improve aspects of the service that are not meeting or exceeding the expectation of customers.
3. Inform to build customers’ knowledge of the company. The Internet can serve as a strategic tool of building an information center. Important information such as lists, locations of key agents, and updating news about products, service, offers, and benefits can be posted on company’s Web site.

4. Tempt customers to purchase more regularly, and try different products. The Internet can be used to achieve this goal by direct emailing special electronic leaflet to frequent consumers. More so, the EC-Web site can be designed to cross-sell other products/service.

5. Retain the customer by developing different forms of loyalty schemes.

Basically, Gilbert’s model is accord with the criteria for a successful Web strategy advocated by the Butler Group (1996). According to Butler Group (1996), business organizations should implement those strategic actions including but not limited to:

- Treat the Internet as a new medium and exploit its unique properties i.e. interaction with customers;
- Start with customers by defining who they are and what they want to know;
- Build relationships with customers by getting to know them, customizing content for them, and ensuring relevance to them;
- Build a service rather than a Web site by giving consumers value for time, money, and by providing specific option not available somewhere else.
- Leverage existing business by building on assets, and think radically to achieve the best chance of obtaining the benefits offered by technology.

However, the model and strategies brought by Gilbert and Butler Group are not comprehensive. Based on principles of relationship marketing, every business player
should create a comfortable shopping environment in order to create consumer inertia. This inertia suggests that consumers are unwilling to switch to other choices because of inertia. In context of E-Commerce, the so-called comfortable shopping environment is the effectiveness design of EC-Web site combined with consumer trust. Therefore, it is very important to explore such important characteristics as consumer trust, information quality, service quality, and system quality related to EC-Web site from consumer’s perspective. The focus of this research is to show how consumers weight each characteristic when they shop travel products online. Once we know consumers’ preference about the Website design, we can create a comfortable e-shopping environment for them and increase their retention rate as well as their loyalty.

Theoretical Foundation of Research

As ecommerce grows in size and importance, academic researchers devote more efforts to studying the impacts of the Internet. In the previous section, we already explored the impact of Internet on market efficiency, on marketing channel, on price, and on consumer marketing. Among those impacts, cost transparency is a major threat to actors in the E-Commerce environment (Riquelme, 2001). There are four effects brought by cost transparency (Sinha, 2000). First of all, cost transparency severely impairs a seller’s ability to obtain high margin. Next, cost transparency transforms products and services into commodities. Then, cost transparency weakens customer loyalty to both brands and intermediaries. Finally, cost transparency can damage companies’ reputations by creating perceptions of price unfairness to consumers.
In order to deal with this phenomenon, several marketing scholars have proposed a possible marketing strategy i.e. relationship marketing for companies to compete in the E-Commerce environment. According to theory of relationship marketing, companies should try to build the relationship bond with their customers. The foundation of creating a relationship bond with the customer is to understand and meet customer needs in the context of E-Business.

The theoretic foundation of antecedents of consumer’s purchase intention is drawn from several theories: (1) attitude-behavior consistency theory, (2) social cognitive theory, (3) self-efficacy theory, (4) theory of reasoned action, (5) theory of planned behavior, (6) theory of consumer trust, and (7) communication theory. In the subsequent session, the discussion of each theory will be presented. Then, the antecedents of consumer purchase intention will be drawn from those theories. In the last section of this chapter, a hypothesized model will be proposed.

Theory of Attitude-Behavior Consistency

The ability of attitudes predict consumer behavior is the most important concern for most people who interested in understanding consumer behavior (Petty, Unnava, & Strathman, 1991). In the past, various situational and dispositional factors have been shown to enhance the consistency of attitudes with behavior. Researchers have found that attitudes have been found to be more predictive of behavior in some situations. According to Petty et al. (1991), those situations include:

When (1) the persons tested are of a certain personality type (e.g., are low in “self-monitoring,” (Snyder & Swann, 1976); or high in “need for cognition,” (Cacioppo et al., 1986), (2) the attitudes in question are consistent with underlying beliefs (Norman,
1975); (3) the attitudes are based on high rather than low amounts of issue-relevant knowledge and/or personal experience (Davidson, Yantis, Norwood, & Montano, 1985; Fazio & Zanna, 1981; Smith & Swinyard, 1983), (4) the attitudes were likely formed as a result of issue-relevant thinking (Petty, Cacioppo, & Schumann, 1983; Verplanken, 1989), the cues in the situation indicate that the persons’ attitude is relevant to the behavior (Borgida & Campbell, 1982) and others (for reviews see Ajzen 1989; and Pieters 1988) (p. 264).

On the other hand, some other methodological considerations have also proven to be important if attitudes are to predict behaviors. Particularly, the attitude and behavior should be estimated at the same degree of concurrence. For example, general attitudes predict multiact criteria, and specific attitudes predict single behaviors (Ajzen & Fishbein, 1977; Bagozzi, 1981). Additionally, both attitude and behavioral measures should be evaluated at about the same time (Bagozzi, 1981; Davidson & Jaccard, 1979). Except that, attitude and behavioral measures should be under similar situations (Millar & Tesser, 1986). Several academic researchers gave a good example. If people are asked to think about the basis of their attitude before attitude measurement, attitude-behavior consistency may be deteriorated if thinking produces an expressed attitude that is not representative (Wilson, Dunn, Kraft, & Lisle, 1989). Also, there is one important proposition. In general, behavior prediction can be improved by including factors other than attitudes. According to several scholars, those factors include societal norms and personal norms (Ajzen & Fishbein, 1977); habit (Triandis, 1977); perceived control (Ajzen, 1988) in one’s model.
Two general models of behavior theory by which attitudes predict behavior have received tremendous attention. First theory is the theory of reasoned action (TRA) proposed by Ajzen and Fishbein (1980). The assumption is that “people consider the implication of their actions before they decide to engage or not engage in given behavior” (Ajzen and Fishbein, 1980, p. 5). In particular, a person forms intention whether to perform behaviors or not, and these intentions are based on the person’s attitude toward the behavior as well as his or her perception of the opinions of other significant people i.e. norms. The model of theory of reasoned action focused on the relatively thoughtful processing involved in considering the personal costs and benefits of engaging in a behavior. The whole theory may involve the following issues such as (1) the formation of attitudes, norms, and intentions before the behavior, (2) the formation of intentions based on previously stored attitudes and norms, at least, (3) the accessing of a previously stores intention prior to the behavior.

Although some of studies have challenged some of the specifics of the Fishbein and Ajzen theory (Bentler & Speckart, 1979; Miniard & Cohen, 1983; Ryan, 1978; Shimp & Kavas, 1984), the theory has proven remarkably successful in accounting for a various of different behaviors (Chaiken & Stangor, 1987; Cialdini, Petty, & Cacioppo, 1981; Cooper & Fazio, 1984). Conduced by Sheppard, Hartwick, and Warshaw (1988), a meta-analysis of studies proved the significant predicting power of this model. Sheppard et al. (1988) concluded that the model “has strong predictive utility, even when utilized into investigate situations and activities that do not fall within the boundary conditions originally specific behavior” (p. 338). It is better when the behavior involved a choice

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1 In an extension of the model into the theory of planned behavior, Ajzen (1988) argues that people also consider the likelihood that they will have the necessary skills and opportunities to engage in the behavior. This specific condition is also important in Warshaw’s (1980) behavioral expectation model.
from among alternatives rather than a single action. Sheppard et al. (1988) suggested that
the latter effect may hold because a choice among alternatives invokes greater
involvement than a single opinion.

The Background of Two Theories (TRA and TPB)

In the past 3 decades, a few general theoretical models of behavior have been
proposed; perhaps the two best known are the Theory of Reasoned Action (TRA) and the
Theory of Planned Behavior (TPB). The (TRA) was proposed by Ajzen and Fishbein
(Ajzen & Fishbein, 1969, 1980; Fishbein & Ajzen, 1975). It proposed that one’s
intention to perform or not to perform an action (behavioral intention) is the immediate
precursor to the actual behavior. The TRA model introduced two factors that affect
behavioral intention. Those two factors are attitude toward the behavior and subjective
norms. Attitude involves judgment related to two situations i.e. whether the behavior is
good or bad and whether the actor is in favor of or against performing it. Subjective
norm is the perception of how one ought to behave. Later on, Ajzen (Ajzen, 1989, 1991)
expanded the model which is called the theory of planned behavior (TPB). Basically,
TPB just added perceived behavioral control as another factor which influenced
behavioral intention. Perceived behavioral control is the perception of how easy or
difficult it would be to perform the behavior. Both the TRA and the TPB models have
been the basis of numerous studies. Also, numerous empirical researches (Beck & Ajzen,
1991; Madden, Ellen, & Ajzen, 1999). TRA and TPB did contribute a lot to our
understanding about human perceived behavior. Azjen acknowledged that most of
knowledge about the role of perceived behavioral control comes from the systematic
research program of Bandura and his associates (Bandura, Adams, & Beyer, 1977;
Bandura, Adams, Hardy, & Howells, 1980). Therefore, two theories, i.e. self-cognitive theory and self-efficacy theory will be discussed first. Then, TRA and TPB will be covered in the following section in order to provide a sound conceptual framework.

**Self-Efficacy & Social Cognitive Theory**

Usually, people face numerous decision, problems, and challenges in his or her course of life. In social psychology, it becomes a most important problem to understand how people adapt and adjust to life’s inconspicuous challenges. In relation to human learning (cognition, emotion, personality, social interaction) most models try to explain the individual’s capacity for adaptively responding to environmental changes. This kind of capacity for adaptivity often refers to competence (Sternberg & Kolligan, 1990; White, 1959). The study of beliefs about personal competence and the role of such belief in human adaptation and adjustment have a long history in clinical, personality, and social psychology (Maddux, 1995). Given example, those theories and model include effectance motivation (White, 1959), achievement motivation (McClelland, Atkinson, Clark, & Lowell, 1953), social learning (Rotter, 1966), and helplessness (Abramson, Seligman, & Teasdale, 1978). Those examples are just a few of many theories that have sought to explore and explain the relationship between perceptions of personal competence and adaptation, adjustment, and psychological well-being.

Self-efficacy theory (Bandura, 1977, 1982, 1986) is one of the more recent in a long tradition of personal competence or efficacy theories. In the past decade, it has generated more research in clinical, social, and personality psychology than other such models and theories (Maddux, 1995). Maddux (1995) further explained that “The critical part of self-efficacy theory is that the initiation of and persistence at behaviors and courses of action
are determined primarily by judgments and expectations concerning behavioral skills and capabilities and the likelihood of being able to successfully cope with environmental demands and challenges” (p. 4). In the following paragraphs, we will explore social cognitive theory; then, explore the role of self-efficacy beliefs and related influences in human adaptation and adjustment.

Social-Cognitive Theory

Social cognitive theory is an approach to understanding human cognition, action, motivation, and emotion. It assumes that people are capable of self-reflection and self-regulation and they are active shapers of their environments rather than simply passive reactors to them. Though the notions such as volition and freedom in human behavior have generated some controversy (Howard & Conway, 1986; Williams, 1992), those notions are recognized as the essential ideas in social cognitive theory, and they make the following specific assumptions (Bandura, 1986, 1989a).

Based on notions of volition and freedom in human behavior, Maddux (1995) summarized those assumptions from Bandura’s work as following:

1. People have powerful symbolizing capabilities that allow for creation of internal models of experience, the development of innovative courses of action, the hypothetical testing of such courses of action through the prediction of outcomes, and the communication of complex ideas and experience to others.

2. Most behavior is purposive or goal-directed and is guided by forethought. This capacity for intentional behavior is dependent on capacity for symbolizing.
3. People are self-reflective and capable of analyzing and evaluating their own thoughts and experiences. These meta-cognitive, self-reflective activities set the stage for self-control of thought and behavior.

4. People are capable of self-regulating by influencing direct control over their own behavior and by selecting or altering environmental conditions that, in turn, influence their behavior. People adopt personal standards for their behavior, evaluate their behavior against these standards, and thus create their own incentives that motivate and guide behavior.

5. People learn vicariously by observing other people’s behavior and its consequences. Vicarious learning through observation greatly reduces people’s dependency on trial-and-error learning and allows for the rapid learning of complex skills that would not be possible if people learned only by taking action and directly experiencing the consequences of their own behavior.

6. The previously mentioned capacities for symbolization, self-reflection, self-regulation, and vicarious learning are the result of the evolution of complex neuro-physiological mechanisms and structures. Psychological and experiential forces interact to determine behavior and provide it with tremendous plasticity.

7. Environmental events, inner personal factors (cognition, emotion, and biological events), and behavior are mutually interacting influences. Thus, people respond cognitively, affectively, and behaviorally to environmental events; but most important, through cognition they also exercise control over
their own behavior, which then influences not only the environment but also
cognitive, affective, and biological states (p. 4-5).

In short, it is necessary to understand all three sources of influencing behavior in
order to study the human behavior in any situation. Bandura (1989b) refers to this
structure as a model of emergent interactive agency.

Psychology is comprised of different subfields. Those different subfields are
ccerned with different aspect of these reciprocal relationships (Bandura, 1990;
Kihlstrom & Harackiewicz, 1990). Social psychologists have examined extensively the
relationships between specific attitudes on behavior and the influence of behavior on
attitudes. Also, experimental social psychologists and applied behavior analysts have
ccerned over the influence of the environment on the human being. On the other hand,
cognitive psychology is concerned with cognition—action influences, particularly with
ow people attend to, acquire, and the process information about their environments and
themselves (Bandura, 1990; Kihlstrom & Harackiewicz, 1990). More so, the
neurosciences in psychology and medicine are concerned with the physiological and
biochemical correlates and substrates of cognition and emotion. Therefore, social
cognitive theory offers linkages to and among all the major subfields of psychology and
to other disciplines concerned with understanding the complexity of human thought and
action.

Basically, there are three such approaches to explain personality and behavior as
psychodynamic theories, trait theories, and radical behaviorism. According to Bandura
(1986), social cognitive theory views the three major alternative approaches as unable to
account satisfactorily for the complexity and plasticity of human behavior.
Psychodynamic theories are difficult to test empirically. Also, they cannot adequately explain for the tremendous situational variation in individual behavior. Therefore, they are inadequate in predicting future behavior, and have not contributed to the development of efficient and effective methods for changing psychosocial functioning. Trait theories neither have good predictive utility nor enough consideration about the documented impact of situational influences. For radical behaviorism, the assumptions have been disputed by empirical findings. According to Maddux (1995), social cognitive theory assumes that people process and use information in symbolic form, evaluate their own thoughts and behaviors, predict and anticipate events and consequences, set goals and strive toward them, and regulate their own behavior. Therefore, it surpasses the previously mentioned approaches in its ability to explain situational influences and difference, to account for the effects of belief and expectancies, to predict behavior accurately, and to provide models and strategies for effective behavior change (for a comprehensive explanation, please see Bandura, 1986).

Self-Efficacy Theory

Self-efficacy is a concept drawing from social cognitive theory (SCT) and a considerable stream of basic research (Bandura, 1982). Self-efficacy theory recognized that psychological construct deals specifically with how people's beliefs in their capabilities to affect the environment control their actions in ways that produce desired outcomes. The aspect of self-efficacy played a vital role in SCT. In his book, Bandura (1997) provides a detailed conceptual analysis and empirical overview of how self-efficacy operates in concert with sociocognitive determinants represented by SCT in influencing human action, adaptation, and change (Bandura, 1997).
Basically, self-efficacy theory is concerned with the role of personal cognitive factors in the triadic reciprocality model of social cognitive theory. Maddux (1995) further added that the theory also concerns with both the effect of cognition on affect and behavior and the effect of behavior, affect, and environmental events on cognition. Self-efficacy theory maintains that all processes of psychological and behavioral change operate through the alteration of the individual’s sense of personal mastery or self-efficacy (Bandura, 1982, 1986, 1997).

According to Bandura, self-efficacy was originally defined as a rather specific type of expectancy concerned with one’s beliefs in one’s ability to perform a specific type of behavior or set of behaviors required to produce outcome (Bandura, 1977). Although it has been expanded, the original definition of self-efficacy theory refers to “people’s beliefs about their capability to exercise control over events that affect their lives” (Bandura, 1989a, p. 1175) and their “beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over task demands” (Bandura, 1990, p. 136). Therefore, self-efficacy judgments are concerned “not with the skills one has but with judgments of what one can do with whatever skills one possesses” (Bandura, 1986, p. 391). According to Bandura (1977), “people process, weigh, and integrate diverse sources of information concerning their capability, and they regulate their choice behavior and effort expenditure accordingly” (p. 212). Thus, the expectations concerning mastery or efficacy have two functions. One is to have generative capability, and the other one is to determine choice of goals and goal-directed actions, expenditure of effort
in the pursuit of goals, persistence in the face of adversity, and emotional or affective
experiences (Bandura, 1986; Locke & Latham, 1990).

Wylie (1979) indicated that most conceptions of self-belief or self-evaluation have
been global or trait constructs. For example, self-concept is the sum total of beliefs about
the self, and self-esteem is the sum total of the evaluation of these beliefs i.e. how one
feels about these beliefs and about oneself, or one’s assessment of one’s worth or value as
a person (Wylie, 1979). In specific behavioral or situational domains, the general
measures of self-concept and self-esteem have not provided much explanation about
psychosocial functioning (Bandura, 1986, 1990). Based on vast majority of research
related to attitude-behavior relationships, it has been confirmed that specific cognitive
measures predict specific behavior more correctly than do omnibus or global measures
of traits or motives (Ajzen & Fishbein, 1980). Unlike the traditional approach, self-
efficacy is conceptualized and measured as in the context of relatively specific behaviors
in specific situations or context. However, the degree of specificity at which self-efficacy
is measured will depend on the nature of the task and situation at hand as well as by the
nature of the task and situation to which one wishes to generalize, or in which one wishes
to predict (Bandura, 1992).

Sometime, self-efficacy is used to refer people’s general sense of competence and
effectiveness (Smith, 1989). However, the term is most useful when defined,
operationalized, and measured specific to a behavior or set of behaviors in a specific
situation (Kaplan, Atkins, & Reinsch, 1984; Manning & Wright, 1983). Several authors
have contributed to the development of general self-efficacy scales (Sherer, Maddux,
Mercandante, et al., 1982; Tipton & Worthington, 1984). These scales have not made
much useful research on specific types of behavior change (Maddux, 1995). For example, research demonstrates that the best way to predict a drinker’s attempt and success at giving up wines is to measure his self-efficacy expectancy for quitting, not his general self-confidence or self-esteem. More so, measuring self-efficacy expectancies for quitting drinking will be more successful if we measure the drinker’s expectations for being able to refrain from drinking under specific situation (DiClemente, 1986).

It doesn’t mean that we can reject the possible generality of self-efficacy by rejecting the notion of perceived efficacy as a personality trait (Maddux, 1995). In fact, Bandura (1990) indicated that perceived efficacy in one behavioral-situational domain will generalize to other behaviors and situations depending on the extent to which the behaviors and situations share crucial features and require similar skills and functions. Except that, beliefs about mastery and personal effectiveness are important aspects of self-concept and self-esteem. For example, if one’s sense of competence is high for an ability one cares; then, this will help to promote high self-esteem. Judgments of inefficacy in unvalued areas of competence are unlikely to influence significantly self-concept and self-esteem.

According to Bandura (1977, 1982, 1986), self-efficacy expectancies can be viewed as varying along three dimensions: magnitude, strength, and generality. Magnitude of self efficacy is defined as the number of “steps” of increasing difficulty or threat a person believes himself or herself capable of performing. Strength of self-efficacy expectancy means the resoluteness of a person’s convictions that he or she can perform a behavior in question. It has been related repeatedly to persistence in the face of frustration, pain, and other barriers to performance (Bandura, 1986). Generality of self-efficacy expectancy is
the extent to which success or failure experiences influence self-efficacy expectancies in a limited, behaviorally specific manner, or whether changes in self-efficacy expectancy extend to other similar behaviors and contexts (Smith, 1989). Although a completed analysis of self-efficacy expectancy requires a detailed assessment of magnitude, strength, and generality, most research depends on uni-dimensional measures of self-efficacy expectancy that most resemble the strength dimension.

