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So Ra Park

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THE ROLE OF INTERACTIVITY IN INTERNET BUSINESS ON CUSTOMER  
EXPERIENTIAL VALUES AND BEHAVIORAL INTENTIONS

by

So Ra Park

A DISSERTATION

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Under the Supervision of Professors David L. Olson & Sang M. Lee

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THE ROLE OF INTERACTIVITY IN INTERNET BUSINESS ON CUSTOMER  
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So Ra Park, Ph.D.

University of Nebraska, 2012

Advisor: Sang M. Lee & David L. Olson

Customers' experiential value is based on holistic experience customers would have when they interact with a product/service. Experiential value is defined as "relativistic preference characterizing a subject's experience with some object" (Holbrook, 1994). Internet is characterized for interactivity and it should have a role in customers' experiential value. Therefore, this research investigates the role of interactivity (e-store interaction, C2C interaction, and content interaction) and web store utility on intrinsic and extrinsic customer experiential value. The final dependent variable is behavioral intentions. To test the research model, a survey was designed to capture online consumers' perception of interactivity within e-stores, experiential value, and behavioral intentions. The survey was conducted in South Korea due to its advancement in e-commerce (Reuter, 2010) and 354 usable responses were gathered. 98% of the respondents had experience in online purchasing showing the maturity of e-commerce in South Korea. SPSS 18.0 and AMOS 18.0 were used to analyze for reliability, validity, model fits and SEM. The result showed strong influence of e-store interaction, C2C interaction, and content interaction on intrinsic customer experiential value. Content interaction and web store utility had positive relationships with extrinsic customer experiential value. Intrinsic customer experiential value, extrinsic customer experiential

value, and web store utility had positive relationships with behavioral intentions.

However, e-store interaction and C2C interaction did not have any relationship with extrinsic customer experiential value. Also, there was no influence found between web store utility and intrinsic customer experiential value.

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# CHAPTER ONE

## INTRODUCTION

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### 1.1 OVERVIEW

Pine and Gilmore's (1999) book titled "The Experience Economy" describes how businesses can turn essentially the same goods into different economic offerings using coffee as an example. Coffee beans are sold as a commodity when they are harvested for about a dollar per pound (translated as one to two cents per cup of coffee). When coffee beans are roasted, packaged, and sold at markets as a product, a cup of coffee made from the packaged coffee beans is about five to twenty-five cents. A cup of coffee bought at a convenience store comes from transforming coffee beans into a service and would be about fifty cents to a dollar. Pine and Gilmore (1999) discuss the fourth form of product offering as an experience. In the updated version of "the Experience Economy" (Pine & Gilmore, 2011), Pine and Gilmore urge business leaders to engage in creating customer experience as an economic output.

Businesses sell the coffee experience in high-end restaurants or specialty coffee shops for two to even over ten dollars per cup of coffee, up to 50 times what a customer would pay for a commodity form of coffee: wholesale coffee beans. The coffee experience is comprised of comfortable seating areas to enjoy coffee with a company, a heightened sense of smell from freshly brewed coffee, visual display of coffee-making by baristas, and other stimulating features. These create extra value to make the coffee

experience attractive. There are experiences involved in purchasing other types of coffee beans, but specialty coffee shops provide an experience customers are willing to pay for.

Online products and services seem to resemble the experiential goods which Pine and Gilmore describe. According to Stuer (1992), when two parties are involved in exchanging information through a medium, they are not just exchanging information but also creating a mediated environment and experiencing it. The Internet allows so much more than a traditional communication medium (e.g., a phone). The complex environment mediated by the Internet provides a stage where individuals experience everything from the product, service, atmosphere, a sense of community, feelings of trust/distrust in the transaction, after-sale support, and so much more. Shopping online rather than using traditional stores implies that experiences customers gain online have certain value to them. They are willing to invest time and effort for more product related information, 24/7 accessibility and lower prices. Utility factors, however, do not seem to explain the full scope of consumer experience online. Li et al. (1999) show that online shoppers are not different from others in terms of seeking price value. Rather, web surfers and shoppers tend to lose all sense of time in their web activities (Agarwal and Karahanna, 2000; Csikszentmihalyi, 1990; Pace, 2004; Pace, 2007; Weber et al., 2009) which seems to signal the users' intrinsic value of those activities.

The basic research question of this dissertation is what brings intrinsic as well as extrinsic customer experiential values online. In order to understand experiential value, one must first know what experiential value is <sup>1</sup>.

The example of coffee sold in an experiential form is useful in describing what a value is. According to Zeithaml (1988), there are four major ways to define value. One is "low price." Early philosophers equated value with low price. Due to low search cost and shopbots, the Internet can be a valuable venue for price conscious customers to shop (Brashear et al., 2009). However, Brasher's research shows no consistent support for the hypothesis that Internet shoppers are more price conscious than non-Internet shoppers. While there are mixed results for the correlation between price and quality, people generally feel that price is the indication of value (Zeithaml, 1988). When coffee beans are sold at a higher price, we assume that the beans must have been priced higher for a reason. Often, the reason will be price enhancing quality such as taste, rarity, organic production, and so on. Therefore, price could be used as an indication of value.

Value is also defined as "what people get for their payment" and as a "tradeoff between perceived product quality and price" (Babin et al., 1994). Both second and third definitions explain why trade-off occurs between the buyers and sellers. Packaged ground coffee by Folgers will be evaluated by customers for a certain level of quality and customers who can see the value of trade off will purchase the packaged coffee. Online shoppers would pay a few extra dollars to shop in a store with privacy guard or security certification. The heightened level of perceived security in this case is part of the product

---

<sup>1</sup> Holbrook (1994) defined experiential value as "relativistic preference characterizing a subject's experience with some object." Pine and Gilmore (2011) say companies, experience stager, uses services and goods to create experiences that are unique due to the individual's prior state of mind and being.

the customer purchases. If an e-store performs the transaction securely in the eyes of the buyer, the security is what the customer gets for spending a little bit more.

The last definition of value is “all factors, both qualitative and quantitative subjective, and objective, that make up the complete shopping experience” (Schechter, 1984). The last definition of value captures the essence of an experiential product. People not only pay for a predefined level of utilitarian value of coffee and service, they are also willing to pay for their hedonic experiences during coffee consumption (Pine & Gilmore, 1999). Similarly, people shop online and expect quality of information, product, and service to satisfy utilitarian aspects of shopping. In addition, people shop online to feel enjoyment, creativity, and other good feeling to satisfy hedonic aspects of shopping.

## **1.2 RESEARCH OBJECTIVE**

This research subscribes to the experiential definition of value. Value should be the experiential quality of product/service customers get when they invest time, effort, and money. Value should cover both extrinsic and intrinsic aspects of benefits (Babin & Attaway, 2000; Mathwick et al., 2001; Schechter, 1984). Extrinsic benefits can include monetary discounts, gift items, store points, and other factors which can be measured or compared objectively. Intrinsic values, on the other hand, can include satisfaction of curiosity, fulfillment of a certain desire, pursuit of knowledge, and many other factors that can give pleasure from the behavior itself (Vansteenkiste et al., 2006).

Experiential customer value seems to be highly connected with interactive nature of the Internet. Holbrook (1994) sees customer value to be an individual’s interactive

experience with product or service. The Internet, the best example of new media, is characterized by its interactivity (Wikipedia, 2011a). Interactive experience should provide value to online customers who favor e-stores with more interactive features (Ghose & Dou, 1998). Maximizing customer value is a way to keep long-term profitability (Sweeney & Soutar, 2001) and perceived interactivity is found to bring favorable experiences online (Huang, 2003). Finally, the goal of customer experience management is making friendly, easy and convenient interactions with customers (Pine & Gilmore, 2011).

How does interactivity play a role in customers' perception on the experiential value of the business e-store? There are two research questions this dissertation is seeking to answer.