According to Bandura (1977, 1986), in self-efficacy theory, beliefs about personal resources and abilities are the product of the interaction of information from six primary sources: (1) performance or enactment experiences; (2) vicarious experience; (3) imaginal experiences; (4) verbal persuasion; (5) physiological arousal; (6) emotional states (Bandura, 1977, 1986; Williams, 1995). Based on Bandura (1977), performances are the most powerful sources of self-efficacy information. In other words, success at a task, behavior or skill will strengthen self-efficacy expectancies for that task, behavior, or skill. In contrast, perceptions of failure diminish self-efficacy expectancy. In relation to vicarious experience, Maddux (1995) suggested that vicarious experience such as observational learning, modeling, and imitation will influence self-efficacy expectancy in the following situations. For example, when people observe the behavior of others, see what they are able to do, note the consequences of their behaviors, they will use this information to form expectancies about their own behavior and its consequence. The effects of vicarious experiences depend on several factors. Those factors include the observer's perception of similarity between himself and the model, the number and variety of models, the perceived power of the models, and the similarity between the problems faced by the observer and the model (Bandura, 1986; Schunk, 1986). However,
vicarious experiences generally have weaker effects on self-efficacy expectancy than do
direct personal experience (Bandura et al., 1977).

In social cognitive theory, it assumes that people have tremendous capacity for
symbolic cognitive activity. Therefore, people are capable of the anticipatory
visualization of possible situations and events, their own behavioral and emotional
reactions to these situations and events, and the possible consequences of their behavior.
In other word, people can generate beliefs about personal efficacy or inefficacy by
imagining themselves or others behaving effectively or ineffectively in future situations
(Cervone, 1989; Williams, 1995). Comparing performance experiences and vicarious
experience, verbal persuasion is a less evident source of enduring change in self-efficacy
expectancy (Maddux, 1995). As a source of self-efficacy expectancies, the potency of
verbal persuasion will depend on such factors as the expertness, trustworthiness, and
attractiveness of the source. Past researches on verbal persuasion and attitude change has
proved the point noted above (Petty & Cacioppo, 1981). In addition, experimental
studies have shown that verbal persuasion is a moderately effective means for changing
self-efficacy beliefs (Maddux, Norton, & Stoltenberg, 1986; Maddux & Rogers, 1983;
Newman & Goldfried, 1987). Physiological state will influence self-efficacy in the
following situations: when people associate aversive physiological arousal with poor
behavioral performance, perceived incompetence, and perceived failure (Maddux, 1995).
Therefore, when persons become aware of unpleasant physiological arousal, they are
more likely to doubt their behavioral competence than if the physiological state were
pleasant or neutral (Bandura, 1986). According to Maddux (1995), physiological cues
are important components of emotions but emotional experiences are not simply the
product of physiological arousal (Ortony, Clore, & Collins, 1988). Thus, emotions or moods can be additional sources of information about self-efficacy. For example, human being are more likely to have self-efficacious beliefs about performance when their affect is positive than when it is negative. Both anxiety and depression may have a negative impact on self-efficacy (Maddux & Meier, 1995; Williams, 1995).

According to Limayem, Khalifa, and Frini (2000), shopping on the Internet is a voluntary individual behavior. Basically, E-shopping behavior can be explained by two theories and one model. Those two behavioral theories are the theory of reasoned action (TRA) and the theory of planned behavior (TPB), and the model is or Triandis’s model (Triandis, 1980). The TRA argues that behavior is preceded by intentions and that intentions are determined by the individual’s attitude toward the behavior and the individual’s subjective norms (i.e., social influence). The TPB extends the TRA to account for conditions where individuals do not have complete control over their behavior. It argues that perceived behavioral control (the individual’s perception of his/her ability to perform the behavior) influences both intentions and behavior.

Triandis’ model is similar to the TPB in modeling intentions and facilitating conditions as direct antecedents of behavior. More so, Triandis’ model posits that behavior is also affected by habits and arousal. It contains aspects that are directly related to an individual (genetic factors, personality, habits, attitudes, behavioral intentions, and behavior) and others that are related to an individual’s environment (culture, social situation, social norms, facilitating conditions, etc.). Although Triandis’ model is more comprehensive than the TPB, several of its constructs are difficult to operationalize. Therefore, we didn’t adapt Triandis’ model in this research. On the other
hand, TRA is very similar to TPB. The major difference between two theories is:
addition of perceived behavioral control in TPB (Ajzen, 1991). Also, the overall results
indicate that the theory of planned behavior (TPB) provides a good understanding about
factors which affect online shopping intentions and behavior (Limayem et al., 2000).
Thus, in the following section, we will discuss the theory of reasoned action (TRA) first;
then, focus the theory of planned behavior (TPB).

Theory of Reasoned Action (TRA)

Background

The roots of the reasoned action theory (TRA) come from the field of social
psychology. Social psychology attempts, among other things, to explain how and why
attitude impacts behavior. In other words, it tries to explain how and why people’s
beliefs change the way they act. The study of attitude’s influence on behavior began in
1872 with Charles Darwin. Darwin defined attitude as the physical expression of an
emotion. In the 1930’s, psychologists defined attitude as emotions or thoughts with a
behavioral component. This behavior could be non-verbal such as body language or
vocally expressed messages. Psychologists of the time argued about what should make
up the term of attitude. Social psychologists theorized that attitude included behavior and
cognition and that attitude and behavior were positively correlated. In 1935, Gordon
Allport proposed that the attitude-behavior concept was multi-dimensional rather than
uni-dimensional, as had previously been thought. Attitude multi dimensional systems
consist of beliefs about the attitude object, feelings about the attitude object and action
tendencies toward the object. In 1934, Richard Lapiere conducted a study to study the
attitudes of hotel manager’s towards Chinese patrons. The study used a questionnaire
sent to hotel managers who had previously sold rooms to a Chinese couple to determine their attitudes towards Chinese people in general. The results showed that nearly every hotel manager, who had already sold a room to a Chinese person, said they would not sell a room to a Chinese guest. This story demonstrated that attitude was not a good predictor of behavior. By the late 1960s, social psychologists no longer believed that they had a theory to explain the relationship between attitude and behavior. It was the moment that Ajzen and Fishbein created the theory of reasoned action in 1967.

Theory of Reasoned Action

Introduced in 1967, the ultimate goal of the reasoned action theory is to predict and understand an individual’s behavior. The first step is to identify and measure the behavior of interest. Once the behavior has been clearly defined, it is possible to ask what determines the behavior. In their model, Ajzen and Fishbein assumed that most actions of social relevance are under volitional control and consistent with this assumption, their theory views a person’s intention whether to perform a behavior or not as the immediate determinant of the action (Ajzen & Fishbein, 1980).

According to theory of reasoned action, a person’s intention is a function of two basic determinants. One factor is personal in nature, and the other one reflects social influence (Ajzen & Fishbein, 1980). The personal factor is the individual’s positive or negative evaluation about performing the behavior. This personal factor is termed attitude toward the behavior (Ajzen & Fishbein, 1980). It refers to the person’s judgment that performing the behavior is good or bad and that he or she is in favor of or against performing the behavior. Generally speaking, people may differ in their evaluations of buying a music CD. Some have a favorable attitude, and others have an unfavorable
attitude toward this behavior. The second factor of intention is the person’s perception of the social pressures put on him about whether to engage in the behavior or not in question. Because it deals with perceived prescriptions, Ajzen and Fishbein (1980) termed this factor as subjective norm. Returning to the example of buying a music CD, we may believe that most people who are important to us think we should buy a music CD or that they think we should not do so. In general, people will intend to perform a behavior when they evaluate it positively and when they believe that important others think they should do it.

The theory of reasoned action assumes that the relative importance of these factors depends partly on the intention under evaluation. For some intentions attitudinal considerations may be more important than normative considerations; while, normative considerations may predominate for other intentions. Usually, both factors are important determinants of the intention. Additionally, the relative weights of the attitudinal and normative factors may vary from one person to another. According to Ajzen and Fishbein (1980), “the assignment of the relative weights to the two determinants of intention greatly increases the exploratory value of theory” (p. 6). Ajzen and Fishbein gave an example to explain the value of this theory. It assumed that one woman intended to use birth control pills while the other one didn’t intend to do so. Because those two women held identical attitudes and subjective norms, their different intentions could not be explained in terms of these factors alone. They concluded that the different intentions would follow if the first woman’s intention was determined primarily by attitudinal considerations and the second woman’s intention was primarily under the control of her subjective norm.

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In many cases, this degree of explanation can be sufficient. It becomes possible to predict and learn some understanding of a person’s intention by measuring his attitude toward performing the behavior, his subjective norm, and their relative weight (Ajzen & Fishbein, 1980). It is necessary to explain why people hold certain attitudes and subjective norms to get a comprehensive understanding of intentions. In short, the theory of reasoned action attempts to answer those questions.

Based on the theory, attitudes are a function of beliefs. In general, people will hold a favorable attitude toward engaging in the behavior if he or she believes that doing a given behavior will lead to mostly positive outcomes. In contrast, if a person believes that performing such behavior will lead to mostly negative outcomes, he or she will hold an unfavorable attitude toward performing this behavior. Behavioral belief is the term that the belief underlies a person’s attitude toward the behavior.

More so, subjective norms are also a function of belief. The belief is a different kind i.e. namely the person’s belief that specific individuals or groups think he or she should or should not perform the behavior. Those beliefs underlying a person’s subjective norm are called normative beliefs. Normally, a person who believes that most referents with whom he or she is motivated to obey thinks he or she should perform the behavior will perceive social pressure to do so. On the other hand, a person who believes that most referents with whom he is motivated to conform think he or she should not perform the behavior will have a subjective norm that puts pressure on him to avoid doing that behavior. Therefore, for a given behavior, subjective norm may put pressure to whether to engage in the behavior or not, and it is independent of the person’s own attitude toward the behavior in question.
Unlike traditional approach, the theory of reasoned action makes reference only to a person’s attitude toward behavior. It doesn’t include traditional attitudes. Those traditional attitudes include attitudes toward objects, people or institutions. The purpose of this emphasis on attitudes toward behaviors is to question a fundamental assumption underlying many researches on social behavior. Traditionally, it has been assumed that a person’s behavior toward some target is decided by his attitude toward that target. However, it is not true in the model of the reasoned theory action. In addition, the analysis of behavior in the theory of reasoned action made no reference to various factors other than attitudes toward targets that social and behavioral scientists have invoked to explain behavior. Those factors include personality characteristics, demographic variable, social role, status, socialization, intelligence, and kinship patterns.

According to Ajzen and Fishbein (1980), “there is plenty of evidence that factors such as attitudes toward targets, personality traits, and demographic characteristics are sometimes related to the behavior of interest” (p. 9). Ajzen and Fishbein (1980) considered those factors as external variables. It is no doubt that external variables may influence the beliefs a person holds or the relative importance he attaches to attitudinal and normative considerations. Further, because the extravert is likely to be more sensitive to social pressures, the subject norm may be a more important factor of his intention than that of the introvert’s intention. In short, Ajzen and Fishbein (1980) proposed “that the theory of reasoned action identifies a small set of concepts which are assumed to account for the relations between any external variable and any kind of behavior that is under an individual’s volitional control” (p. 9).
Theory of Planned Behavior (TPB)

Dispositional prediction of human behavior

According to (Ajzen, 1991), general dispositions tend to be poor predictors of behavior in specific situations. General attitudes have been evaluated with respect to different cases. For example, it has been assessed related to organizations and institutions, minority groups, and particular individuals with whom a person might interact (Ajzen & Fishbein, 1977). The failure of using general attitudes to predict specific behaviors indicated one proposition i.e. the abandon of attitude concept (Wicker, 1969).

In a similar situation, theorists claimed that the trait concept, defined as a broad behavior disposition, is untenable because of the low empirical relations between general personality traits and behavior in specific situations (Mischel, 1968). However, there is one exception: generalized locus of control to be related to behaviors in specific contexts (Rotter, 1954, 1966). In context of other personality traits, the results have been disappointing.

Several scholars (Epstein, 1983; Fishbein & Ajzen, 1974) have proposed one possible remedy for this situation. They proposed: “The remedy for the poor predictive validity of attitudes and traits is the aggregation of specific behaviors across occasions, situations, and forms of action (Epstein, 1983; Fishbein & Ajzen, 1974). According to Ajzen (1991), the idea behind the principle of aggregation is the assumption: “Any single sample of behavior reflects not only the influence of a relevant general disposition, but also the influence of various other factors unique to the particular occasion, situation, and action being observed” (p. 180). These other sources of influence tend to change each other
with aggregation of different behaviors, observations of different occasions, and collection of different situations. In the recent past, the studies have shown that the principle of aggregation predicts behavioral aggregates much better than they predict specific behavior (Ajzen, 1988).

**Predicting behavior: intentions and perceived behavioral control**

The theory of planned behavior is an extension of theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The TPB extends the TRA to account for conditions where individuals do not have complete control over their behavior. It argues that perceived behavioral control (the individual’s perception of his/her ability to perform the behavior) influences both intentions and behavior.

Same as the theory of reasoned action, a central part of TPB is the individual’s intention to carry out a given behavior. It is assumed that intentions to capture the motivational factors which influence a behavior. Intentions are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. Generally speaking, the stronger the intention to engage in a behavior, the more likely should be its performance. However, Ajzen (1991) suggested: “A behavioral intention can find expression in behavior only if the behavior in question is under volitional control, i.e. if the person can decide at will to perform or not perform the behavior” (p.181). In fact, some behaviors may meet this requirement quite well but the performance of most behavior depends on some non-motivational factors such as availability of requisite opportunities and resources (Ajzen, 1985). In short, these factors represent people’s actual control over the behavior. If a person has the required
opportunities and resources, and intends to perform the behavior, he or she should succeed in doing this.

![Diagram of Theory of Planned Behavior]

Figure 1. Theory of Planned Behavior.


It is not a new idea that behavioral achievement depends jointly on motivation (intention) and ability (behavioral control). The idea is comprised of the basis for
theorizing on those diverse issues such as animal learning (Hull, 1943), level of aspiration (Lewin, Dembo, Festinger, & Sears, 1944), performance on psychomotor and cognitive tasks (Fleishman, 1958; Locke, 1965; Vroom, 1964). Based on these studies, it had been suggested that conception of behavioral control be included in more general models of human behavior. There is an assumption needed to be made, i.e. motivation and ability interact in their effects on behavioral achievement (Ajzen, 1991). Therefore, Ajzen (1991) concluded that “Intentions would be expected to influence performance to the extent that the person has behavioral control, and performance should increase with behavioral control to the extent that the person is motivated to try” (p. 183).

**Perceived behavioral control**

It is self evident that the resources and opportunities available to a person must to some extent dictate the likelihood of behavioral achievement. In fact, two concepts are of greater psychological interest than actual control. Those two concepts are: perception of behavioral control and its impact on intention as well as actions. Ajzen (1991) suggested that perceived behavioral control plays an important role in the theory of planned behavior (TPB). The major difference between TRA and TPB is addition of perceived behavioral control in TPB (Ajzen, 1991).

Comparing with other conceptions of control, perceived behavioral control differs significantly from Rotter’s (1966) concept of perceived locus of control. Perceived behavioral control refers to people’s perception of the ease or difficulty of performing the behavior of interest. On the other hand, locus of control is a generalized expectancy that remains stable across situations and forms of action. In contrast to locus of control, perceived behavioral control can vary across situations and actions.
Atkinson (1964) had proposed the perceived control in his theory of achievement motivation. The theory of achievement is the expectancy of success. Ajzen (1991) argued that this view is quite similar to perceived behavioral control in that it refers to a specific behavioral context and not to a generalized situation. He further explained:

The motive to achieve success is defined not as a motive to succeed at a given task but in terms of a general disposition ‘which the individual carries about him from one situation to another’ (Atkinson, 1964, p. 242). This general achievement motivation was assumed to combine multiplicatively with the situational expectancy of success as well as with another situation-specific factor, the ‘incentive value’ of success” (Ajzen, 1991, p. 184).

Currently, the view of perceived behavioral control is most compatible with Bandura’s (1977, 1982) concept of perceived self-efficacy. According to Bandura (1982), the concept of perceived self-efficacy “is concerned with judgments of how well one can execute courses of action required to deal with prospective situations” (p. 122). Ajzen (1991) acknowledged that most of knowledge about the role of perceived behavioral control comes from the systematic research program of Bandura and his associates (Bandura et al. 1977; Bandura et al. 1980). Those researches have showed that people’s behavior is strongly influenced by their confidence in their ability to perform it (i.e., by perceived behavioral control). Self-efficacy can influences choice of activities, preparation for an activity, effort expended during performance, and thought patterns and emotional reactions (Bandura, 1977, 1982). In concluding this, Ajzen (1991) said that the theory of planned behavior places the construct of self-efficacy belief or perceived behavior control within a more general framework of the relations among beliefs,
attitudes, intentions, and behavior. Finally, Ajzen (1985) proposed that: “According to
the theory of planned behavior, perceived behavioral control, together with behavioral
intention, can be used directly to predict” (p. 184).

Predicting intentions

The theory of planned behavior proposes three conceptually independent
determinants of intention. The first one is the attitude toward the behavior. It refers to
the degree to which a person has a favorable or unfavorable assessment or measurement
of the behavior in question. The second one is social factor, the so-called subjective
norm. It refers to the social pressure to whether to perform the behavior or not. The third
precedent of intention is the degree of perceived behavioral control. As we discussed
earlier, the perceived behavioral control refers to the perceived ease or difficulty of
performing the behavior. It is assumed to reflect past experiences as well as anticipated
impediments and obstacles. In short, Azjen (1991) concluded a general rule in the theory
of planned behavior:

As a general rule, the more favorable the attitude and subjective norm with respect to
a behavior, and the greater the perceived behavioral control, the stronger should be an
individual’s intention to perform the behavior under consideration. The relative
importance of attitude, subjective norm, and perceived behavioral control in the
prediction of intention is expected to vary across behaviors and situations. Thus, in
some applications it may be found that only attitudes have a significant impact on
intentions, in others that attitude and perceived behavioral control are sufficient to
account for intentions, and in still others that all three predictors make independent
contributions (p. 188-189).
Trust

In the past, trust has been conceptualized in various ways either theoretically and operationally. Researchers have acknowledged that there is the confusion in the field (Lewis and Weigert, 1985a; McKnight, Cumming, & Chervany, 1998). In his work, Gefen et al. (2003) provided a summary of prior conceptualizations of trust along with the measures used to operationalize the construct (Gefen et al. 2003)(for a comprehensive review, please see D. Gefen, E. Karhanna, & D. W. Straub, 2003).

Antecedents of Trust

According to Gefen et al. (2003), there are a number of trust antecedents. In their article, Gefen et al. (2003) identified the antecedents of trust including knowledge-based trust, institution-based trust, calculative-based trust, cognition-based trust, and personality-based trust. In the subsequent sections, those antecedents of trust based on Gefen’s et al (2003) will be discussed. Since the focus of this section is to explore the antecedents of trust related to consumer’s online shopping behavior, three antecedents of trust i.e. knowledge-based trust, institution-based trust, and calculated-based trust will be focuses in the following section.

Personality-based trust & cognitive-based trust.

According to Gefen et al. (2003), trust is the commodity of many antecedents. A number of researchers (Farris, Senner, & Butterfield, 1973; Mayer, et al., 1995; McKnight, Choudhury, & Kacmar, 2000; McKnight, et al., 1998; Rotter, 1971) have referred personality-based trust as the inclination to believe or not believe in others and so trust them. The assumption of this form of trust is that people are typically well-meaning and reliable (Rosenburg, 1957; Wrightsman, 1991). Gefen et al., (2003)
explained that those beliefs are one kind of trust credit which is given to others before experience can provide a more rational interpretation. In the early stage of a relationship, this disposition is very important (Mayer, et al., 1995; McKnight, et al., 1998; Rotter, 1971; Wrightsman, 1991). Once people interact with the trusted parties, the importance of those dispositions will be lower because people are more influenced by the nature of the interaction itself (McKnight, et al., 1998; Rotter, 1971; Zand, 1972).

Based on Gefen et al., (2003), the research in the field of cognition-based trust proposed a different set of antecedents of trust. Basically, cognition-based trust focuses on how trust is built on initial impressions rather than through personal interaction experiences (Brewer & Silver, 1978; Meyerson, Weick, & Kramer, 1996). In this tradition, trust is formed via categorization and illusions of control. In categorization process, McKnight et al. (1998) suggested that people put more trust in an individual similar to themselves and evaluate trustworthiness based on information from other people and on stereotypes (Morgan & Hunt, 1994; Zucker, 1986). When there is a missing of significant first-hand information, illusions of control can help to describe how trusting beliefs can be over-inflated (Gefen, et al., 2003). Under an uncertain situation, individuals will try to gain some sense of personal control either by assessing a person’s trustworthiness (Langer, 1975) or by observing and attending to cues that might confirm this persons’ trustworthiness (McKnight, et al., 1998). Nevertheless, Davis and Kotteman (1994) indicated that even in the absence of any evidence, the process of observing tends to over-inflate trust beliefs.
Gefen et al. (2003) suggested that familiarity with the E-vendor is the antecedent of knowledge-based trust. The so-called familiarity is experience with the what, who, how, and when of what is happening. Trust and familiarity have the different functionality in the trust developing process. For example, trust can reduce social complexity relating to future activities of the other party. On the other hand, familiarity can lower social uncertainty through increased understanding of what is happening in the present situation (Luhmann, 1979). Supporting this notion, some scholars also mentioned that familiarity is an important antecedent of trust in ongoing business interactions (Kumar, 1996; Kumar, et al., 1995). Generally speaking, familiarity can offset concerns that the other party may be opportunistic, based on a reliance on past joint activities when that did not happen (Gulati, 1995). The antecedent has been referred to as a prediction process by Doney et al. (1998). Doney et al. (1998) argued that trust is created in this process when the trustor’s knowledge about the other party allows it to predict the behavior of the other party. Gefen (2000) explained the familiarity in the context of E-commerce. He suggested that consumer familiarity corresponds to how well consumer comprehends the Web site procedures. Those procedures include when and how to enter credit card information (Gefen, 2000). In other word, trust deals with belief about the e-vendor’s future intentions and behavior (Gefen, 2000).

Why and how familiarity builds trust in developing process? Luhmann (1979) proposed the explanation of this issue. He said that familiarity creates an appropriate context to interpret the behavior of the trusted party (Luhmann, 1979). The notion has been supported by empirical research (Gefen, 2000). According to Gefen (2000),
familiarity with how to use an EC Web site as well as with the e-vendor increases trust in
the e-vendor. Given an example, familiarity can reduce confusion about the EC Web site
procedures, lower the possibility that the consumer may mistakenly sense that he or she is
being taken unfair advantage of (Gefen, 2000). In short, as an important antecedent of
knowledge-based trust, familiarity with the online vendor suggests that the developing
process of trust takes time with the accumulation of trust-relevant knowledge resulting
from experience with the other party (Holmes, 1991; Lewicki & Bunker, 1995).

The antecedents of calculative-based trust.

According to Hosmer (1995), the second type of trust-developing instrument involves
a calculative process. Based on the calculative-based trust paradigm, several scholars
(Buckley & Casson, 1988; Coleman, 1990; Dasgupta, 1988; Lewicki & Bunker, 1995;
Shapiro, Sheppard, & Cheraskin, 1992; Williamson, 1993) have proposed that trust can
be shaped by rational assessments, and those evaluations are related to the costs and
benefits of another party cheating or cooperating in the relationship. Based on this view
of point, trust is derived from an economic analysis happening in ongoing relationships.
It means that it is not worthwhile for the other party to perform opportunistic behavior
(Doney, et al., 1998; Williamson, 1985). Based on economic principle, people will
evaluate the costs of being caught and the benefits of cheating. Normally, trust will be
warranted if people think the cost of being caught outweighs the benefits because
cheating is not in the best interest of the other party (Akelof, 1970). According to this
paradigm, Gefen et al. (2003) argued that the trusted party has gained nothing from not
being trustworthy builds trust. The assumption underlying this approach to trust is that
while other people may not be necessarily good, they are rational, calculative, act in their
own best interest, and they will refrain from inflicting harm upon themselves (Gefen, et al., 2003). Therefore, Shapiro et al. (1992) concluded that calculative trust is deterrence-based in that individuals will not engage in opportunist behavior out of fear of facing the adverse consequences of being untrustworthy (Shapiro, et al., 1992). In relation to e-commerce, a consumer will expect to trust an e-supplier more when he or she has some beliefs in his or her mind. Those beliefs are either the customer believes that the e-vendor has more to lose than to gain by cheating or the e-vendor has nothing to gain by deteriorating consumer trust (Gefen, et al., 2003).

The antecedents of institution-based trust.

Gefen et al. (2003) proposed that institution-based trust is another trust-developing process which may be applicable in the e-commerce environment. According to Shapiro (1987) and Zucker (1986), the institution-based trust refers to one’s sense of security from guarantees, safety nets, or other impersonal structures inherent in a specific context. In the literature, there are two types of institution-based trust. One is situational normality, and the other one is structural assurances (McKnight, et al., 1998).

According to several researchers (Baier, 1986; Lewis & Weigert, 1985b), situational normality refers to a measurement that the business transaction will be a success, based on how normal or customary the situation appears to be. In other word, this normality makes people feel that everything in the setting is as it ought to be, and there is a shared understanding of what is happening (McKnight, et al., 1998; Zucker, 1986). For example, a store should look like a store, and a salesman should looks like a salesman; otherwise, the store that doesn’t look that way will damage customer trust (McKnight, et al., 1998). McKnight et al. (1998) explained that people tend to extend greater trust when the nature
of the interaction is in accordance with what they consider to be typical as well as anticipated. Sociologists such as Luhmann (1979) and Blau (1964) also agreed with the notion above, and they viewed the trust as the product of fulfilled expectations. In the e-commerce environment, consumers view an EC web site based on their experience and knowledge of similar Web sites. If a web site looks like similar web sites, customers will be more inclined to trust the e-vendor. In contrast, if a web site has a suspicious characteristic, consumer will be more inclined not to trust this e-vendor. Unlike familiarity, situational normality is not related to knowledge with that particular vendor, it involves the extent that the interaction with that vendor is normal compared with other similar sites.

Structural assurances or structural safeguards mean a measurement of success resulting from safety sites such as legal resource, guarantees, and regulations that exist in a certain context (McKnight, et al., 1998; Shapiro, 1987; Zucker, 1986). According to Gefen (1997), those structural assurances such as BBBOnline Reliability seal, the TRUSTe seal of eTrust, or one toll free number should build trust. Because of those structural assurances on the Web, consumers may feel safe about security with the Web site. Thus, trust will emanate from the safe feeling brought by those structural safeguards. Gefen (1997) argued that empirical research shows that adding a structural assurance to a Web site will increase trust in that Web site. Zucker (1986) asserted that thirty-party certifications should build trust online just as they do in other commerce activities without any doubt.
The importance of trust in e-commerce

Trust in online transaction is vital to the success of e-commerce. Previous researches (Jarvenpaa & Tractinsky, 1999; Reichheld & Scheffler, 2000; Rose, Khoo, & Straub, 1999) have pointed out the lack of online customer trust was the main barrier of consumer participation in e-commerce. Because consumers are unlikely to buy from strange web stores on account of worries, trust has become an important factor in business-to-customer electronic commerce. According to Steinfield (2004), the main concern that consumers have is how the Internet companies use their private information collected during the online transaction process. Currently, the past researches can be classified into several fields. For example, Jarvenpaa et al. (2000), Kim et al. (2003), and Kim et al. (2004) empirically examined the effect of trust on purchase behavior. Fishbein and Ajzen (1975), Gefen (2000), and Gefen (2002) studied antecedents of trust i.e. familiarity and disposition to trust, and McKnight and Chervany (2002) and McKnight et al. (2002) clarified the definition of trust in e-commerce.

Comparing with conventional shopping process, making a transaction with online vendors is considered an uncertain and risky situation. There is little chance for consumer to verify the quality of goods on their own. Also, it is difficult to test goods through interaction with the Web vendor. When customers make a purchase from a strange web store, they are unable to judge the quality, and they don’t know whether the service is reliable and legitimate or not. According to Grabner-Kraeuter (2002), two types of uncertainty exist in e-commerce. One is system-dependent uncertainty, and the other one is transaction-specific uncertainty. System-dependent uncertainty is caused by functional defects or security problems in the technical system. On the other hand,
transaction-specific uncertainty can be demonstrated by an asymmetry in information between the transaction partners (Grabner-Kraeuter, 2002).

In the past, studies have shown that trust is the most significant factor in explaining the process of e-commerce (Doney, et al., 1998; Gefen, 2002b; Mayer, et al., 1995). Gefen (2002c) and Hart et al. (1997) viewed trust as the most effective uncertainty reduction method. In fact, trust plays a critical role in purchasing processes where consumers especially look for credential qualities of goods or services. Trust is one of the determinants that influence how risk is perceived and evaluated by the individual. In the context of e-commerce, some scholars suggested that perceived risk is a function of trust between a buyer and a seller (Kimery & McCord, 2002). The degree of risk inherent in a particular e-commerce environment is offset by the degree to which trust is maintained by one party. As a matter of fact, the functions of trust are to reduce perceptions of risk.

According to Schurr and Ozanne (1985), trust is been defined as the belief that a party’s word or promise is reliable and that a party will fulfill his/her obligation in an exchange relationship. Fishbein and Ajzen (1975) explained the belief as “Whereas attitude refers to a person’s favorable or unfavorable evaluation of an object, beliefs represent the information he has about the object” (p. 12). It is no doubt that this belief leads to behavioral intentions (Fishbein & Ajzen, 1975). In the past, several authors have defined the trust differently. For example, Mayer et al. (1995) defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the truster, irrespective of the ability to monitor or control that other party” (p. 712). McKnight et al.
(2002) defined trust to mean that one believes in, and is willing to depend on, another party. Further, Gefen (2002a) suggested that trust is based on previous interaction though a supplier’s previous behavior cannot guarantee that the supplier will act as expected.

McKnight and Chervany (2002) is the first one to define trust-building process in the context of e-commerce. They classified the definition of trust into four stages i.e. disposition to trust, institution-based trust, trusting belief, and trusting intention. Then, they approached the trust-building process by integrating trust-related constructs within the framework of the theory of reasoned action (TRA) (Gefen, 2002b).

There has been a debate about how the dimensionality of consumer trust should be understood. Some researchers viewed consumer trust as a single dimensional construct (Jarvenpaa & Tractinsky, 1999). However, Gefen (2000) is against this approach. Gefen (2000) argued that trust should be understood as a multi-dimensional construct in e-commerce; thus, it showed the different sub-constructs of trust. Conceptually, he demonstrated trust in two ways. One way approaches trust as a set of specific beliefs about the specific party that is built on integrity, benevolence, and ability. The other approaches trust as “a general belief” that a specific party is reliable because it has ability, integrity, and benevolence (Gefen, 2000).

According to Kim and Kim (2005), the willingness of the buyers to provide their credit card number or other personal information will depend on their assessment of the trustworthiness of the online vendor (Kim and Kim, 2005). Gefen (2000) and Mayer et al. (1995) suggested that trust is the result of a set of trustworthiness beliefs (Gefen, 2000; Mayer, et al., 1995). Therefore, it is clear that trustworthiness beliefs (ability, benevolence, and integrity) can be influenced by the individual’s judgment.
The Theories Related to Effectiveness of IS Design

The Concept of Store Image

As widely cited (Arons, 1961; Kukel & Berry, 1968; Lindquist, 1974; Walters, 1978), the common definitions of retail store image are based on consumer perceptions of various store characteristics. The term of store image can be traced to Martineau (1958). In his article, Martineau (1958) described a store’s personality as “…the way in which the store is defined in the shopper’s mind, partly by its functional qualities and partly by an aura of psychological attributes” (pp. 51-52). Also, there are four important factors related to store image: (1) layout & architecture, (2) symbols & color, (3) advertising, and (4) sales personnel (Martineau, 1958). Later on, Oxenfeldt (1974) explained the function of image as a whole. He suggested: as an overall impression, image represents interaction among characteristics and includes extraneous elements. Also, it has some emotional content, i.e. a combination of factual and emotional material (Oxendeldt, 1974).

In 1985, Dichter further reinforced the idea that “image” refers to a global or overall impression. Dichter explained the reality of image that images describe not individual traits or qualities but the total impression an entity makes on the minds of others. Image is not anchored in objective data but the configuration of the whole field of the object (Dichter, 1985). In short, image is comprised of distinct dimensions; also, it is greater than the sum of its parts.

Evidently, store image is an important input in the consumer decision making process (Nevin & Houston, 1980). Nevin and Houston suggested that: “Image, especially the assortment dimension, was found to exhibit a strong influence on consumers’ level of liking for a shopping area” (p.91). Also, store image encompasses various characteristics.
Those characteristics include physical environment of the store, service level, and merchandise quality (Baker, Grewal, & Parasuraman, 1994; Zimmer & Golden, 1988).

However, in e-commerce environment, the characteristics of an e-store (E-Commerce web site) image are quite different from that of a retail store (Jahng et al., 2000). In related to the measures of information system (IS) effectiveness, DeLone and McLean (1992) identify six categories into which these measures can be grouped: system quality, information quality, use, user satisfaction, individual impact, and organization impact. However, the basis of the DeLone and McLean categorization can be traced back to Shannon and Weaver’s (1949) theory of communication. Therefore, the theory of communication will be discussed in the next section.

Theory of Communication

According to communication theory, a communication system generally contain several variables (Shannon & Weaver, 1949). Those variables contain (1) an information source, (2) semantic noise, (3) a transmitter, (4) a communication channel with its noise, (5) a receiver, (6) a semantic filter, and (7) a destination (see Figure 4). Based on Borden (1963), an explanation of each variable as it applies to the communication between human beings is shown in Figure 4 and discussed in subsequent paragraphs:
1. Information Source: The information source is where the communication process begins. It is here that a stimulus is transformed into a mental symbol. This stimulus may be any number of things originating either within or outside the individual who initiates the communication, a work spoken by another, a thought, etc. The information source essentially represents a transformation from one reference system to another, i.e. from stimulus to mental symbol.

2. Semantic Noise: Semantic noise is the unintentional distortion in meaning introduced by the information source. All of the articulatory, grammatical and semantic errors are included in this category. Semantic noise is closely identified with the information source. Since it is a part of the message that the transmitter sends out, it generally stems from the original transformation of stimuli into mental symbols.
3. Transmitter: The transmitter changes the mental symbols into signals which the communication channel can carry to the receiver. These signals may be words, motions, sounds, etc., but must be something that can be received by the receiver if communication is to be established. This stage in communication is another essential transformation which occurs within the individual. It transforms bits of information from one reference system to another, i.e., from mental symbols to perceivable symbols. In the case of the spoken word the transmitter is our voice.

4. Communication Channel and Noise: The channel is the means by which the message is carried from the transmitter to the receiver. In the case of the spoken word the channel is the air which carries the sound vibrations created by the vocal mechanism. It is not necessarily a transformation, although many transformations may occur within it, but a process that may permit outside noise to be amalgamated with the communication signal, distorting the message received by the receiver.

5. Receiver: The receiver is the mechanism which receives the message and transforms it into the mental symbols received by the semantic receiver. This transformation, which occurs within an individual, changes the message received from one reference to another.

6. Semantic Receiver: The semantic receiver is the mechanism within the human being which filters out the semantic noise which may be present in the message received. The semantic receiver is an integral part of the destination. It is not a transformation in itself, but a compensation in the destination transformation for the distortions introduced into the message by the semantic noise of the source.
7. Destination: The destination represents the final transformation that changes the mental symbols back into stimuli which individuals recognize as meaning. If this is to be the meaning intended by the source, the transformation must be the inverse of the transformation that occurred in the source. The stimuli that result from this transformation would ordinarily cause some reaction on the part of the receiving party (Borden, 1963, p. 87-89).

The seven steps above briefly explain the simplified schematic of the communication process and the theory of communication. The basic process in communication involves the construction of a message by a source and the transmission of that message along some channel to a receiver. Feedback loops typically extend from the receiver back to the source, providing the basic mechanism for adjustment. The process of communication can become very complex. Actions of each party to the process are affected by the operating environment, by perception of role, by the level of training, and may other factors. Communication processes are continuous, dynamic, and always subject to pressures for change. Roles are reversible as the receiver acts as a source and vice versa—especially when time is available (for a comprehensive review, please see Shannon & Weaver, 1949). In fact, the theory of communication has become the theoretical foundation of modern researches (DeLone & McLean, 1992; Pitt, Watson, & Kavan, 1995) related to measures of the effectiveness of IS design. Among those, the notable example is DeLone and McLean’s (1992) six categorizations of measures of IS effectiveness.
Consumer Information Search Theory

Normally, the outcomes of an exchange are uncertain for consumers. Therefore, consumers want to manage their risk in exchanges in the trading process. In the consumer’s perspective, perceived risk is a variable which is often used to explain the risk perception and risk deduction method. Based on their works, decision theorists defined risk as the situation where a decision maker has a priori knowledge of both consequences of alternatives and their probabilities of occurrence.

According to Bauer, perceived risk has been defined to have a two dimensional structures (Bauer, 1960). One is uncertainty, and the other one is adverse consequences. In the past, the uncertainty dimension has been used in many research studies (Arndt, 1968; Gronhaug, 1975; Herman & Locander, 1977; Schiffman, 1972; Shimp & Bearden, 1982; Toh & Heeren, 1982). Also, some researchers have defined uncertainty in terms of an individual’s probabilistic beliefs (Peter & Tarpey, 1975). However, Bauer has not explicitly defined the adverse consequences dimension of perceived risk in his work. Thereby, several researchers (Cox & Rich, 1964) interpreted adverse consequences to mean “the amount at stake in a buying situation is determine by ...the costs...involved in attempting to achieve a particular set of buying goals” (p. 33). Later on, Taylor (1974) defined adverse consequences as “importance of loss” (p. 57). Finally, Bloch and Richins (1983) have replaced the adverse consequences component with a concept called “instrumental importance.” Besides those two dimensions of perceived risk, researchers have proposed that the concept relates to various types of loss. Those losses include performance, social, physical, financial, psychological, psychosocial, time, frustration,
and so on (Dowling, 1986). Nevertheless, Dowling concluded that little consensus regarding the precise nature of perceived risk has been reached (Dowling, 1986).

In the past, several scholars have argued that service purchases are more uncertain than the purchases of good/products (Guseman, 1981). Mitra, Reiss, and Capella, (1999) suggested "As all services fall along a continuum from search based to credence based, the difficulty of obtaining pre-purchase information and knowledge increase as one moves from search-based to credence-based services" (p. 211). Information search is a common method implemented by the consumer. The marketing literatures have suggested that perceived risk and information search are positively related (Murray, 1991; Newman, 1977). As a matter of fact, risk can be reduced through several approaches. For example, the risk can be reduced through increased brand loyalty (Bauer, 1967; Lutz & Reilly, 1973) or by seeking additional information about the product or service (Crocker, 1986; Davis, Guiltinan, & Jones, 1979; Eigler and Langeard, 1977; Hugstad, Taylor, & Bruce, 1987; Lutz and Reilly, 1973; Zeithaml, 1981).

When a consumer is aware of an unmet need, the consumer will be motivated to gather information concerning a way to satisfy the need. Information search helps consumers become aware of competing brands or products and their features. According to Beatty and Smith (1987), with high involvement, the consumer is likely to conduct a more active information search. In a state of high involvement, the consumer may be more willing to seek out detailed information from private or public sources well as opportunities to acquire information through product/service trial experience. There is no doubt that the Internet is a powerful tool for consumer information search. For a long time, marketers have been interested in the relationship between consumers' use of the
Internet for information search and their choice of channel for the final purchase. Klein (1998) argued that search processes of interactive consumer models are critical predictors of Internet consumer behavior.