1. Does interactivity increase the level of intrinsic and extrinsic experience value customers perceive?
2. Does experiential value felt by customers lead to changes in their shopping behavior?

This dissertation intends to focus on customer experiential value research, which has yet to be rigorously pursued. In particular, this research will view interactivity and experiential value in the online business environment; see how different dimensions of interactivity can influence intrinsic and extrinsic experiential value of individual customers; and eventually influence the behavioral intention to revisit/shop. The research setting is limited to the online business environment and the conceptual model of the research presented in the next section.

### 1.3 THE CONCEPTUAL MODEL

This dissertation investigates customer perception of interactivity and experiential value. The conceptual model (see Figure 1.1) is influenced by two previous studies examining the relationship between interactivity and experiential values (Keng et al., 2007; Keng & Ting, 2009) which will be discussed in greater detail in Chapter Two. The research by Keng and Ting shows the influence of interactivity on bloggers' experiential value. Keng et al. studied the role of interactivity on experiential value in a physical retail environment where customers can interact with the salesperson and the retail-shopping atmosphere. While a personal encounter with a sales clerk will increase the efficiency of the transaction and perceived service excellence, the environment provides intrinsic values such as sensory pleasure, entertainment, sense of escape, and enjoyment (Mathwick et al., 2001).

This dissertation identifies interactivities in three levels:

- (1) E-store interaction
- (2) C2C interaction
- (3) Content interaction

E-store interaction covers the friendly environment, the website, and the sales/supporting workforce behind the interface. C2C interaction deals with the interactive environment created for customer-to-customer interaction. The content interaction will reflect quality of e-store contents. Machine interactivity behind the

interface that enables transactional efficiency and ease of use will be covered in the separate construct of web store utility, specifically, accessibility dimensions.

To determine the intention to return and purchase within the web store, this research included web store utility. Web store utility is added in the conceptual model to provide ease of use and usefulness aspects of technology enabled shopping (Gefen et al., 2003). Situational normality to ensure a standardized service level and transactional processes is a basic expectation of customers (Gefen et al., 2003; McKnight et al., 1998). Trust in the e-business sites they visit, and interactivity alone cannot satisfy situational normality. Transactional ease of use and usefulness assumed in web store utility dimensions influence the experiential values perceived by customers.

This dissertation considers customer experiential value in terms of extrinsic and intrinsic value due to the general consensus in retail shopping related literature. Intention to purchase/revisit will be used as the final dependent construct. Therefore, this research proposes the conceptual model, shown in Figure 1-1, to examine the effects of e-store interactivity (web store and sales people), C2C interaction, content interaction, and web store utility on customer experiential value. Whether customer experiential value and web store utility affect the behavioral intention of the shoppers will also be examined.