In his Interaction Model, Klein (1998) analyzed consumer search behavior. He suggested that consumer information search employs a goods classification model based on the principles of information economics (Klein, 1998). According to information economics, consumers analyze the relative costs and benefits of an additional search. In fact, this model adopts Stigler’s (1961) framework. In Stigler’s model, search behavior is expected to cease when consumers perceive that marginal costs of a subsequent search exceed those of benefits. Typically, search costs include perceived time, travel, and access to media as well as monetary factors. On the other hand, benefits of search are comprised of extent and duration of search and the nature of search sources (e.g., types and numbers of information sources). Klein (1998) further suggested that information search facilities on the Internet are particularly useful for search goods because the low perceived cost of providing and assessing objective data. This notion has been supported by other scholars (Liang & Huang, 1998). Based on Liang and Huang (1998), consumers are likely to conduct transaction costs such as those related to searching for product information, receiving post-sales services, and so on. They reported that search goods requiring limited direct examination were perceived to have lower acquisition costs on the Internet than experience goods. Online shopping is a new mode of shopping, and it involves various and novel types of perceived risks (Eastlick, 1996). The consumer is likely to place added importance on search for information when using the e-channel.
According to Jahng et al. (2000), EC system (B2C Web site design) is one kind of information system. Recently, a number of studies have addressed the design of Web-based E-Commerce application systems and identified many different design features. Liu et al (2000) identifies some of key design factors of EC web sites. Those key design factors include information quality, service quality, playfulness, system design quality, and system use. In his article, he found that a well-designed web site leads to better customer recall and recognition, and a favorable attitude toward the site and the products.

Basically, the design of a website store is related to both information systems and marketing. Therefore, relevant literature from both areas is applicable for a research framework in this study. Liu et al. (2000) concluded that a well design e-commerce site will be positively related to factors such as information quality, learning capability, playfulness, system use, and service quality. However, DeLone and McLean (1992) is the pioneer to identify six categorizations of measures of IS success.

In the past, there are as many measures of IS success as there are studies. Delone and McLean (1992) argued the reason for this phenomenon. They said: “The reason for this is understandable when one considers that ‘information,’ as output of an information system or the message in a communication system, can be measured at different levels, including the technical level, the semantic level, and the effectiveness level” (p. 61). In their pioneering work on communication, Shannon and Weaver (1949) proposed the definition of three different levels. They defined technical level as accuracy and efficiency of the system which produces the information, semantic level as the success of
the information in conveying the intended meaning, and the effectiveness level as the
effect of information on the receiver (Shannon & Weaver, 1949).

Based on communication theory, Mason (1978) changed the name of “effectiveness”
to “influence”, and defined the influence level of information to be a “hierarchy of events
which take place at the receiving end of an information system which may be used to
identify the various approaches that might be used to measure output at the influence
level” (Mason 1978, p. 227). According to Mason (1978), the series of influence events
includes the receipt of the information, an evaluation of the information, and the
application of the information, leading to a change in recipient behavior and a change in
system performance.

In communication theory, the concept of levels of output demonstrates the serial
nature of information i.e. a form of communication. The information system creates
information which is communicated to the recipient. Then, it is possible that the recipient
is influenced by information. Based on the concept above, information flows through a
series of stages from its production through its use or consumption to its influence on
individual and/or organizational performance. Mason’s approach suggested there may a
need to have separate success measures for each of the levels of information (Mason,
1978).
In Figure 3, the three levels of information of Shannon and Weaver are shown, combining with Mason’s expansion of the effectiveness or influence level, to provide six distinct categories or aspects of information system. Those six categories include system quality, information quality, use, user satisfaction, individual impact, and organizational impact. In this research, we focus on the factors that affect consumer’s purchase intention of travel product(s) online. Some scholars argued that we need to evaluate the effectiveness of EC web site design from consumer’s perspective (Kim and Lim, 2001; Liu, et al., 2000). Based on their research, system quality, information quality, and service quality played an important role in consumers’ satisfaction with Internet shopping. Therefore, these three factors we will be focus in the following section.

<table>
<thead>
<tr>
<th>Categories of I/S Success</th>
<th>System Quality</th>
<th>Information Quality</th>
<th>Use</th>
<th>User Satisfaction</th>
<th>Individual Impact</th>
<th>Organizational Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shannon &amp; Weaver (1949)</td>
<td>Technical Level Production</td>
<td>Semantic Level Production</td>
<td>Effectiveness or Influence Level Receipt on Recipient</td>
<td>Influence on System</td>
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<td></td>
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</tbody>
</table>

Figure 3. Categories of I/S Success.

In evaluating the contribution of information systems to the organization, some researchers have focused on the processing itself. For example, Kriebel and Raviv (1980) created and tested a productivity model for computer systems. Those computer systems include performance measures such as resource utilization and investment utilization (Kriebel, 1979). Also, Alloway (1980) has developed 26 criteria for measuring the success of data processing operation. The efficiency of hardware utilization was one of those system success criteria.

On the other hand, several authors have developed multiple measures of system quality. Swanson (1974) used several items to measure MIS appreciation among user managers. Basically, the items in his study (Swanson, 1974) included the reliability of the computer system, online response time, the ease of terminal use, and so on. Emery (1971) suggested that several system characteristics should be considered in the measure of system quality. Those system characteristics include the content of the data base, aggregation of details, human factors, response time, and system accuracy (Emery, 1971). Hamilton and Chervany (1981) suggested data currency, response time, turnaround time, data accuracy, reliability, completeness, system flexibility, and ease of use among others as part of a “formative evaluation” scheme to measure system quality.

However, DeLone and McLean (1992) concluded that: “system quality and information quality singularly and jointly affect both use and user satisfaction related to information system” (p. 83). Therefore, we will explore the concept of information quality in the next section.
In the past, various studies have employed different measures of success for information systems. Those measures include user satisfaction (Amoako & White, 1993; Ives et al., 1983; Raymond, 1985), business profitability (Barua, Kriebel, & Mukhopadhyay, 1995; Mukhopadhyay, Kekre, & Kalathur, 1995), improved decision quality and performance (Martin, 1982; Pearson and Shim, 1994; Rivard and Kaiser, 1989; Wilson, 1998), perceived benefits of information systems (Davis, 1989; DeLone & McLean, 1992; King & Teo, 1996; Purvis & Sambamurthy, 1997), and the level of system usage (DeLone, 1988). All the studies above emphasized one important point i.e. information quality provided by a system cannot be ignored.

User information satisfaction (UIS) is one evaluation mechanism. According to Ives et al. (1983), UIS is defined as the extent to which users believe the information system available to them meets their information requirement. In fact, UIS provides a useful measure of an information system. By applying the behavioral theory of the firm, Cyert and March (1963) proposed the concept of UIS.

Primarily, the theory of the firm is a theory of market. It purports to explain at general level the way resources are allocated by a price system (Cyert & March, 1963). In other word, the theory of firm is one kind of economic theory. In their book, Cyert and March (1963) introduced the theory of firm in this way:

Assuming that the firm is operating within a perfectly competitive market, the generally received theory asserts that the objective of the firm is to maximize net revenue in the face of given prices and a technologically determined product function. Net revenue (profits, or expected profits) is the difference between receipts and the
sum of fixed and variable costs. The production function is a relation between factors of production and their corresponding outputs determined by physical conditions within the firm. Maximization of profit is accomplished by determining the optimal mix of outputs (products) and inputs (factors), i.e., the equilibrium position (p. 5-6).

In relation to UIS, Cyert and March (1963) suggested that an information system which meets the need of its user will reinforce satisfaction with that system. In contrast, if the system does not provide the needed information, the user will become dissatisfied; then, look somewhere else.

Although some researchers would like to evaluate the effectiveness of an information system based on its degree of use in decision making and the resulting productivity benefits, this approach is not feasible (Nolan & Seward, 1974). Ives et al. (1983) suggested that “satisfaction of users with their information systems is a potentially measurable, and generally acceptable, surrogate for utility in decision making” (p. 785).

Basically, UIS is kind of perceptual or subjective measure of system success. When those objective determinants of information system effectiveness are not available, it can be used as a substitute (Ives et al., 1983). Based on economy theory, the determination of information system value can be obtained in the following approach. We can get the net value of the system to the organization by subtracting the costs of system operations and development from the actual benefits (e.g., improved organizational effectiveness). However, Ives et al. (1983) argued that it is not a simple determination because of following rationales. First of all, intangible costs and benefits of information systems are difficult to recognize and to convert to their monetary equivalent. Next, some decision support systems are used for disparate, relatively unstructured decisions. In other word, it
is nearly impossible to objectively assess the benefits of such systems. Then, firms may be able to determine data on system success. However, those data are not recorded by the firm; therefore, those data are unavailable for research uses.

Under certain conditions, system usage can be a surrogate indicator of system success. Those conditions include: reliable system and accurate data. Other than its objective utility in decision making, there are some motivations for using the system. For example, a mandate from management, political motivation, self-protection for justifying poor decision can be appropriate motivations of using the system. Ives et al. claimed that UIS can be more than a substitute for an objective measure of system success. UIS measures how users view their information system rather than the technical quality of the system. In other words, the success of a system is decided by the users rather than technical quality.

_Service quality._

Pitt et al. (1995) argued that the basis of the DeLone and McLean categorization is product oriented. In DeLone and McLean’s (1992) categorization, system quality describes measures of the information processing system. Most measures in this category focus on engineering-oriented performance characteristics. Information quality is comprised of measures of information system output. Typically, those measures include accuracy, precision, currency, timeliness, and reliability of information provided. Based on communication theory, the categories in the past studies are all labeled as production and product respectively (Mason, 1978). Therefore, Pitt et al. (1992) concluded that existing measures seem strongly product focused, and there is a gap of measuring IS service quality.
Service quality is the final result of a combination of factors, and all of which have a potential for a frequent and high degree of variability (Langer, 1997). For example, services are intangible, unique performances and outcomes by customer-contact personnel. All involved individuals’ unique expectations and perceptions will affect the process. According to Langer (1997), the theoretical construct of service quality, similar to service, is a dynamic, multidimensional and unique form of judgment by individuals that can change at any time.

Service quality is the most researched area of service marketing (Fisk, Brown, & Bitner, 1993). Conducted by Parasuraman, Zeithaml, & Berry (1985), the concept was investigated in an extensive series of focus group interviews. They concluded that service quality is founded on a comparison between what the customers feels should be offered and what is provided (Parasuraman, et al., 1985). The notion that service quality is the discrepancy between customers’ perceptions and expectations, is also support by other researchers (Gronroos, 1982; Sasser, Olsen, & Wychoff, 1978). Similar support can be found in IS literature. Conrath and Mignen (1990) reported that the second most important component of user satisfaction, after the general quality of service, is the match between users’ expectations and actual IS service. Rushinek and Rushinek (1986) conclude that fulfilled user expectations have a strong effect on overall satisfaction.

Pitt, et al., (1995) have suggested that users’ expressions of what they want are revealed by their expectations and their perceptions of what they think they are getting. Also, Parasuraman and his colleagues (Parasuraman, et al., 1991; Parasuraman, Zeithaml, & Berry, 1985, 1988; Zeithaml, Parasuraman, & Berry, 1990) have suggested that service quality can be evaluated by measuring customers’ expectations and perceptions of
performance levels for a range of service attributes. Then the difference between expectations and perceptions of actual performance can be calculated and averaged across attributes. In short, the gap between expectations and perceptions can be measured.

As suggested by Zeithaml, et al. (1990), the primary determinants of service quality include word-of-mouth communication, personal needs, past experiences, and communications by the service provider to the user. Users like to share ideas with each other, and exchange stories about their experience with service providers. These conversations are a critical factor affecting users' expectations of service.

Parasuraman et al. (1988) operationalized their conceptual model of service quality by following the framework of Churchill (1979) for developing measures of marketing constructs. At first, they started it by using a lot of focus group interviews. Then, they identified 10 potentially overlapping dimensions of service quality. Using those dimensions, they generated 97 items. Each item was turned into two statements. One is to measure expectations, and the other one is to measure perceptions. The 97 items instrument was then purified and condensed by first focusing on the questions clearly discriminating between respondents having different perceptions, and second, by focusing on the dimensionality of the scale and establishing the reliability of its components.

Eventually, Parasuraman et al. (1988) created a 45-item instrument i.e. SERVQUAL. SERVQUAL is used to evaluate customer expectations and perceptions of service quality in service and retailing organizations. Basically, the instrument contains three parts. Each part consists of 22 questions but focused on different perspectives. The first part is
used to measure expectations. The second part is to measure perceptions. The final part
is to evaluate overall service quality. There are five dimensions underlying the 22 items.
Parasuraman, et al. (1988) claimed that customers use those five dimensions to assess
service quality regardless of the type of service. Those five dimensions are:

1. Tangibles: Physical facilities, equipment, and appearance of personnel.
2. Reliability: Ability to perform the promised service dependably and accurately.
3. Responsiveness: Willingness to help customers and provide prompt service.
4. Assurance: Knowledge and courtesy of employees and their ability to inspire trust
   and confidence.
5. Empathy: Caring, individualized attention the service provider gives its customer.

Each dimension is captured by a difference score G. The formula is: \( G = P - E \) (Murray, 1991), where P and E are the average ratings of a dimension’s corresponding
perception and expectation statements separately. Since service quality is an important
topic in the marketing. SERVQUAL has been subject to considerable debates (Brown,
Churchill, & Peter, 1993; Parasuraman, Berry, & Zeithaml, 1993) in relation to its
dimensionality and the wording of items (Fisk, et al., 1993). Anyhow, Fisk et al.
concluded that researchers generally agree that the instrument is a good predictor of
overall service quality (Fisk, et al., 1993).

Hypothesized Model

Based on the Theory of Planned Behavior (TPB), Shim et al. (2001) first proposed an
Online Pre-purchase intentions Model (see Figure 4). In this model, the focus of this
research is to determine whether intent to search the Internet for product information is a key element for marketing researchers to employ in predicting consumers’ Internet purchasing intention. Shim et al. (2001) made the restriction on the category of search product. They included five categories of shopping goods i.e. videos, apparel, books, computer software, and clothing accessories for each subject’s assessment. However, they didn’t include the travel product(s) in neither search product category nor shopping goods category. According to the final result, they found that intention to use the Internet for information search was not only the strongest predictor but also mediated relationships between other predictors. The finding of this research is consistent with the Theory of Planned Behavior (Ajzen, 1985, 1991) that predicts that attitudes are determinants of behavioral intentions.
In this research, the focus is not only to examine the factors affecting consumer’s online purchase intention but also test it in the context of the hospitality industry. Therefore, we adapt parts of Shim’s model: the effect of attitude toward online shopping and effect of the Internet purchase experience. The reasoning underlying this decision is...
that we want to isolate and analyze the effects of these three predictors (Shadish, Cook, & Cambell, 2002). Then, we integrate two new constructs i.e. quality of EC web site design and consumer trust. A number of empirical studies have supported that there is the positive relationships between these two new factors and consumer online purchase intention (Gefen, 2000, 2002; Gefen, et al., 2003; Jahng, et al., 2000; Kim and Lim, 2001; Koivumaki, 2001; Liu, et al., 2000). Combining parts of Shim’s model with two new constructs, we develop a new model. Finally, we will test the model in the context of the hospitality industry.

Basically, there are a number of perceptional and technical determinants that may have influences on consumer online purchase intention. Typically, the perceptional factors include attitude toward online shopping, previous purchase experience, and consumer trust (Gefen, 2000, 2002b; Gefen, et al., 2003; Shim, et al., 2001). On the other hand, perceptions about the effectiveness of E-Commerce store design may also have influence on consumer online purchase intention. In consumer’s perspective, these such technical factors related to design of a B2C website as information quality, system quality (DeLone & McLean, 1992), and service quality (Pitt, et al., 1995) may have influences on consumer’s online purchase intention. Based on discussion above, a hypothesized model (see Figure 5) and a number of hypotheses have been proposed, and presented in Table 2.
Figure 5. The Framework of Proposed Model.

Note. The dotted lines show the new links/augmentation to Shim’s model. The proposed model of this research adopted two constructs from Shim, et al., 2001 model.
**Proposed Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Quality of EC Web site design has a positive effect on attitude toward online shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Quality of EC Web site design has a positive effect on consumer trust</td>
</tr>
<tr>
<td>H1b</td>
<td>Quality of EC Web site design has a positive effect on consumer’s online purchase intention</td>
</tr>
<tr>
<td>H1c</td>
<td>Quality of EC Web site design has a positive effect on purchase experience</td>
</tr>
<tr>
<td>H1d</td>
<td>Attitude toward online shopping has a positive effect on consumer’s online purchase intention</td>
</tr>
<tr>
<td>H2</td>
<td>Customer trust has a positive effect on consumer’s purchase online intention</td>
</tr>
<tr>
<td>H3</td>
<td>Purchase experience has a positive effect on consumer’s online purchase intention</td>
</tr>
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<td>H4</td>
<td></td>
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</tbody>
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**Shim’s Hypotheses**

Based on the model of online pre-purchase intentions model, Shim et al. (2001) have proposed the following hypotheses. The theoretical foundation of Shim’s model (2001) is building on theory of planned behavior (TPB). In the last section, we have presented the detail about the theory of planned behavior (TPB). Therefore, we will not present
much details about reasoning of each hypothesis (for a comprehensive review, please see Shim’s et al., 2001). We will briefly discuss each one of Shim’s hypothesis.

According to Shim et al. (2001), attitude toward online shopping has a positive effect on intention to use the Internet for information search. On the other hand, attitude toward online shopping has a positive effect on consumer purchase intention. Therefore, we postulate the same hypothesis but test it in the context of hospitality industry.

H2: Attitude toward online shopping has a positive effect on consumer purchase intention.

Following the same reasoning in Shim’s model, purchase experience has a positive effect on both information search intention and purchase intentions. That hypothesis is:

H4: Purchase experience has a positive effect on consumer’s online purchase intention.

Augmented Hypotheses

Quality of EC-Web site refers to effectiveness of EC-Web site design from users’ perspective (DeLone & McLean, 1992). In the past, various researchers (DeLone, 1988; DeLone & McLean, 1992; Jahng, et al., 2000; Koivumaki, 2001; Liu, et al., 2000; Njite & Parsa, 2005) have proposed different measures of assessing the effectiveness of EC-Web site design. However, the characteristics related to information quality, service quality, and system quality are very important in consumers’ perspective, and those characteristics will affect consumers’ attitude toward online shopping (Liu, et al., 2000).

According to Liu et al. (2000), a good EC-Web site design will attract consumers and elicit purchase transactions from them. White and Manning (1997) also found a similar relationship between the navigational features of a Web shop and the likelihood of a
potential purchase. Turban et al. (2000) suggested a possible relationship between Web store designs and navigational experience (Turban, et al., 2000). In Turban’s model, he also suggested there is a positive relationship between EC-Web site design and consumer trust. On the other hand, Koivumaki (2001) used several alternative variables to describe the navigational experience and interface characteristics in a Web-based grocery shop. Based on the result, it showed there is a significant positive correlation between the shopping experience and enhanced navigational features (Koivumaki, 2001). From reasoning and theory above, we postulate the following hypothesis:

H1a: Quality of EC Web site design has a positive effect on consumer’s attitude toward online shopping of travel products.

H1b: Quality of EC Web site design has a positive effect on consumer trust.

H1c: Quality of EC Web site design has a positive effect on consumer’s online purchase intention.

H1d: Quality of EC Web site design has a positive effect on purchase experience.

Generally speaking, people do not need to invest resources in monitoring and in maintaining complex legal contracts to gain their fair share in a trusting relationship (Fukuyama, 1995; Kumar, 1996). According to Korsgaard et al. (1995) and Kumar (1996), trusting relationship also provide a measure of indirect control and of assurance that the outcome will be fair to all of involved parties (Korsgaard, et al., 1995; Kumar, 1996). All involved parties will keep the relationship for a long run (Fukuyama, 1995). In addition to that, Williamson (1985) suggested that all parties will refrain from taking unfair or opportunistic advantage. In short, Kumar (1996) concluded that trust creates a “reservoir of goodwill” (p. 97). For an E-vendor, the benefits of trusting relationship are...
that consumers are more willing to pay higher price for the benefits of purchasing from a vendor’s Web site (Reichheld & Schechter, 2000). Although the marginal benefits with one-time purchase may be small, it is only by believing that the e-vendor will behave with integrity, caring, and acceptable ability that consumers can rule out socially unacceptable yet conceivable behavior on the part of the e-vendor” (Gefen et al., 2003, p.62).

According to Gefen, et al. (2003), “only with an e-vendor who can be trusted will the consumer be able to successfully accomplish their tasks on the Web site, i.e. search for product information, and place an order” (p. 62). This notion has been supported by numerous authors (Liu, et al., 2000; McCole, 2002; Njite and Parsa, 2005). Based on reasoning and theory above, we postulate one hypothesis: In the hospitality industry, consumer trust will have a positive effect on consumer’s online purchase intention of travel product(s).

H3: Customer trust has a positive effect on consumer’s purchase online intention.
CHAPTER 3

METHODOLOGY

The original research questions that led development of framework in chapter 2 are presented here again for purpose of review. Those research questions are as follow:

1. What is the relationship between consumer’s online purchase intention and its antecedents?
2. Is there any relationship between consumer trust and quality of EC-Web site design?
3. Does EC-Web site design have an impact on purchase experience and attitude toward online shopping?
4. Do the empirical linkages between the attitude toward online shopping and consumer’s online purchase intention found in Shim, Eastlick, Lotz, and Warrington (2001) model hold up in the context of the hospitality industry?
5. Is the impact of quality of EC-Web site design on consumer purchase intention been mediated by consumer trust, purchase experience, and attitude toward online shopping?

In order to answer the above questions, underlying theories such as behavioral theories, communication theory, and the theory related to trust have been reviewed, and the combination of related literature review has provided foundation of this research.
design. This research design was a structural equation modeling design utilizing survey methodology and included a number of survey instruments. The purpose of the design was to establish linkages between consumer purchase intention and its antecedents (consumer trust, purchase experience, attitude toward online shopping, and quality of EC-Web site design) as well as measure the direct and indirect impacts between consumer purchase intention and its antecedents.

Once a suitable problem has been identified, it is very important to select the appropriate method with which to study the problem (Rudestam & Newton, 2001). Zikmund (2003) also supported this notion. He explained that researchers should develop the research design once he or she has formulated the research problem. According to Zikmund (2003), “a research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information” (p. 65). Before choosing the appropriate research design, there are some issues that will determine which method is chosen. Those issues include the objective of research methods, the available data sources, the urgency of the decision, and the cost of obtaining the data (Zikmund, 2003). Based on those determinants, the research design will be presented in this chapter.

In the following sections, the characteristics of sampling participants will be described first. Next, sampling procedures used in this research design will be presented. Then, the developing process of instrumentation will be provided. Finally, statistical tests employed in this research design will be discussed.
Sampling Design

According to Zikmund (2003), the definition of target population is the complete group of specific population elements relevant to the research project. The purpose of this research is to explore as well as predict consumer’s online purchase intention of travel products. Therefore, the target population of this research is general customers who have made online purchase of travel products in the past two years. By definition, the travel products are including an airline ticket, a hotel room, a car rental, a cruise package, or combination of any two above. In other words, if anyone who had purchased travel product(s) online in the past two years, he or she will be in our target population.

However, it is impossible to get a complete list of population elements in this research design. Thus, it is an appropriate approach to get a list that can be worked with operationally, i.e. sampling frame. “A sampling frame is the list of elements from which the sample may be drawn” (Zikmund, 2003, p. 373). With the help from www.key2travel.com, a manageable email list of general consumers is obtained.

Participants

Key2Travel.com (K2T) is an online travel service company. Generally speaking, key2travel.com provides travelers the ability to plan destination activities in advance. It focuses on providing travel service to both leisure travelers and corporations. For general leisure travelers, it offers personal concierge services that assist with planning and arranging destination activities. For corporations, K2T delivers unique value-add service such as alternate revenue centers and expense control. When consumers register with
According to Zikmund (2003), it is not feasible to compile a list without excluding some members of the population. Therefore, a sampling frame error may occur in the sampling process. The so-called sampling frame error is “when certain sample elements are excluded or when the entire population is not accurately represented in the sampling frame” (Zikmund, 2003, p.375). The objective of this research is to explore the factors which may affect consumers’ online purchase intention. Because of difficulty of compiling a complete list of general travelers across United States, it is reasonable to use convenience sampling in this research design.

The usability of convenience sampling has been supported by academic scholars (Zikmund, 2003). Traditionally, the researchers use convenience samples to obtain a large number of complete questionnaires quickly and economically. Based on Zikmund (2003), convenience samples are best used for exploratory research when additional research will subsequently be conducted with a probability sample (Zikmund, 2003). In this research, the convenience sample is the comprehensive customer list from an online travel company. For the customer who registers with an online travel company, they may incline to shop travel products online. By studying their behavioral intentions, we can get an idea about factors affecting consumers’ online shopping intention of travel products. Although the sampling fame error may occur in this research, we can compare the result with a comprehensive study conducted by Travel Industry Association of America (TIA) to make sure that the sampling frame error won’t be a serious concern in this research design. An operationally manageable email list was attained from key2travel.com. Our
sampling frame comprises of twenty two thousand email addresses. Each email address is one unique sampling unit in this research design. At first, we used SPSS to randomly draw 10,760 email addresses from the sampling frame. The next step will be determining the appropriate number of subjects for this design.

**Sample size**

According to Rudestam and Newton (2001), the best method to decide the number of subjects is to conduct a power analysis. A power analysis lets the researcher know how many subjects are necessary to detect any effects that result from the independent variable, given (a) the size of the effect of these variables in the population, (b) the type of statistical tests to be utilized, and (c) the level of significance of study. Hair, Anderson, Tatham, and Black (1995) concluded that power is not solely a function of $\alpha$. It is actually determined by three factors i.e. effect size, alpha ($\alpha$), and sample size. Power analysis is a useful tool to help in making a decision on the required sample size. However, it is somewhat difficult for the researcher to utilize this tool because the effect size is usually unknown. In addition to the issues above, different statistical tests have different requirement on the sample size (Hair, et al., 1995).

As with all other multivariate methods, the sample size plays an important role in the estimation and interpretation of SEM results (Hair, et al., 1995). Hair et al. (1995) suggested four factors that will impact the required sample size. Those four factors include model misspecification, model size, departures from normality and estimation procedure. Hair et al. (1995) offered detailed guidelines about the sample size requirement:
1. Model misspecification: Model misspecification refers to the extent that the model suffers from specification error. Specification error is the omission of relevant variables from the specified model. Sample size impacts the ability of the model to be correctly estimated and identify specification error if desired. Thus, if the researcher has concerns about the impact of specification error, sample size requirements should be increased over what would otherwise be required.

2. Model size: The absolute minimum sample size must be at least greater than the number of covariances or correlations in the input data matrix. However, more typical is a minimum ratio of at least five respondents for each estimated parameter, with a ratio of 10 respondents per parameter considered most appropriate. Thus, as model complexity increases, so do the sample size requirements.

3. Departures from normality: As the data violate the assumptions of multivariate normality, the ratio of respondents to parameters needs to increase with a generally accepted ratio of 15 respondents for each parameter.

4. Estimation procedure: Maximum likelihood estimation (MLE), the most common estimation procedure, has been found to provide valid results with sample size as small as 50, but a sample size this small is not recommended. It is generally accepted that the minimum sample size to ensure appropriate use of MLE is 100 to 150. As we increase the sample size above this value, the MLE method increases in its sensitivity to detect differences among the data. (p. 604-605)
In conclusion, Hair et al. (1995) recommended that a sample size of 200 with increase occurring if misspecification is suspected, the model is overly large or complex, the data exhibit non-normal characteristics, or an alternative estimation procedure is used. There are 24 estimated variables in this research design, and the model is somewhat complicated. Meanwhile, we cannot ignore the possibility of model misspecification even though we tried to include all relevant variables in this study. Also, the data that we collect may violate the assumption of normal distribution. Given those considerations above, a sample size of 500 will be necessary in this research design in order to detect any effects that exist in the data.

Instrumentation

Developed by Rensis Likert, the Likert scale is extremely popular for measuring attitudes because the method is simple to administer (Likert, 1932). With the Likert scale, participants indicate their attitudes by checking how strongly they agree or disagree with carefully constructed statements that range from very positive to very negative toward the attitudinal object. Generally speaking, individual respondents can choose from five alternatives: strongly agree, agree, uncertain, disagree, and strongly disagree. However, the number of alternatives may range from three to nine (Best, Hawkins, & Albaum, 1979; Jacoby & Matell, 1971).

A Likert scale may be comprised of several scale items to form an index. It is assumed that each statement is to represent an aspect of a common attitudinal domain (Zikmund, 2003). With the using of the Likert scale, a large number of statements are
generated; then, an item analysis is performed. The purpose of item analysis is to ensure that final items evoke a wide response and discriminate among those with positive and negative attitudes. Items are eliminated from the final statement list if items are poor because they lack clarity or elicit mixed response patterns. In short, a good Likert item should state the opinion, attitude, belief, or other construct under study in clear terms. As mentioned before, the purposes of this research are exploring consumers’ attitude toward online shopping of travel product, studying the impact of factors affecting consumers’ online purchase intention, and predicting consumers’ online purchase intention. Therefore, the reasoning underlying using of the Likert scale is justified. Also, after conducting an item analysis, the measurement scale is developed and presented in the subsequent section.

**Attitudes toward Online Shopping**

In few number of retail setting, attitudinal factors and subjective norms have been tested and shown to be significant predictors of retail patronage intentions. For instance, Evans, Christiansen, and Gill (1996) demonstrated that attitude toward shopping and subjective norm had a significant effect on shopping center patronage intentions. According to Shim & Drake (1990), the attitudinal and normative components accounted for almost one-third of the variation in intention to purchase apparel. However, the subjective norms have been tested and shown to be a non-significant predictor in the context of electronic shopping (Shim et al., 2001). Attitude toward Internet shopping is an assessment which measures various aspects of shopping such as price, merchandise, security, service, social shopping, and shopping hours. These aspects of shopping were derived from the literature on store choice (Kopp, Eng, & Tigert, 1989; Mazursky &
Jacoby, 1986) and electronic non-store retailing (Eastlick, 1996; Ernst & Young, 1999; Szymanski and Hise, 2000).

In relation to analysis of attitude, Shim et al. (2001) have used four factors to determine the structure of attitude items. Those four factors include transaction services, convenience, sensory experience, and merchandise (Shim, et al., 2001). Based on the result of items analysis, the convenience, merchandise, and value perception are three final factors used to measure consumers’ attitude toward online shopping of travel products. Participants will use several 7-point Likert scales to indicate how strongly they agree or disagree with statements related to the online shopping of travel products.

**Consumer Trust**

The questionnaire contains three items of measuring consumer trust. Typically, structural assurance items capture some of the typical steps taken by many EC-Web sites to reassure their customers that the interaction and transaction are safe. According to Gefen, Karahanna, and Straub (2003), structural assurance items deal with (1) a 1-800 number being provided, which has been previously shown to build trust (Gefen, 1997), with (2) belief that the Better Business Bureau (BBB) will help in case of trouble, with (3) the e-vendor providing a written statement of its guarantees, and with (4) the belief that the online transaction is safe. Originally, the questionnaire contains four items above. However, after conducting the items analysis, one of these items has been removed because it confused participant. In short, three of those items used in the questionnaire are third party approval, the e-vendor providing a written statement of its guarantees, and consumers’ belief that the online transaction is safe. Participants will use a 7-point Likert scale to indicate how strongly they agree or disagree with each trusting item.
Quality of Online Travel Agency Design

In the recent past, various researchers have tried to address the design of Web-based E-Commerce application systems. Based on communication theory, DeLone and McLean (1992) have proposed a set of measures of effectiveness of IS design from users’ perspective. This set includes system quality, information quality, use, user satisfaction, individual impact, and organizational impact.

Although those measures are comprehensive, some scholars argued that we need to evaluate the effectiveness of EC web site design from consumer’s perspective (Kim & Lim, 2001; Liu, Arnett, & Litecky, 2000). Liu et al. (2000) identified key design factors related to EC web site. Liu suggested that marketers should consider such factors as information quality, service quality, playfulness, system design quality, and system use when the marketers develop their EC web site. Kim and Lim supported this notion, and added that system quality, information quality, and service quality play an important role in customer’s satisfaction with Internet shopping.

System quality refers to desired characteristics of an information system. Those desired characteristics include content of the data, aggregation of details, human factors, response time, and system accuracy. In addition to those characteristics, other scholars proposed data currency, response time, turnaround time, data accuracy, reliability, completeness, system flexibility, and ease of use among others as part of a “formative evaluation” scheme to measure system quality (Hamilton & Chervany, 1981). In related to information quality, Ahituv (1980) incorporate five information characteristics into a multi-attribute utility measure of information value: accuracy, timeliness, relevance, aggregation, and formatting. In other words, the information quality has been defined as
quality of measuring information characteristics such as accuracy, timeliness, relevance, aggregation, and information formatting. Parasuraman, Zeithaml, and Berry (1988) have created a 45-item instrument i.e. SERVQUAL. SERVQUAL is used to evaluate customer expectations and perceptions of service quality in service and retailing organizations. Parasuraman, et al. (1988) claimed that customers use those five dimensions to assess service quality regardless of the type of service. Those five dimensions are: (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance, and (5) empathy.

In assessing quality of travel Web site design, participants will use a 7-point Likert scale to measure responses to a single statement related to each attribute. Thus, subjects will use several 7-point Likert scales to indicate how strongly they agree or disagree with each attribute of quality of Internet travel intermediary’s Web site design.

Data Collection and Coding

This study utilized the Internet survey to collect data. The original questionnaire was developed on February 2005. In that version, there was 28 items in the questionnaire. After running several pre-tests and items analyses, the final version of the questionnaire was created on March 2005. The final version comprised of 24 items. At the beginning of April 2005, the invitation email was sent to 10,760 customers of key2travel.com. The email contained a short description about the study and the survey. The invitation email also provided a link to a URL to visit zoomerang.com which was a business organization host the Internet survey. By clicking that link, participants were
forwarded to the survey site. When participants clicked the link, there was a welcome screen shown on the screen. Like a cover letter in a mail survey, the welcome screen of an Internet survey serves as a means to gain the respondents’ cooperation and provides brief instructions. The welcome screen also contains the name of UNLV and information about how to contact researchers or UNLV Institutional Review Board if the respondent has a problem or concern. In order to get input from customers who had made online purchase of travel products, the first question it asked: whether a respondent purchased travel product online in the past two years or not. If participants had answered “no”, he or she would be directed to final section of the questionnaire i.e. demographical questions. If participants had answered “yes”, he or she would continue to do the survey step by step.

The online survey was opened from April 19, 2005 to May 24, 2005. During that period of time, a reminding letter was been sent every two weeks to remind participants of the survey. Of those 10,760 invitations sent, only 960 responses were returned. Some email addresses on the list were no longer active. Some email invitations were returned by spam warning, and others were returned with automated messages. Among those 960 responses, only 580 responses were valid and complete. Therefore, the whole survey process yielded a response rate of 5.04%.

The standard coding scheme was created before the survey was distributed. The coded data were downloaded from zoomerang.com, and transformed into SPSS format. Basically, the ID was assigned to each data during the compiling process. After finished the compiling process, the coded data was transformed into EQS format again.
Data Analysis Methods

The Statistical Package for Social Science (SPSS) 13.0 and EQS 6.1 was used in the process of data analysis. The statistical tools used in this research included: (1) descriptive statistics, (2) factor analysis, and (3) structural equation modeling. The application of each of those statistical tests in this study will be explained in the subsequent sections.

Descriptive Statistics

Descriptive statistics have been defined as those methods involving the collection, presentation, and characterization of a set of data in order to describe the various features of that set of data properly (Levine, Berenson, & Stephan, 1999). Anderson, Sweeney, and Williams (1998) explained that most of the statistical information in newspapers, magazines, reports, and other publications consists of data summarized and presented in a form that is easy for the reader to understand. Such summaries of data, which may be tabular, graphical, or numerical, are referred to as a descriptive statistics (Anderson, et al., 1998).

By applying the descriptive statistics, mean, median, and standard deviation could be derived from interval data. On the other hand, a histogram of interval data could help us to check the assumption of normal distribution. In short, descriptive statistics would be used in this study to analyze, summarize, and present the descriptive information in the data set.

Structural Equation Modeling

In relation to multivariate techniques, one of the primary objectives is to expand the researcher’s explanatory ability and statistical efficiency. For example, multiple
regression, factor analysis, multivariate analysis of variance, and discriminant analysis all provide the researcher with powerful tools for addressing a wide range of managerial and theoretical questions. However, these tools all share one common limitation: each technique can examine only a single relationship at a time. In this study, we are faced with a set of interrelated questions. For instance, what variables determine the quality of online travel agency’s Web site design? How does that quality of Web site design combine with other variables to affect consumers’ purchase intentions? How do consumer trust, online purchase experience, and attitude toward online shopping of travel products affect consumers’ online purchase intention? None of the multivariate statistics mentioned above allows us to address all these questions with a single comprehensive technique. Luckily, the technique of structural equation modeling (SEM), an extension of several multivariate techniques such as multiple regression and factor analysis, allows us to examine for study all issues with a single comprehensive technique.

Structural equation modeling has been used in almost every conceivable field of study, including education, marketing, psychology, sociology, management, testing and measurement, health, demography, organizational behavior, biology, and even genetics. According to Hair et al. (1998), the reasons for its attractiveness to such diverse areas is twofold: “(1) it provides a straightforward method of dealing with multiple relationships simultaneously while providing statistical efficiency, and (2) its ability to assess the relationships comprehensively and provide a transition from exploratory to confirmatory analysis” (p. 578).

As a matter of fact, the estimation of multiple interrelated dependence relationships is not the only unique element of structural equation modeling. SEM also has the ability to
incorporate latent variables into the analysis. A latent variable is a hypothesized and unobserved concept that can only be approximated by observable or measurable variables. The observed variables, which we gather from participants through various data collection methods i.e. survey, tests, observations, are known as manifest variables.

Based on statistical theory, a regression coefficient is actually composed of two elements: the true or structural coefficient between the dependent and independent variable and the reliability of predictor variable. Reliability refers to the degree to which the independent variable is “error-free” (Blalock, 1982). According to Hair et al. (1998), it is conventional assumption that we have assumed we had no error in our variables. However, we cannot perfectly measure a concept and that there is always some degree of measurement error. Measurement error is not just caused by inaccurate responses but occurs when we use more abstract or theoretical concepts, such as attitude toward online shopping of travel products. With concepts such as those, it is easy to give rise to measurement error in process. If we know the magnitude of the problem, we can incorporate the reliability into the statistical estimation and improve our dependence model. SEM provides the measurement model, which specifies the rules of correspondence between manifest and latent variables. The measurement model allows the researcher to use one or more variables for a single independent or dependent concept and then estimate the reliability.

A structural model allows researcher to explicitly incorporate measurement error into their models to assess its influence on the model fit. Also, developing and testing models allows researchers to study interdependent relationships among multiple variables simultaneously; thus, it provides a more veridical view of the reality of the phenomena of
interest. This model will be organized and present factors that lead consumers’ intention of travel products purchasing. Therefore, SEM is the suitable statistical tool in this research. In order to use structural equation modeling effectively, Hair et al. (1998) suggested seven stages in structural equation modeling. These seven stages are:

(1) developing a theoretically based model, (2) constructing a path diagram of causal relationships, (3) converting the path diagram into a set of structural and measurement models, (4) choosing the input matrix type and estimating the proposed models, (5) assessing the identification of the structural model, (6) evaluating goodness-of-fit criteria, and (7) interpreting and modifying the model, if theoretically justified (Hair et al., 1998, p. 592).