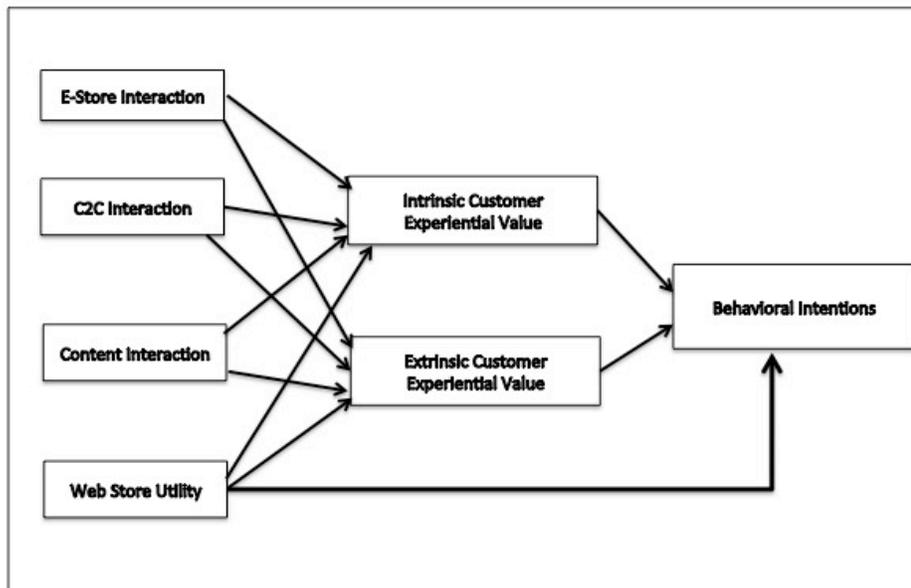


Figure 1-1 The Proposed Conceptual Model

## 1.4 SIGNIFICANCE OF THE STUDY

This research will contribute to the less researched area of online shopping, customer experiential value. While there is a significant increase in the effort of understanding online customers' intrinsic shopping motivations, not much research has been conducted in terms of experiential values customers would perceive during their online shopping.

Second, this research identifies three levels of interactivity to guide actual design of web stores. Interactivity is one of the buzzwords which is used with newer technologies and their features; however, how interactivity should be achieved is unclear. By proving a concise and technology-independent category, this dissertation will provide a more generalizable categorization of interactivity. The three levels, attractiveness of the

design, published content, and interaction among consumers, give a clear objective for businesses to pursue in designing an interface for their customers.

Third, this research provides measures for the three levels of interactivity and empirically tests them. By employing measurements for the interactivity, future research can be done to find out whether three levels of interactivity can be applied in other aspects of consumer perceptions and behavior.

Finally, there has been no previous research on the role of interactivity on experiential value in an e-commerce environment. An empirical study of the influence of interactivity on experiential value would be a contribution to not only current but also future e-commerce research.

## **1.5 STRUCTURE OF THE DISSERTATION**

Chapter Two will present a comprehensive literature review on the interactivity and experiential value, and Chapter Three will present hypotheses and the research model. Chapter Four will focus on measurement and discuss the sample selection, measurements, and statistical method. Chapter Five will present the results of data analysis. Chapter Six will discuss the findings and Chapter Seven will give conclusions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

---

Chapter Two will reviews past and current literature on customers' experiential value, and interactivity. Also, three levels of interactivity and two dimensions of interactivity are defined. Each of the antecedents, intrinsic and extrinsic experiential values, and behavioral intentions will be defined.

#### **2.1 CUSTOMER EXPERIENTIAL VALUE**

##### **2.1.1 TRADITIONAL ONLINE SHOPPING VALUE**

Internet technologies enable many different things and individuals have many different goals. What are the specific goals of individuals who shop online? What does the Internet technologies enable consumers to do online? Srinivasan, Anderson and Ponnnavolu (2002) conducted interviews with online shoppers, e-business executives, and web site developers and extracted eight factors, called eight C's, as to why loyal online consumers shop through e-vendors. The identified factors are customization, contact interactivity, cultivation, care, community, choice, convenience, and character. All factors other than the convenience are found to influence the e-loyalty. However, convenience, which is an ease of use of the e-business site, is an important predictor of use in the Technology Acceptance Model (TAM).

- Customization can be defined as “the extent to which an e-tailer’s web site can

recognize a customer and then tailor the choice of products, services, and shipping experience for the customer” (Srinivasan et al., 2002). Customization can match customers with products better, signals higher quality, and promotes efficiency by helping customers avoid browsing through the entire selection of products (Ostrom & Iacobucci, 1995). Customization to offer user relevant products or contents is possible when the business site has information such as purchase history, search history, page views, and customers’ rating of products or preferences (Lee, Kim, & Park, 2007).

- Contact interactivity refers to the business web site’s interactivity which enables two-way conversations, produces recommendations, and provides instant access to searched information.
- Cultivation is defined as “the extent to which an e-retailer provides relevant information and incentives to its customers in order to extend the breadth and depth of their purchases over time” (Srinivasan et al., 2002). Cultivation is the basis of customization because customer information stored over the years becomes the tool to zeroing on what customers might want.
- Care covers all the activities e-tailors perform to enable pending transactions and future relationships with the existing customers. Businesses efforts in informing customers of available products, sharing current order status, and maintaining user-specific communications are essentially care activities. Failing to keep up with the appropriate level of services will bring negative word-of-mouths and losing existing and future customers.
- A virtual community within a business site is to exchange information, opinions,

and experiences on the services and products offered by the business. A community is excellent way to exchange word of mouth and becomes an indispensable tool to find advices from others like us. Individuals' identification with a virtual community is also common and identification is a good indicator of bonding with the company/brand (Mael & Ashforth, 1992).