In short, data analysis took place in two phases as follow: (1) Confirmatory Factor Analysis (CFA), and (2) Full structural equation model analysis. Also, in the process, two types of validity i.e. convergent and discriminant will be analyzed. These two types of validity constitute construct validity. Construct validity refers to the extent to which an operationalization measures the concept it is supposed to measure (Bagozzi, Yi, & Phillips, 1991). Convergent validity has been defined as the extent to which the measures of a variable act as if they were measure the underlying theoretical construct because they share a variance. Discriminant validity refers to the degree to which measures of two constructs are empirically distinct (Bagozzi et al., 1991; Davis, 1989). In order to make sure good quality of research design, it is necessary to assess those validities above. Therefore, the test of those validities will be analyzed and presented in chapter 4.
CHAPTER 4

FINDING OF THE STUDY

This chapter begins with a demographic profile of the survey respondents and a descriptive summary section. In the section of descriptive summary, assumption of SEM are discussed and tested. Following by descriptive statistics, several design quality issues will be discussed, including validity, and reliability. In the final section of this chapter, the results of the SEM analysis for each hypothesis will be presented.

Demographic Profile of Survey Respondents

The majority of survey respondent are female (62.4%) (see Table 2). Of the 540 respondents who responded to the survey, the average annual household was between $60,000 and $74,999 (see Table 3). Of those respondents, three in ten had a bachelor's degree (see Table 4). The majority of survey respondents are married (see Table 5).
Table 2

*Gender Profile of Survey Respondents*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>199</td>
<td>36.9</td>
</tr>
<tr>
<td>Female</td>
<td>337</td>
<td>62.4</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table 3

*Income Profile of Survey Respondents*

<table>
<thead>
<tr>
<th>Income level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $30,000</td>
<td>28</td>
<td>5.2</td>
</tr>
<tr>
<td>$30,000 to $44,999</td>
<td>51</td>
<td>9.4</td>
</tr>
<tr>
<td>$45,000 to $59,999</td>
<td>56</td>
<td>10.4</td>
</tr>
<tr>
<td>$60,000 to $74,999</td>
<td>69</td>
<td>12.8</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>95</td>
<td>17.6</td>
</tr>
<tr>
<td>$100,000 or greater</td>
<td>189</td>
<td>35.0</td>
</tr>
<tr>
<td>Missing</td>
<td>52</td>
<td>9.7</td>
</tr>
</tbody>
</table>
Table 4

Education Profile of Survey Respondents

<table>
<thead>
<tr>
<th>Education level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>52</td>
<td>9.6</td>
</tr>
<tr>
<td>Technical degree</td>
<td>31</td>
<td>5.7</td>
</tr>
<tr>
<td>1 to 3 years of college degree</td>
<td>127</td>
<td>23.5</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>187</td>
<td>34.6</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>140</td>
<td>25.9</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Table 5

Marital Status Profile of Survey Respondents

<table>
<thead>
<tr>
<th>Marital status</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>126</td>
<td>23.3</td>
</tr>
<tr>
<td>Married</td>
<td>346</td>
<td>64.1</td>
</tr>
<tr>
<td>Separated</td>
<td>5</td>
<td>0.9</td>
</tr>
<tr>
<td>Divorced</td>
<td>45</td>
<td>8.3</td>
</tr>
<tr>
<td>Windowed</td>
<td>11</td>
<td>2.0</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>1.3</td>
</tr>
</tbody>
</table>

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Shopping Profile of Survey Respondents

Of those survey respondents, airline tickets continued to be the most-often purchased travel products (97.6%), followed by reserving overnight lodging (91.5%). Also, many respondents made rental car or recreation vehicle reservations online (84.1%). Other travel-related products most often bought online include cruise line (52.2%) and vacation package (16.3%) (see Figure 6).

![Figure 6. Travel Products/Services Purchased Online.](image)

*Note. Multiple responses allowed.*
Most of survey respondents preferred using a travel portal Web site to search information about travel products/services. Other popular medium used by survey respondents included company brand Web site (55.2%) and discount travel Web site (26.5%) (see Figure 7).

<table>
<thead>
<tr>
<th>Media</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional travel agency</td>
<td>9.10%</td>
</tr>
<tr>
<td>Internet portal</td>
<td>21.90%</td>
</tr>
<tr>
<td>Discount travel Web site</td>
<td>26.50%</td>
</tr>
<tr>
<td>Travel portal</td>
<td>73.70%</td>
</tr>
<tr>
<td>Company brand Web site</td>
<td>55.20%</td>
</tr>
</tbody>
</table>

*Figure 7. The medium used by survey respondents to search information about travel products/services.*

*Note.* Multiple responses allowed.

In relation to buying travel products/services, most of survey respondents preferred using travel portal Web site (43.9%) to buy travel products/services. Other popular
medium used by respondents to buy travel products/services include company brand Web site (31.5%) and discount travel Web site (10.2%) (see Figure 8).

Figure 8. The medium used by survey respondents to buy travel products/services.

The majority of respondents used the same medium to search information about travel products/services most of the time (63.1%) and all of the time (25.7%). In relation to buying travel products/services, most of respondents used the same medium to buy travel products/services most of the time (67.8%) and all of the time (16.5%) (see Table 6).
### Table 6

*Comparison between Searching Behavior and Shopping Behavior of Survey Respondents*

<table>
<thead>
<tr>
<th>Response</th>
<th>Search behavior(^a) Percentage (%)</th>
<th>Shopping behavior(^b) Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Seldom</td>
<td>1.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Some of the time</td>
<td>8.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Most of the time</td>
<td>63.1</td>
<td>67.8</td>
</tr>
<tr>
<td>All of the time</td>
<td>25.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Missing</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Mean</td>
<td>4.15</td>
<td>3.99</td>
</tr>
</tbody>
</table>

*Note.* \(^a\)Consumers use the same medium to search information about travel products/services. \(^b\)Consumers use the same medium to shop for travel products/services.

### Descriptive Statistics and Assumptions

For this study, there were 559 participants and 24 observed variables originally. Descriptive statistics of 24 continuous variables are presented in Table 7. Table 7 included mean, standard deviation, and skewness indices for accessing normality of each variable. The data were evaluated for assumptions of SEM: Normality, linearity, multicollinearity and singularity, and adequacy of covariances.
Table 7

Mean, Standard Deviation, Skewness, and Kurtosis of Items

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>System quality 1</td>
<td>559</td>
<td>4.498</td>
<td>1.386</td>
<td>-0.342</td>
<td>-0.057</td>
</tr>
<tr>
<td>System quality 2</td>
<td>559</td>
<td>5.135</td>
<td>1.322</td>
<td>-0.657</td>
<td>0.304</td>
</tr>
<tr>
<td>Information quality 1</td>
<td>559</td>
<td>5.131</td>
<td>1.325</td>
<td>-0.738</td>
<td>0.515</td>
</tr>
<tr>
<td>Information quality 2</td>
<td>559</td>
<td>5.109</td>
<td>1.3244</td>
<td>-0.610</td>
<td>0.314</td>
</tr>
<tr>
<td>Information quality 3</td>
<td>559</td>
<td>4.994</td>
<td>1.366</td>
<td>-0.470</td>
<td>-0.017</td>
</tr>
<tr>
<td>Service quality 1</td>
<td>559</td>
<td>4.765</td>
<td>1.402</td>
<td>-0.407</td>
<td>0.082</td>
</tr>
<tr>
<td>Service quality 2</td>
<td>559</td>
<td>3.904</td>
<td>1.500</td>
<td>-0.028</td>
<td>-0.228</td>
</tr>
<tr>
<td>Customer trust 1</td>
<td>559</td>
<td>5.093</td>
<td>1.179</td>
<td>-0.517</td>
<td>0.407</td>
</tr>
<tr>
<td>Customer trust 2</td>
<td>559</td>
<td>4.566</td>
<td>1.298</td>
<td>-0.361</td>
<td>0.246</td>
</tr>
<tr>
<td>Customer trust 3</td>
<td>559</td>
<td>4.756</td>
<td>1.222</td>
<td>-0.365</td>
<td>0.351</td>
</tr>
<tr>
<td>Attitude-Convenience 1</td>
<td>559</td>
<td>5.581</td>
<td>1.262</td>
<td>-0.856</td>
<td>0.483</td>
</tr>
<tr>
<td>Attitude-Convenience 2</td>
<td>559</td>
<td>5.377</td>
<td>1.311</td>
<td>-0.637</td>
<td>-0.144</td>
</tr>
<tr>
<td>Attitude-Convenience 3</td>
<td>559</td>
<td>5.256</td>
<td>1.194</td>
<td>-0.482</td>
<td>0.024</td>
</tr>
<tr>
<td>Attitude-Merchandising 1</td>
<td>559</td>
<td>5.007</td>
<td>1.459</td>
<td>-0.480</td>
<td>-0.500</td>
</tr>
<tr>
<td>Attitude-Merchandising 2</td>
<td>559</td>
<td>4.800</td>
<td>1.351</td>
<td>-0.242</td>
<td>-0.295</td>
</tr>
<tr>
<td>Attitude-Merchandising 3</td>
<td>559</td>
<td>5.285</td>
<td>1.379</td>
<td>-0.833</td>
<td>0.367</td>
</tr>
<tr>
<td>Attitude-Value 1</td>
<td>559</td>
<td>5.160</td>
<td>1.403</td>
<td>-0.656</td>
<td>0.120</td>
</tr>
<tr>
<td>Attitude-Value 2</td>
<td>559</td>
<td>5.103</td>
<td>1.377</td>
<td>-0.580</td>
<td>0.067</td>
</tr>
</tbody>
</table>

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Table 7 (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping experience1</td>
<td>559</td>
<td>5.790</td>
<td>1.075</td>
<td>-1.298</td>
<td>2.356</td>
</tr>
<tr>
<td>Shopping experience2</td>
<td>559</td>
<td>5.784</td>
<td>1.063</td>
<td>-1.366</td>
<td>2.857</td>
</tr>
<tr>
<td>Shopping experience3</td>
<td>559</td>
<td>5.797</td>
<td>1.066</td>
<td>-1.301</td>
<td>2.568</td>
</tr>
<tr>
<td>Purchase intention1</td>
<td>559</td>
<td>4.796</td>
<td>1.498</td>
<td>-0.563</td>
<td>-0.102</td>
</tr>
<tr>
<td>Purchase intention2</td>
<td>559</td>
<td>4.835</td>
<td>1.404</td>
<td>-0.473</td>
<td>-0.075</td>
</tr>
<tr>
<td>Purchase intention3</td>
<td>559</td>
<td>5.212</td>
<td>1.194</td>
<td>-0.855</td>
<td>1.053</td>
</tr>
</tbody>
</table>

The ratio of cases to observed variable was 22:1. On the other hand, the ratio of cases to estimated parameters is 8:1. This ratio is adequate given that the reliability of the subtests of the SEM model is high. There are some missing values in the data set. Using EQS Missing value analysis, the pattern of missing data is missing at random (MAR) and missing data mechanism is ignorable (Kaplan, 2000). Given the required sample size, those missing values had been replaced by the value calculated from SPSS missing value analysis.

Normality of the observed variable was assessed through examination of histograms using SPSS DESCRIPTIVES and EQS and summary descriptive statistics in EQS. Twenty three of the twenty four observed variables were significantly skewed (see Table 8). EQS also provided information on multivariate normality. In the section labeled, Multivariate Kurtosis, Mardia’s coefficient and a normalized estimate of the coefficient...
were given; the normalized estimate can be interpreted as a z score. In this study, Normalized estimate = 81.27, suggesting that the measured variables were not distributed normally. When the assumptions underlying normal, elliptical, or heterogeneous kurtosis theory were false, the test statistics, $T$, based on these assumptions could be corrected using a scaling factor developed by Satorra and Bentler (Satorra & Bentler, 1988a, 1988b, 1994). The Satorra-Bentler corrected test statistics, called SCALED statistic was computed on the basis of the model, estimation method, and sample fourth-order moments, and it held regardless of the distribution of variable. The result of normality test suggested that Satorra-Bentler Scaled Chi-Square should be used in the data analysis (Tabachnick & Fidell, 2001).
Table 8

*Significant Skewed Observed Variables*

<table>
<thead>
<tr>
<th>Item</th>
<th>Z score of Skewness</th>
<th>Item</th>
<th>Z score of Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>System quality1</td>
<td>-3.25</td>
<td>Attitude-Convenience3</td>
<td>-7.93</td>
</tr>
<tr>
<td>System quality2</td>
<td>-6.25</td>
<td>Attitude-Merchandising1</td>
<td>-4.57</td>
</tr>
<tr>
<td>Information quality1</td>
<td>-7.02</td>
<td>Attitude-Merchandising1</td>
<td>-2.30</td>
</tr>
<tr>
<td>Information quality2</td>
<td>-5.80</td>
<td>Attitude-Price1</td>
<td>-6.24</td>
</tr>
<tr>
<td>Information quality3</td>
<td>-4.47</td>
<td>Attitude-Price2</td>
<td>-5.52</td>
</tr>
<tr>
<td>Service quality1</td>
<td>-3.87</td>
<td>Shopping experience1</td>
<td>-12.39</td>
</tr>
<tr>
<td>Consumer trust1</td>
<td>-4.92</td>
<td>Shopping experience2</td>
<td>-13.00</td>
</tr>
<tr>
<td>Consumer trust2</td>
<td>-3.43</td>
<td>Shopping experience3</td>
<td>-12.39</td>
</tr>
<tr>
<td>Consumer trust3</td>
<td>-3.47</td>
<td>Purchase intention1</td>
<td>-5.36</td>
</tr>
<tr>
<td>Attitude-Transaction2</td>
<td>-4.59</td>
<td>Purchase intention2</td>
<td>-4.50</td>
</tr>
<tr>
<td>Attitude-Convenience1</td>
<td>-8.15</td>
<td>Purchase intention3</td>
<td>-8.14</td>
</tr>
<tr>
<td>Attitude-Convenience2</td>
<td>-6.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In relation to the assumption of linearity, it was not feasible to examine all pair-wise scatterplots to assess linearity; therefore, randomly selected pairs of scatterplots were examined using SPSS GRAPHS. All observed pairs appeared to be linearly related. There was no violation of assumption of linearity.
Through the examination of SPSS Frequencies, eleven univariate outliers were detected and deleted. Using Malahanobis distance (through SPSS Regression) and cases with the largest contributions to Mardia’s coefficient (through EQS) at \( p < 0.001 \), eight multivariate outliers were detected and deleted. SEM analysis is performed on 540 participants. Given in EQS output, the determinant of the matrix was 0.46373D-02. This was larger than 0, so there was no singularity.

Preliminary Data Analysis

The CFA model specified two second-order factors—quality of Web site design and attitude toward online shopping, as well as three factors—consumer trust, shopping experience, and purchase intention. Regarding two second-order factors, the factor of quality of Web site design loaded on three factors i.e. system quality, information quality, and service quality. The correlations between three first-order factors were range from 0.836 to 0.854. Variance \( R^2 \) in the first-order account for by their corresponding second-order factor were all significantly large, ranging from 0.832 to 0.868 (see Table 9).
The other second-order factor (attitude toward online shopping) loaded on three factors i.e. convenience, merchandising, and value perception. The correlations between three first-order factors were range from 0.686 to 0.913. Variance ($R^2$) in the first-order account for by their corresponding second-order factor were all significantly large, ranging from 0.590 to 0.833 (see Table 10).
Table 10

Standardized Solutions by Confirmatory Factor Analysis of Second-Order Factor of Attitudes toward Online Shopping Model

<table>
<thead>
<tr>
<th>Item</th>
<th>Attitudes toward online shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Convenience</td>
</tr>
<tr>
<td>Convenience1</td>
<td>0.624</td>
</tr>
<tr>
<td>Convenience2</td>
<td>0.915</td>
</tr>
<tr>
<td>Convenience3</td>
<td>0.848</td>
</tr>
<tr>
<td>Merchant1</td>
<td></td>
</tr>
<tr>
<td>Merchant2</td>
<td></td>
</tr>
<tr>
<td>Merchant3</td>
<td></td>
</tr>
<tr>
<td>Value1</td>
<td></td>
</tr>
<tr>
<td>Value2</td>
<td></td>
</tr>
</tbody>
</table>

Reliability, Convergent Validity, and Discriminant Validity

By definition, scale reliability was the proportion of variance attributable to the true score of the latent variable (DeVellis, 2003). Cronbach’s alpha was used to assess the reliabilities of multi-item constructs. The alpha of each construct was ranged from 0.717 and 0.958 (see Table 11). The reliability level for each construct exceeded the critical value of 0.7 which was suggested by (Nunnally, 1978; Nunnally & Bernstein, 1994). Measurement theory suggested that the relationships among items were logically...
connected to the relationships of items to the latent variable. Therefore, the strong correlations among items implied strong links between items and the latent variable.

The convergent and discriminant validity of these 9 constructs were examined by the results of a confirmatory factor analysis (CFA) (see Table 11). The result of a CFA included estimates of covariances between the factors, loadings of the indicators on their respective factors, and the amount of measurement error (unique variance) for each indicator. The convergent validity meant that indicators specified to measure a common underlying factor all have relatively high standardized loadings on that factor. For each set of indicators, the standardized factor loadings were all relatively high, which suggested convergent validity.

The discriminant validity meant that estimated correlations between the factors were not excessively high (e.g., > 0.85) (Kline, 2005). In relation to discriminant validity, the correlations between system quality, service quality, and information quality were excessively high. The correlations were range from 0.83 to 0.87 which proved the existence of a higher-order factor for system quality, service quality, and information quality; therefore, the higher order factor (quality of Web site design) was created to load on those factors. On the other hand, the correlations between convenience, merchandising, and value perception were also excessively high. The correlations were range from 0.649 to 0.859. It also verified the existence of a higher-order factor for those three factors; thus, the higher-order factor (attitude toward online shopping) was created to load on these factors. The estimated factor correlations were low enough to suggest that five factors i.e. quality of Web site design, attitude toward online shopping of travel
product, purchase experience, consumer trust, and purchase intention, were clearly distinct.

Table 11
Reliability, Discriminant Validity, and Convergent Validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s alpha</th>
<th>Discriminant validity</th>
<th>Convergent validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>System quality</td>
<td>0.717</td>
<td>0.313 to 0.870</td>
<td>0.689 to 0.811</td>
</tr>
<tr>
<td>Service quality</td>
<td>0.717</td>
<td>0.414 to 0.870</td>
<td>0.728 to 0.767</td>
</tr>
<tr>
<td>Information quality</td>
<td>0.832</td>
<td>0.303 to 0.830</td>
<td>0.744 to 0.839</td>
</tr>
<tr>
<td>Customer trust</td>
<td>0.779</td>
<td>0.463 to 0.735</td>
<td>0.614 to 0.800</td>
</tr>
<tr>
<td>Attitude about online shopping-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td>0.835</td>
<td>0.344 to 0.859</td>
<td>0.624 to 0.860</td>
</tr>
<tr>
<td>Attitude about online shopping-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandising</td>
<td>0.864</td>
<td>0.303 to 0.859</td>
<td>0.759 to 0.878</td>
</tr>
<tr>
<td>Attitude about online shopping-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value perception</td>
<td>0.931</td>
<td>0.362 to 0.739</td>
<td>0.915 to 0.952</td>
</tr>
<tr>
<td>Shopping experience</td>
<td>0.958</td>
<td>0.501 to 0.724</td>
<td>0.934 to 0.972</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0.749</td>
<td>0.551 to 0.739</td>
<td>0.534 to 0.840</td>
</tr>
</tbody>
</table>

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Data Analysis

The structural equation modeling (SEM) was used to examine the hypothesized relationships among the constructs in the study. The hypothesized models were tested with the EQS program (Bentler, 2002) by imposing the structure of direct and indirect effects on the current data. First, the fit of a measurement model was tested to determine whether the observed variables (indicators of the latent constructs, system quality, information quality, service quality, attitude-convenience, attitude-merchandising, attitude-value, shopping experience, consumer trust, and purchase intention) were generated by the corresponding latent constructs. The overall fit and the regression paths were analyzed in this approach. Second, the originally hypothesized model (the full SEM model; see Figure 9) was tested. The indices of the goodness of fit between hypothesized model and data were examined to determine whether the model described the data well. Third, a modification process was applied to the hypothesized from previous analysis, so that the model could be improved further not only to represent a good fit to the data but to describe adequately the meaningful relationships among the constructs.
Figure 9. The hypothesized full SEM model.