- Choice can be much greater in a virtual shop due to the minimal cost of providing wider selection of goods. Physical stores have limitation in terms of size of the storage space, time to restock, and limitation on the display floor. Online businesses can form an alliance with other partners and provide more extended selection of goods. Also, manufacturers can directly engage in the online sales providing the customers with perception of more variety of choices (Shostack, 1977).
- Convenience deals with user friendliness of the website. Information accessibility and transaction simplicity should be ensured with a quality of the website since the website is the only thing customers are directly dealing with.
- Character is defined as “an overall image or personality that the e-tailer projects to consumers through the use of inputs such as text, style, graphics, colors, logos, and slogans or themes on the website” (Srinivasan et al., 2002). Unique personality of a web site aids customers in recalling the brand/company/site (Srinivasan et al., 2002).

The above list is not exhaustive, nor are the eight C's in the list equally important to all customers. However, the eight C's provide an idea of how online

shopping experience is different from shopping in a physical store. Online shopping is based on continuous interaction between a shopper and the website (customization, contact interactivity, cultivation, care, choice, convenience, and character) and on the interaction among shoppers (community).

### **2.1.2 NATURE OF CUSTOMER VALUE**

Su (2007) sees expected value as consumers' rational choice to maximize utility among alternatives. Wang (2008) differentiates perceived value from usefulness by explaining how perceived value deals with what customers "give" and "get" compared to perceived usefulness taps into what customers "get." Perceived value is considered more comprehensive and reliable measure in e-commerce than usefulness (Wang, 2008).

Experiential value is defined as customers' perception of a product or service following direct consumption or indirect observation (Mathwick et al., 2001; Yuan, 2008). Experiential value is different from customer satisfaction because experiential value can be gained without any direct evaluation of a product or service (Sweeney & Soutar, 2001). Customer satisfaction, on the other hand, is considered to be an evaluation of product or service after purchasing (Yuan, 2008).

Holbrook (1994) views customer value in terms of individualistic experience each customer has. Holbrook (1994) defined customer value as "relativistic preference characterizing a subject's experience of interacting with some object." From his definition, there are four points of customer values: relativistic, preference, experience, and subject-object interaction. Each of the four points needs to be investigated to identify the characteristics of experiential customer value.

Customer value is relative. Relativity is defined in the Merriam-Webster dictionary as “the state of being dependent for existence on or determined in nature, value, or quality by relation to something else.” “Something else” in the definition of relativity in the context of customer value is alternative products, different evaluator, and situations or environments (Holbrook, 1994). Value shifts depending upon what product it is (comparative), who is evaluating (personal), and in what context the evaluation occurs (situational).

The act of consuming a product is a way of showing one’s preference for the product (Holbrook, 1994). Preference is defined as “relatively stable evaluative judgments in the sense of liking or disliking a stimulus or preferring it or not over other objects or stimuli” (Scherer, 2005). Since preference is an affective state and is to bring intrinsic appraisal, customers’ experience through product interaction will be important.

Holbrook (1994) emphasized the role of experience in valuing a product. Any attribution of value to an object is essentially the object’s extrinsic value that creates better consumer experience with the object. Experience with the object is the way of realizing consumer value. Even for an object of extraordinary value, there should be someone who can appreciate it to realize its potential value.

Wikipedia.com defined interaction as “a kind of action that occurs as two or more objects has an effect upon one another.” In case of the customer interaction with a product, interaction would look into what influence does the product and the customer have to each other. While experiences focus on the impression on the part of the consumer, interaction views influence on the product as well as the consumer. When compared to experience, interaction involves two-sided action (Holbrook, 1994). Value

cannot be achieved without an encounter between a product and a consumer.