Note. QW: Quality of travel Web site design; SystemQ: System quality; InforQ: Information quality; ServiceQ: Service quality; Attitude: Consumer’s attitude toward online shopping of travel product; PerofValue: Perception of value; PerofMerch: Perception about the e-travel merchant; PerofCon: Perception of convenience; PurchaseEx: Purchase experience.
The evaluation of model adequacy was based on chi-square statistic, comparative fit index (CFI), Bollen fit index (IFI), standard RMR, RMSEA, and inspection of the values of standardized residuals. In addition, the results of Lagrange Multiplier (LM) tests and Wald tests were used to determine malfitting parameters in the model modification process. Examination of skewness and kurtosis (univariate and multivariate) indicated that maximum likelihood estimation was appropriate for this study. Appendix II presented the correlations among the 24 indicators examined in the study. The correlations among the indicators of nine constructs were all statistically significant, $p < 0.05$.

**Measurement Model Results**

The measurement model specified two higher-order factors—quality of Web site design and attitude toward online shopping, as well as three factors—consumer trust, shopping experience, and purchase intention. The factor of quality of Web site design loaded on three factors i.e. system quality, information quality, and service quality. The second higher-order factor (attitude toward online shopping) loaded on three factors i.e. convenience, merchandising, and value perception. In this model, each indicator was constrained to load only on the factor it was designed to measure, the residual terms for all indicators fixed to be uncorrelated, no equality constraints on the factor loadings were imposed, and the factor covariances were free to be estimated. This model represented a good fit to the data, Satorra-Bentler Scaled $\chi^2(233, N = 540) = 638.062$, $p < 0.001$, CFI = 0.922, IFI = 0.932, RMSEA = 0.057 (Confidence interval = 0.051~0.062). Variance ($R^2$)
in the indicators account for by their corresponding constructs were all significantly large, ranging from 0.303 to 0.945.

Factor correlations among the five factors were presented in Table 12. The strongest factor correlation, \( r = 0.804 \), was indicated between attitude toward online shopping and purchase intention and the next, \( r = 0.725 \), between shopping experience and purchase intention.

Table 12

Factor Correlations among Five Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality of Web site design</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Attitude toward online shopping</td>
<td>0.493</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Consumer trust</td>
<td>0.702</td>
<td>0.578</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Shopping experience</td>
<td>0.566</td>
<td>0.693</td>
<td>0.530</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. Purchase intention</td>
<td>0.647</td>
<td>0.804</td>
<td>0.622</td>
<td>0.725</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Structural Model Results

To examine the goodness of fit of the hypothesized model, the measurement model was re-specified by imposing the structure of each model (see Figure 9). The results of the proposed structural parameters (see Figure 10) were summarized in Table 13, and the detailed results of the measurement part appear in the appendix. Compared with the models previously examined in the mediation analysis stages, this model featured an
increased number of constrained path coefficients as well as an ordered independent-mediating-dependent construct structure. The fit indices of the hypothesized model indicated that the model represented a good fit to the data [Satorra-Bentler Scaled $\chi^2(237, N = 540) = 791.638, p < 0.001, \text{CFI} = 0.906, \text{IFI} = 0.906, \text{RMSEA} = 0.066$ (Confidence interval = 0.061–0.071)]. To summarize, with the fit index of 0.906 and 0.906 for both CFI and IFI, the significant parameter estimates, and the parsimony and meaningfulness of the paths included in the model, the hypothesized model was considered a fairly good fit to the current data (see Figure 10). The Wald test indicated that all free parameters were reasonable and statistically significant. Although the LM test suggested that a few paths between factors can be added (e.g., from purchase intention to attitude toward online shopping and from purchase intention to service quality under the higher-order factor of quality of Web site design), based on the overall good fit and theoretical meaningfulness of the model, no changes were applied to the hypothesized model.

Additional careful examinations of individual parameters of the model in the appendix assured that the model fit the data well: No evidence of improper solutions was found, all measurement parameters were statistically significant, the confirmatory factor loadings were of relatively large size, and the measurement errors were relatively small.

Based on the result of data analysis, the following seven equations were generated as a result of decomposition of model variables. All five proposed structural equations were supported by the results of data analysis.

$Y_{\text{attitude}} = P_{87}$ (quality of Web site design) + $D_8$

$Y_{\text{purchase experience}} = P_{97}$ (quality of Web site design) + $D_9$

$Y_{\text{trust}} = P_{107}$ (quality of Web site design) + $D_{10}$
\[ Y_{\text{purchase intention}} = P_{117} \text{(quality of Web site design)} + P_{118} \text{(attitude toward online shopping)} + P_{119} \text{(purchase experience)} + P_{119} \text{(consumer trust)} + D_{11} \]

Table 14 provided results lending support for six of the 7 hypothesis. Quality of Web site design appeared to exert a significant positive effect on attitude toward online shopping, and the size of this effect was substantial, which support hypothesis 1a. A better design of travel Web site would positively influence consumers’ attitude toward online shopping of travel products. On the other hand, quality of Web site design also showed a significant positive effect on consumer trust. The better design of e-intermediary had, the higher trust consumers would hold for that travel Web site. Also, with a good Web site design in an e-travel intermediary, customers tended to have better shopping experiences. Furthermore, a good Web site design exerted a significant effect on consumers’ purchase intentions. A well design travel Web site would increase consumers’ purchase intention of travel products at that site.
Table 13

Results of the Direct Effect of Each Construct

<table>
<thead>
<tr>
<th>Path (→)</th>
<th>Unstandardized Estimate</th>
<th>Standard Error</th>
<th>Standardized Estimate</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Web site design → Attitude toward online shipping</td>
<td>0.589</td>
<td>0.050</td>
<td>0.600</td>
<td>11.70*</td>
</tr>
<tr>
<td>Quality of Web site design → Purchase experience</td>
<td>0.644</td>
<td>0.053</td>
<td>0.640</td>
<td>12.26*</td>
</tr>
<tr>
<td>Quality of Web site design → Consumer trust</td>
<td>0.74</td>
<td>0.054</td>
<td>0.752</td>
<td>13.59*</td>
</tr>
<tr>
<td>Quality of Web site design → Purchase intention</td>
<td>0.226</td>
<td>0.115</td>
<td>0.227</td>
<td>1.967*</td>
</tr>
<tr>
<td>Attitude toward online shopping → Purchase intention</td>
<td>0.472</td>
<td>0.063</td>
<td>0.467</td>
<td>7.442*</td>
</tr>
<tr>
<td>Purchase experience → Purchase intention</td>
<td>0.266</td>
<td>0.053</td>
<td>0.270</td>
<td>5.004*</td>
</tr>
<tr>
<td>Consumer trust → Purchase intention</td>
<td>0.074</td>
<td>0.081</td>
<td>0.073</td>
<td>0.911</td>
</tr>
</tbody>
</table>

* *p < 0.05.

Note. aRobust statistics. bRobust statistics.
In addition to quality of travel Web site design, attitude toward online shopping positively influenced customers’ purchase intentions (hypothesis 2). The positive attitude that consumers hold for shopping of travel products online would increase their purchase intention of travel products online. Finally, customers’ purchase experience appeared to exert a significant positive effect on their purchase intentions. Positive online shopping experience would increase consumers’ purchase intentions. However, the analysis results did not support the proposed effect of consumer trust on purchase intention (hypothesis 3). Given the correlations between the three items of consumer trust and three items of purchase intention (Range from 0.214 to 0.411), this insignificant result was against expectations. Although the result of this hypothesis was not significant, the path didn’t being removed based on the theoretical consideration. The results of testing hypotheses were summarized in Table 14.
Table 14

*Results of Hypotheses Testing*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a Quality of EC Web site design has a positive effect on attitude toward online shopping</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b Quality of EC Web site design has a positive effect on consumer trust</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c Quality of EC Web site design has a positive effect on consumer’s online purchase intention</td>
<td>Supported</td>
</tr>
<tr>
<td>H1d Quality of EC Web site design has a positive effect on purchase experience</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Attitude toward online shopping has a positive effect on consumer’s online purchase intention</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Customer trust has a positive effect on consumer’s purchase online intention</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4 Purchase experience has a positive effect on consumer’s online purchase intention</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The EQS also produced indirect effects which were closely examined constructs whose effects were mediated toward other constructs. In general, all indirect effects appeared to be statistically significant ($p < 0.05$) except indirect effect of quality of Web...
site design via consumer trust on purchase intention. The results indicated that the proposed path structure was meaningful. Specially, indirect effect of quality of Web site design via purchase experience was significant. This model explained approximately 36% of the variance in attitude toward online shopping, 40.9% in purchase experience, 56.6% in consumer trust, and 72.6% in purchase intention. The direct effect, indirect effect, total effect, and $R^2$ were summarized in Table 15.
Table 15

*Direct, Indirect, and Total Effect as well as $R^2$ of each Construct*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On attitude toward online shopping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of quality of Web site design</td>
<td>0.589***</td>
<td>N/A</td>
<td>0.589***</td>
<td>0.360</td>
</tr>
<tr>
<td><strong>On purchase experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of quality of Web site design</td>
<td>0.644***</td>
<td>N/A</td>
<td>0.644***</td>
<td>0.409</td>
</tr>
<tr>
<td><strong>On consumer trust</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of quality of Web site design</td>
<td>0.740***</td>
<td>N/A</td>
<td>0.740***</td>
<td>0.566</td>
</tr>
<tr>
<td><strong>On purchase intention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of quality of Web site design</td>
<td>0.226***</td>
<td>0.504***</td>
<td>0.730***</td>
<td>0.726</td>
</tr>
<tr>
<td>of attitude toward online shopping</td>
<td>0.472***</td>
<td>N/A</td>
<td>0.472***</td>
<td></td>
</tr>
<tr>
<td>of consumer trust</td>
<td>0.073</td>
<td>N/A</td>
<td>0.073</td>
<td></td>
</tr>
<tr>
<td>of purchase experience</td>
<td>0.266***</td>
<td>N/A</td>
<td>0.266***</td>
<td></td>
</tr>
</tbody>
</table>

Note. *N/A mean there is no indirect effect associated with that construct.*

*** $p < 0.001.$
Figure 10. Final SEM model output.

Note. Satorra-Bentler Scaled $\chi^2(237, N = 540) = 791.638, p < 0.001$, CFI = 0.906, IFI = 0.906, RMSEA = 0.066 [(Confidence interval = 0.061-0.71)].
CHAPTER 5

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Discussion of Results

This dissertation proposed a comprehensive model which was useful and applicable to exploring customer’s online purchase intention of travel products in the hospitality industry. The model was developed by integrating one existing theoretical model (Shim’s Online Pre-purchase Intentions Model) with several important factors which were guided by theories: (1) social cognitive theory, (2) self-efficacy theory, (3) theory of planned behavior (TPB), (4) attitude-behavior consistency theory, (5) theory of consumer trust, and (6) communication theory. Among those theories, Ajzen’s (1985, 1991) Theory of Planned Behavior was served to examine key roles played by attitude toward online shopping of travel products. On the other hand, communication theory was the foundation to measure the effectiveness of E-intermediary. On the other hand, Gefen’s (2003) theory of trust proposed the relationship between consumer trust and purchase intention though the role predicted for consumer trust was not confirmed by the study’s finding. In the following section, an overview of the significant findings of the study will be presented first. Then, the conclusion and recommendations for future study will be drawn. Finally, the limitations of this study will be discussed in the last section.
Overview of Significant Findings

At first, the findings of both measurement of quality of travel Web site design and measurements of attitude toward online shopping will be discussed. In consumer’s perspective, three such attributes as information quality, system quality, and service quality were representative measures of an e-travel agency. Consumers normally evaluated the design of a travel Web site based on these three attributes. On the other hand, perception of a travel Web site, perception of convenience, and value perception were significant measures to access consumers’ attitude toward online shopping of travel product. Among seven proposed hypotheses, six were supported by the results of data analysis. For review purpose, the results of those hypotheses will be presented in the following paragraphs. Regarding the effect of quality of travel Web site design, the travel Web site with better technical design would positively influence consumers’ attitudes toward online shopping of travel products. A well designed e-travel agency would bring consumers the positive shopping experiences. Also, a good designed travel Web site would increase consumers’ trust toward that site. Most of all, an e-travel agency with good designs would positively influence consumers’ purchase intentions directly and indirectly. On the other hand, a consumer with positive attitude toward online shopping of travel products would has higher intention to purchase travel products online. The consumers who had positive purchase experiences were likely to purchase travel products online. However, the consumers’ trust would not significantly affect their purchase intention of travel products online. Even thought a consumer trusted the travel Web site, he or she was not likely has higher intention to buy travel products from that
site comparing with other consumers who didn’t trust this specific travel Web site. The discussion of the role played by each construct will be presented in the following sections.

**Measurements of Quality of Travel Web Site Design**

An e-commerce Web site is one kind of information system (Jahng, Jain, & Ramamurthy, 2000). In the past, there were numerous researches contributed the developments of measuring effectiveness of an information system (Alloway, 1980; DeLone & McLean, 1992; Emery, 1971; Kim & Lim, 2001; Liu, Arnett, & Litecky, 2000; Mason, 1978; Swanson, 1974). Some scholars argued that it was necessary to evaluate the effectiveness of EC-Web site design from users’ i.e. consumers’ perspective (Kim & Lim, 2001; Liu, Arnett, & Litecky, 2000). Though multiple measures of information system have existed, there is no agreement about the measurement of effectiveness/quality of an e-commerce Web site. Delone and McLean concluded that: “system quality and information quality singularly and jointly affect use and user satisfaction related to information system” (p. 83). On the other hand, Pitt, Watson, & Kavan, (1995) argued that the basis of the DeLone and McLean categorization is only product oriented. Pitt, et al., (1995) further concluded existing measures seem strongly product focused, and there is gap of measuring IS service quality. Based on Pitt, et al., it was necessary to integrate service quality into the evaluation of quality of a travel Web site design in the context of e-commerce.

Therefore, those three dimensions such as information quality, system quality, and service quality were used to measure the quality of a travel Web site design.

Theoretically, the evidence confirms DeLone and McLean’s (1992) as well as Pitt’s, et al., (1995) claim. The results of this study are consistent with Liu’s et al., (2000) finding of
important factors such as information quality, service quality, playfulness, system design quality, and system use when the marketers develop their EC Web site. In other words, consumers will evaluate the quality of a travel Web site based on its information quality, system quality, and service quality. In relation to three dimensions, each one plays an important role in consumer's evaluation of quality of travel Web site which can be confirmed from the fact that subjects gave similar weight on each dimension when they evaluated quality of a travel Web site design.

The Impact of Quality of Travel Web Site Design

One of main focuses of this study was to determine whether quality of travel Web site design would be a major factor to indicate the probability of purchase intention. Liu et al. (2000) claimed that a good EC-Web site design will attract consumers and elicit purchase transactions from them. As suggested, quality of travel Web site design contributed substantial influence in purchase intention. This finding supports the relationships proposed in Liu et al. (2000) and White and Manning (1997). When consumers navigate the travel Web site, the technical characteristics such as information quality, system quality, and service quality will influence their purchase intention of travel product at that travel site. The study also showed that past online purchase experience acts as a central mechanism through which technical characteristics affect higher-order decision making goals. Regarding the salience of technical characteristics, quality of a travel Web site design had indirect effect on online purchase intention.

Quality of EC-Web site refers to effectiveness of EC-Web site design from users’ perspective (DeLone & McLean, 1992). In the past, various researchers (DeLone, 1988; DeLone & McLean, 1992; Jahng, et al., 2000; Koivumaki, 2001; Liu, et al., 2000; Njite...
& Parsa, 2005) have proposed different measures of assessing the effectiveness of EC-Web site design. However, the characteristics related to information quality, service quality, and system quality are very important in consumers’ perspective, and those characteristics will affect consumers’ attitude toward online shopping (Liu, et ah, 2000). The results of this study are consistent with Liu’s claim et ah (2000). In other words, the quality of an e-travel agency design will positively influence consumer’s attitude toward online shopping of travel products. In other words, an e-marketer can positively enforce consumers’ attitude toward online shopping if they have the well designed travel Web site.

Regarding the effect of quality of travel Web site on consumers’ purchase experience, Turban et ah (2000) suggested a positive relationship between Web store designs and navigational experience (Turban, et ah., 2000). The results in this study showed consistency with Turban’s, Lee, King, Chung, (2000) finding. In Turban’s model, he also suggested there is a positive relationship between EC-Web site design and consumer trust. On the other hand, Koivumaki (2001) used several alternative variables to describe the navigational experience and interface characteristics in a Web-based grocery shop. Based on the result, it showed there is a significant positive effect of quality of Web site design on purchase experience.

Measurements of Attitudes toward Online Shopping of Travel Products

According to Shim’s et ah., Online Pre-purchase Intentions Model et ah., (2001), attitudes toward Internet shopping included specific attributes related to transaction service, perception of merchant, and value perception. Also, Wu (2003) proposed an examination of Internet user and perceptions regarding online shopping. She concluded
that nine factors such as effectiveness and modern, purchase convenience, information abundance, multiform and safety, delivery speed, homepage design, selection freedom, and company name familiarity are related to measurement of consumers’ attitude toward online shopping. Donthu and Garcia (1999) also made similar claim that attitudinal measurement should incorporate the value perception as well as product assortment. Those related literatures (Donthu & Garcia, 1999; Wu, 2003) contributed the foundation of using three such dimensions as convenience, value perception, and product assortment to measure consumers’ attitudes toward online shopping of travel product.

The results of this study are consistent with both Donthu & Garcia’s claim (1999) and Wu’s finding (2003) of strong positive relationships between three attributes i.e. perception of convenience, perception of merchant, as well as value perception and attitude toward online shopping of travel products. The finding in this study justified these three attributes as measurements of attitudes toward online shopping of travel products. As consumers shop online for travel products, the perception of e-merchant, perception of convenience, and value perception will positively influence their attitudes toward online shopping of travel product.

The Influence of Attitudes toward Online Shopping of Travel Products

Generally speaking, consumers’ attitudes toward online shopping of travel product were also significant in predicting online purchase intention. The results of this study are consistent with the Theory of Planned Behavior (Ajzen, 1985, 1991). Additional support for these findings is derived from Shim’s et al., Online Pre-purchase Intention Model (2001) as well as from Njite & Parsa (2005). Regarding the attitude toward online shopping of travel products, online travel agency should put more efforts to establish
multiple images i.e. good value, convenience, and positive public image with consumers. Those should be key strategies for attracting consumers to shop travel products online.

*The Impact of Purchase Experience*

Of the notable consumer characteristics, the most influential predictor of online purchase intention was online purchase experience. Online purchase experience was a factor related to consumers’ perceived risk. Past behavior is a predictor of future behavior (Bentler & Speckart, 1979, 1981; Sutton & Hallett, 1989). The results of this study confirm the premises proposed by those previous attitude-behavior researchers. Online purchase experience also manifests a strong and direct effect on online purchase intention which is consistent with traditional attitude-behavior models (Eagly & Chaiken, 1993). According to Shim, et al., (2001), these findings also verify those of other studies (Eastlick, 1996; Eastlick & Lotz, 1999; Shim & Drake, 1990) demonstrating the impact of previous similar shopping experiences on behavior toward innovative non-traditional store formats (Shim, et al., 2001).