Investigating four points of customer value shows unique characteristics of customer value. Customer value is relativistic preference experience of product interaction (Holbrook, 1994). It is hard to think customer value without mentioning the subjective and individual nature. Since preference is an intrinsic affection of an object (Scherer, 2005), customer value can be considered an intrinsic affection over a product. However, individual experience with a product will not be positive when the extrinsic quality of the product does not meet the expectation of the consumer.

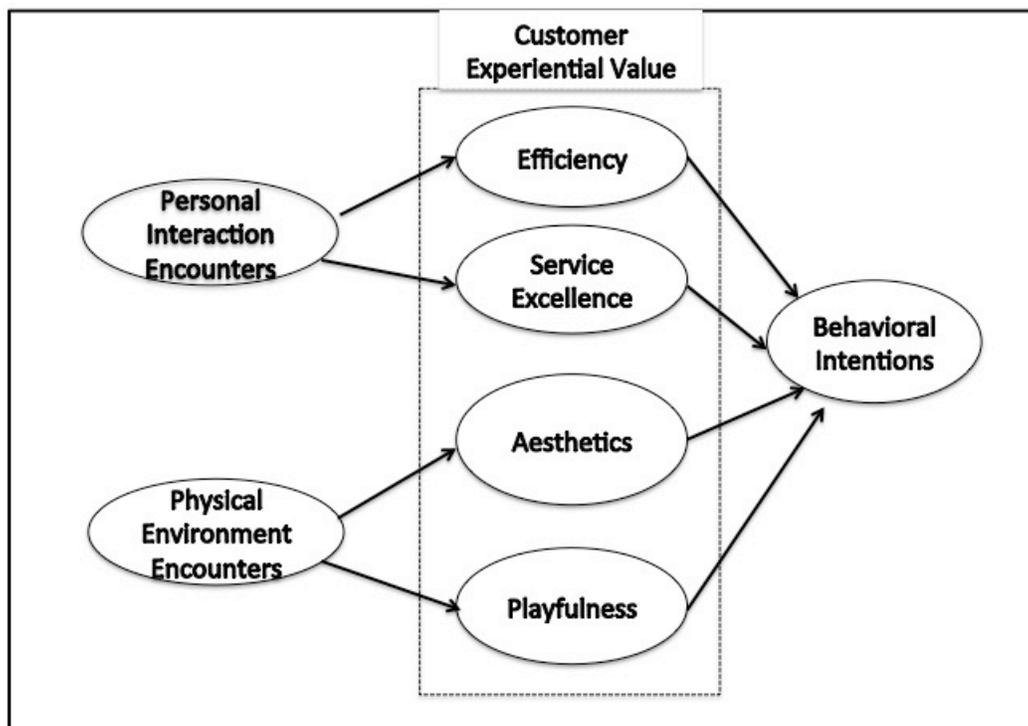
### **2.1.3 RELEVANT RESEARCH ON CUSTOMER EXPERIENTIAL VALUE**

Experiential values have not been studied extensively. A limited number of research on experiential values take Holbrook's topology (1994) for dimensions of customer experiential value (Keng & Ting, 2009; Keng et al., 2007; Mathwick et al., 2001). There is a simple didactic approach to view only hedonic and utilitarian experiential values (Babin & Attaway, 2000; Babin & Darden, 1995; Babin et al., 1994). Also, some research (Jeong et al., 2008; Oh et al., 2007) took Pine and Gilmore's four realm of experience to explore the dimensionality that customers experience. The four realms are entertainment, education, esthetics, and escapism.