In the context of e-shopping, Weber and Roehl (1999) have demonstrate that past online purchase experience predicted adoption and use of electronic shopping. According to studies conducted by Fazio and Zanna (1981), descriptive belief, which are a result of direct experience with an object, are often held with much certainty and predict behavior relatively well. Other studies also have confirmed that consumers are likely to act in consonance with their descriptive beliefs, shapted by their direct experiences with products, services, persons, or processes (Bagozzi, Baumgartner, & Yi, 1992; Mano & Oliver, 1993). As long as they have positive experiences, and hence positive descriptive attitudes, consumers are more satisfied and more likely to engage in relational market
behavior (Westbrook & Oliver, 1991). The importance of previous online shopping experience illustrate the strategic point of turning existing online consumers into repeat customers by providing them with satisfying online shopping experience. This finding is also consistent with the premises made by relationship marketing researchers (Sheth & Parvatiyar, 1995a, 1995b; Sheth & Raju, 1973). Such previous experience may directly and indirectly decrease consumers’ perceived risk levels associated with Internet shopping, respectively, leading to future continued online use.

**The Role of Consumer Trust**

Generally speaking, people do not need to invest resources in monitoring and in maintaining complex legal contracts to gain their fair share in a trusting relationship (Fukuyama, 1995; Kumar, 1996). According to Korsgadd et al. (1995) and Kumar (1996), trusting relationship also provide a measure of indirect control and of assurance that the outcome will be fair to all of involved parties (Korsgaard, et al., 1995; Kumar, 1996). All involved parties will keep the relationship for a long run (Fukuyama, 1995). In addition to that, Williamson (1985) suggested that all parties will refrain from taking unfair or opportunistic advantage. In short, Kumar (1996) concluded that trust creates a “reservoir of goodwill” (p. 97). For an E-vendor, the benefits of trusting relationship are that consumers are more willing to pay higher price for the benefits of purchasing from a vendor’s Web site (Reichheld & Schefter, 2000). Although the marginal benefits with one-time purchase may be small, it is only by believing that the e-vendor will behave with integrity, caring, and acceptable ability that consumers can rule out socially unacceptable yet conceivable behavior on the part of the e-vendor” (Gefen et al., 2003, p. 62).
Unlike Gefen et al., (2003), who believed “only with an e-vendor who can be trusted will consumer be able to successfully accomplish their tasks on the Web site, i.e. search for product information, and place an order”, the current study found that consumer trust would not have a positive effect on consumer’s online purchase intention of travel product(s). In fact, most of the literature reviews related to consumer trust are consistent with Gefen’s claim et al., (2003). Only few exceptions existed in the literature reviews related to consumer trust. For example, Njite and Parsa (2005) found that consumer trust didn’t appear to have substantial influence on the intentions to purchase products and services over the Internet. They justified the contradicting finding with the changing perceptions toward Internet business activities (Njite & Parsa, 2005). The construct of consumer trust was measured by three items. One item was related to the measure of general consumer trust. The other two items were related to the third party approval assurance. In consumer’s perspective, most of them did not have clear idea about the third party approval assurance. Therefore, the two items might not be representative measures of consumer trust. It could justify the reason of non-significant path from consumer trust to consumer purchase intention.

Trust is a construct encompassing many different dimensions/attributes. The attributes used to measure consumer trust in this study were mainly related to assurance of third party and partially related to concept of trust worthiness of an Internet merchant. The possible reason for this non-significant result was lacking the comprehensive attributes of trust in the measurements of this study. Because of this seemingly contradicting finding, it is intended that the external validity and interpretation of this findings be handled with caution.
Conclusion

This dissertation proposed a comprehensive model which was useful and applicable to exploring customer’s online purchase intention of travel products in the hospitality industry. The model was developed by integrating one existing theoretical model (Shim’s Online Pre-purchase Intentions Model) with several important factors which were guided by theories: (1) social cognitive theory, (2) self-efficacy theory, (3) theory of planned behavior (TPB), (4) attitude-behavior consistency theory, (5) theory of consumer trust, and (6) communication theory. The purpose of this study was to investigate such factors as technical designs of a travel Web site, consumers’ attitude, consumer trust, and previous purchase experience online that affect consumer intentions to purchase over the Internet.

The overall results indicate that the Theory of Planned Behavior, attitude-behavior consistency theory, theory of consumer trust, and communication theory provide a good understanding those factors. The results reveal a strong support for the importance of designing a travel Web site. In consumers’ perspective, a good travel Web site should provide consumers with detailed, timely, and accurate information, reliable system operation, and excellent service quality. A well design e-travel agency can significantly influence consumers’ attitude, purchase experience, consumer trust, and online purchase intention. The findings also show the significance of managing consumers’ attitude by creating convenience perception, good merchant image, and value perception in consumers’ mind. The importance of previous online shopping experience illustrates the strategic point of turning existing online consumers into repeat customers by providing them with satisfying online shopping experience. Although there is one contradicting
finding in the hypotheses, this study still provide a more comprehensive model to explore consumers’ online purchase intention of travel products.

Limitations and Implications

Basically there are several limitations of this study. Those limitations encompass the nature of the sample, data collection procedure, low response rate, and the identification of attributes related to quality of travel Web site design, attitudes toward online shopping, consumers’ trust should be considered when interpreting this study’s results and developing future research to extend and expand its scope.

The subjects of this study were the members of key2travel.com. Our sample is made of consumers that are already familiar with the concept of Internet shopping and comfortable navigating around the Internet. Therefore, the may be a concern about generalizing findings from this research. Also, low response rate in this study can cause the non-response error in this study. Future researches should consider using the help from professional marketing institution to get a more comprehensive sample from general population as well as to increase the response rate.

Although this study was cross-sectional in nature (it covered five different types of online travel Web site in this study), it was not longitudinal study. In this nature, it would not be helpful in determining patterns with respect to consumer attitudes, quality of travel Web site design, and so on. Consumers’ attitudes and past shopping experience were collected on a self-reported basis. In order to minimize the disadvantages related to self-report data, future researches should obtain consumers’ actual behavior through real-time electronic data collection from those online travel agencies. In addition, the theoretical model may not have incorporated all relevant variables especially consumer trust. Future
studies might need to consider encompassing the representative variables in consumer trust.

This model was to investigate the factors that affect consumers' purchase intentions. Future researches could use this one as a base model to create a new model to explore customers' repurchase intention. The fundamental question facing online travel agencies is what antecedents that predict consumers' repurchase behavior. Webster (1992) points out, repeated transactions are a precursor of relationships; greater and more valuable relationships develop between consumer and marketers when consumers become actively involved in the decisions of the company. By working with online travel agencies, academic researchers can use research methodology such as interview and focus group study to get involvement from consumers; then, both parties can develop a new model of customers' repurchase intention. When the new model is in the place, researchers can use real-time electronic data collection to test new model. Any relationship that attempts to develop customer value through partnering activities is likely to create greater bonding between consumers and marketers. The greater the enhancement of the relationship through such bonding, the more committed the consumer becomes to the relationship and hence the less likely he or she is to patronize other marketers. In this way, it is possible for e-intermediaries to develop a well designed online transaction platform, to create an effective marketing program, and finally to increase relationship bond with customers.
Dear Sir or Madam:

You are invited to participate in this research study by taking this simple survey. It has been design to take between 7 to 10 minutes of your time and all results will be kept confidential.

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice.

All the information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for at least 3 years after completion of the study. After the storage time, the information gathered will be destroyed.

If you have any questions regarding this research or experience harmful effects as a result of participation, please contact director of graduate program, Dr. Pearl Brewer, UNLV, 702-895-3643 or email to pearl.brewer@unlv.edu

If you have any questions about the right of research, please contact the UNLV Office for the Protection of Research Subjects at 702-895-2794.

Thanks for your participation. Your opinions are valuable to us! We appreciate your consideration and thank you for your assistance in completing this survey. To begin the survey, please click here.

Sincerely yours,

Ivan Wen
Ph.D. Candidate
Wenh2@unlv.nevada.edu

Kathleen Pearl Brewer
Ph.D. Director of Graduate Studies
Pearl.brewer@unlv.edu
APPENDIX II

SURVEY QUESTIONNAIRÉ

Survey of Consumer's Perspectives on Online Travel Agencies

1. While it is not necessary to identify yourself, if you wish to be identified with this research study, please type your name in the box below. Your name:

2. During last two years, have you ever purchased any travel product such as airline tickets, hotel rooms, car rentals, cruise line accommodations, or travel packages (including a combination of two or more of the above travel products)?

3. In the last 2 years, which of the following have you purchased over the Internet?
   - Airline Tickets
   - Hotel Rooms
   - Car Rentals
   - Cruise Line Accommodations
   - Vacation Packages


---

2 This survey questionnaire encompassed five versions. Each version focuses on different type of online travel agencies. The subject wording is slightly different in each version.
What do you consider most important when selecting a hotel?

<table>
<thead>
<tr>
<th></th>
<th>1 Not important at all</th>
<th>2 Not so important</th>
<th>3 Neutral</th>
<th>4 Fairly important</th>
<th>5 Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other's recommendation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent membership program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the price offered by several hotels is the same, please choose the most important of the following considerations which you will use to make the booking decision:

Of the following methods to SEARCH for information about a travel product, please identify the top 2 method(s) that you prefer to use:

- Go to a company brand Website (such as the Marriott, Delta, Hertz, Carnival, or MGM Grand, etc...)
- Go to an online travel portal Website (such as Expedia, Travelocity, Orbitz, etc...)
- Go to an online discount travel Website (such as Hotwire, Priceline, and so on)
- Go to an Internet Portal (such as Yahoo, AOL, Excite, Google, etc...)
- Call a traditional travel agency or company toll free number.

How often do you use the same methods to SEARCH a travel product?

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Of the following methods to BUY a travel product, please select the one from which you mostly use to BUY a travel product:

- Go to a company brand Website such as the (Marriott, Delta, Hertz, Carnival, or MGM Grand etc...)
- Go to an online travel portal Website (such as Expedia, Travelocity, Orbitz, etc...)
- Go to an online discount travel Website (such as Hotwire, Priceline, and so on)
- Go to an Internet Portal (such as Yahoo, AOL, Excite, Google, etc...)
- Call a traditional travel agency or company toll free number

How often do you use the same method to BUY travel products?

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When booking a hotel room, do you agree or disagree the following statements?

1 2 3 4 5 6 7

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Mostly disagree</th>
<th>Somewhat disagree</th>
<th>Neutral</th>
<th>Somewhat agree</th>
<th>Mostly agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

I normally have a brand or hotel in mind before making a reservation.

I consider it a convenience to see multiple brands and prices in one request.

I often shop for hotel prices and availability online but make a reservation by phone.

After you booking a hotel room, do you follow up to check the status of the booking?

You have completed 30% of survey questions!
Survey of Consumer's Perspectives on Online Travel Agencies

Based on your response in Question 8, you had being directed to questions related to a company brand Web site!

12. Do you believe that purchasing a travel product through a 3rd party affects the quality of service you receive?

13. Do you believe that purchasing a travel product through a 3rd party affects the quality of service you receive?

14. Based on your experience related to purchasing travel products with a company brand Web site and with other types of Internet travel Web sites, to what extent do you disagree or agree with the following statements.

<table>
<thead>
<tr>
<th>1 Strongly disagree</th>
<th>2 Mostly disagree</th>
<th>3 Somewhat disagree</th>
<th>4 Neutral</th>
<th>5 Somewhat agree</th>
<th>6 Mostly agree</th>
<th>7 Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A company brand Web site has the characteristics to easily correct technical problems related to booking of travel products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have better access to check the status of my transaction with a company brand Web site.</td>
<td></td>
</tr>
<tr>
<td>A company brand Web site presents more customized information.</td>
<td></td>
</tr>
<tr>
<td>There are more in-depth product/service descriptions available with a company brand Web site.</td>
<td></td>
</tr>
<tr>
<td>A company brand Web site provides more accurate information as to the availability status of travel products.</td>
<td></td>
</tr>
<tr>
<td>A company brand Web site replies more promptly to my inquiries.</td>
<td></td>
</tr>
<tr>
<td>A company brand Web site shows more empathy and cares about my problem.</td>
<td></td>
</tr>
</tbody>
</table>

Comparing the security measures of a company brand Web site with that of other types of Internet travel Web sites, to what extent do you disagree or agree with following statements.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly</td>
</tr>
<tr>
<td>2</td>
<td>Mostly</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat</td>
</tr>
<tr>
<td>4</td>
<td>Neutral</td>
</tr>
<tr>
<td>5</td>
<td>Somewhat</td>
</tr>
<tr>
<td>6</td>
<td>Mostly</td>
</tr>
<tr>
<td>7</td>
<td>Strongly</td>
</tr>
</tbody>
</table>

There are 3rd party approvals and tight measures in a company brand Web site to assure the security of my transactions (e.g., Verisign)

I think that a company brand Web site is more trustworthy.

A company brand Web site provides me with clearer statements assuring my privacy and security.

You are doing great!
You have completed 50% of survey questions!
with a company brand Web site (such as the Marriott, Southwest, Hertz, Carnival, MGM Grand, etc...) and by other types of Internet travel Web sites, to what extent do you disagree or agree with the following statements about a company brand Web site.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly disagree</td>
<td>Mostly disagree</td>
<td>Somewhat disagree</td>
<td>Neutral</td>
<td>Somewhat agree</td>
<td>Mostly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

There are a larger variety of payment methods available in a company brand Web site.

It is fast to complete a transaction with a company brand Web site.

Shopping for travel products with a company brand Web site is more convenient for me.

It takes me less time to purchase travel products from a company brand Web site.

A company brand Web site provides me one stop shopping to fulfill my needs.

There is greater assortment of travel products to choose from with a company brand Web site.

I can find more high quality travel products available with a company brand Web site.

I believe that I can get a better rate with a company brand Web site.

A company brand Web site offers better value for my money.

You have completed 65% of survey questions!

Survey of Consumer's Perspectives on Online Travel Agencies

Regarding your search experience with a company brand Web site, to what extent do you disagree or agree with the following statements.

1 Strongly
2 Mostly
3 Somewhat
4 Neutral
5 Somewhat
6 Mostly
7 Strongly

When using a company brand Web site, I have more freedom to search for travel products by using a variety of search methods.

In my perspective, a company brand Web site makes it easier to search for travel products.

In the past 12 months, how many of the following travel products have you purchased through a company brand Web site?

None 1 to 3 4 to 6 7 to 9 10 to 12 13 to 15 16 or more

Shopped for an airline ticket

Shopped for a hotel room

Shopped for a vacation package

To what extent do you disagree or agree with the following statements:

Strongly Mostly Somewhat 4 Somewhat Mostly Strongly

I am likely to provide a company brand Web site with detailed demographic information it needs to better serve my needs.

My willingness to buy the travel products from a company brand Web site is higher than to buy it from other types of travel Web site.

Regarding your shopping experience with a company brand Web site, to what extent do you disagree or agree with the following statements.

I was satisfied with my decision to shop for travel products with a company brand Web site.

Overall, I was satisfied with the travel products and services offered by a company brand Web site.

Shopping travel products with a company brand Web site was a good experience for me.
You have completed 80% of survey questions!

21. Which one of following statements do you agree with?

I believe that price offered by a company brand Web site is typically higher than the price offered by other types of online travel agency.

I believe that price offered by a company brand Web site is typically similar to the price offered by other types of online travel agency.

I believe that price offered by a company brand Web site is typically less than the price offered by other types of online travel agency.

22. To what extent do you disagree or agree with the following statement: I think of a company brand Web site as more beneficial for buying travel products.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Mostly</th>
<th>Somewhat</th>
<th>Neutral</th>
<th>Somewhat</th>
<th>Mostly</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>disagree</td>
<td>disagree</td>
<td>agree</td>
<td>agree</td>
<td>agree</td>
<td>agree</td>
<td>agree</td>
</tr>
</tbody>
</table>

You have completed 95% of survey questions!
Just few more questions about you!

Survey of Consumer's Perspectives on Online Travel Agencies

Please respond to the following:

23 What is your gender?
   - Male
   - Female

24 What is the highest level of education you have completed?
   - High school
   - Technical degree
   - 1 to 3 years of college degree
   - Bachelor's degree

Graduate degree

What is your marital status?
- Single
- Married
- Separated
- Divorced
- Windowed

Approximately, what is your total household income?
- Less than $30,000
- $30,000 to $44,999
- $45,000 to $59,999
- $60,000 to $74,999
- $75,000 to $99,999
- $100,000 or greater
What suggestions would you offer to a reservation facilities that would help you make your decision?

APPENDIX III

Zero-Order Correlations, Means, and Standard Deviations for Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>SysQ1</th>
<th>SysQ2</th>
<th>InforQ1</th>
<th>InforQ2</th>
<th>InforQ3</th>
<th>ServQ1</th>
<th>ServQ2</th>
<th>Trust1</th>
<th>Trust2</th>
<th>Trust3</th>
<th>AttCon1</th>
<th>AttCon2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SysQ1</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SysQ2</td>
<td>0.559</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>InforQ1</td>
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<td>0.544</td>
<td>--</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>InforQ2</td>
<td>0.434</td>
<td>0.529</td>
<td>0.660</td>
<td>--</td>
<td></td>
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</tr>
<tr>
<td>InforQ3</td>
<td>0.408</td>
<td>0.497</td>
<td>0.621</td>
<td>0.604</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ServQ1</td>
<td>0.431</td>
<td>0.525</td>
<td>0.526</td>
<td>0.512</td>
<td>0.481</td>
<td>--</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ServQ2</td>
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<td>0.452</td>
<td>0.440</td>
<td>0.414</td>
<td>0.559</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust1</td>
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<td>0.345</td>
<td>0.335</td>
<td>0.315</td>
<td>0.333</td>
<td>0.286</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust2</td>
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<td>0.439</td>
<td>0.427</td>
<td>0.402</td>
<td>0.424</td>
<td>0.365</td>
<td>0.491</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Trust3</td>
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<td>0.437</td>
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<td>0.422</td>
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<td></td>
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<tr>
<td>AttCon1</td>
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<td>0.373</td>
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<td>0.341</td>
<td>0.360</td>
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<td>0.300</td>
<td>0.299</td>
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<td>AttCon2</td>
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<td>0.351</td>
<td>0.341</td>
<td>0.321</td>
<td>0.339</td>
<td>0.291</td>
<td>0.222</td>
<td>0.283</td>
<td>0.281</td>
<td>0.777</td>
<td>--</td>
</tr>
<tr>
<td>M</td>
<td>4.50</td>
<td>5.13</td>
<td>5.13</td>
<td>5.10</td>
<td>4.99</td>
<td>4.76</td>
<td>3.90</td>
<td>5.10</td>
<td>4.57</td>
<td>4.76</td>
<td>5.58</td>
<td>5.37</td>
</tr>
<tr>
<td>SD</td>
<td>1.38</td>
<td>1.32</td>
<td>1.32</td>
<td>1.32</td>
<td>1.33</td>
<td>1.40</td>
<td>1.49</td>
<td>1.16</td>
<td>1.29</td>
<td>1.21</td>
<td>1.26</td>
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</table>
### APPENDIX III (Continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>SysQ1</th>
<th>SysQ2</th>
<th>InforQ1</th>
<th>InforQ2</th>
<th>InforQ3</th>
<th>ServQ1</th>
<th>ServQ2</th>
<th>Trust1</th>
<th>Trust2</th>
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Dissertation Title: A Comprehensive Structural Model of Factors Affecting Online Consumer Travel Purchasing

Dissertation Examination Committee:
- Chairperson, Dr. Kathleen Pearl Brewer, Ph.D.
- Committee Member, Dr. Billy Bai, Ph.D.
- Committee Member, Dr. Bo Bernhard, Ph.D.
- Graduate Faculty Representative, Dr. Ken Peffers, Ph.D.