Oh et al. (2007) utilize the typology of experiential value from Pine and Gilmore's book "the Experience Economy" to capture the customer experience of bed-and-breakfast (B&B). In their study, aesthetics was found to have the strongest influence on memory, overall quality perception, and satisfaction, while escapism and entertainment did not have strong influence on experiential outcomes. Jeong (2008) look

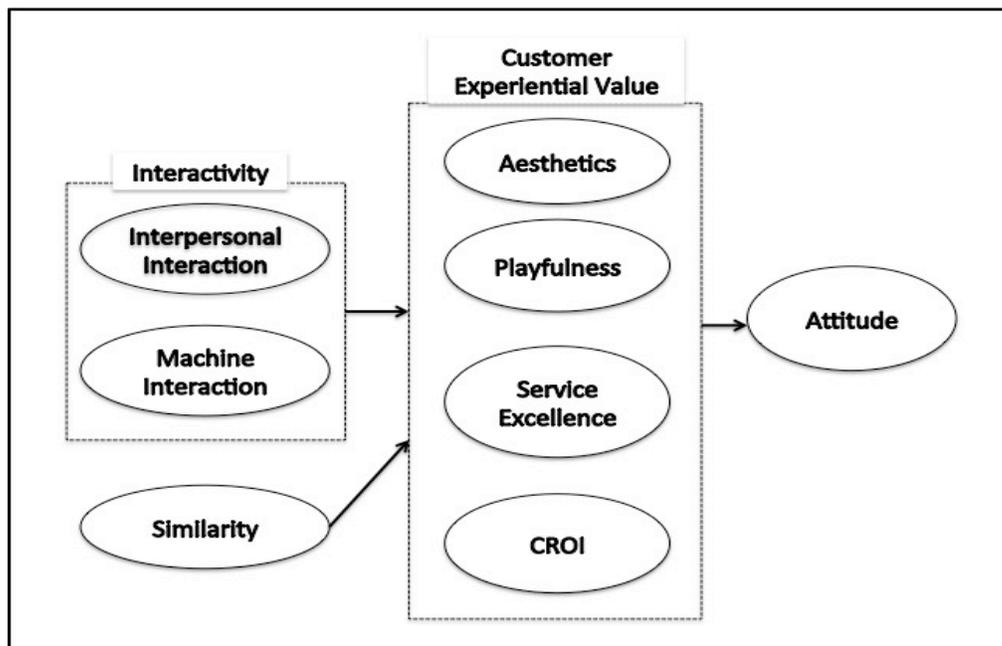
at how product presentation influences the four realms of clothing shopper experience. Entertainment and aesthetics have a direct influence on customer patronage intention, whereas entertainment, aesthetic, and escapism have indirect influence on customer patronage via pleasure and arousal.

Keng et al.'s work (2007) studied how personal interaction and the shopping mall environment influence customer experiential value, which in turn affects the behavioral intention in a physical environment. The conceptual model in the research is shown in Figure 2-1. Prior customers' experience affects the potential customers' purchase intention and their interaction with clerks and the shopping environment are found to influence extrinsic and intrinsic experiential values respectively. All of the paths from the model were found to be significant. Keng et al.'s (2007) research shows both physical and personal encounters can influence how customers feel about the product related services and pleasure related aspects of shopping. While the research setting is in physical stores that the customers visited, the research shows interaction with people and the environment can influence the perception of customer value and this changed perception can influence the future shopping, visitation, and recommendation intentions of the shoppers.



**Figure 2-1 Conceptual Model of Customer Experiential Value in a Physical Store Setting (Keng et al., 2007)**

Similarly in the online setting, Keng and Ting's work (2009) identified interpersonal interaction and machine interaction as antecedents of customer experience values in visiting a blog site. Figure 2-2 shows the conceptual model of the research. Interpersonal interaction is the atmosphere (personality) of the blog, and machine interaction shows whether the blog can provide frequent updates, diverse contents, and requested information. High machine interaction will ensure high communication utility of the blog as an information channel. Similarity is defined as the degree of feeling similar to other users of the website and it captures one human aspect of interactivity. Since the research is only in the context of a blogosphere, the research does not look at the aspects of transactional utility. Also, the final dependent variable is attitude, which will reflect the favorable emotions the visitors would have.



**Figure 2-2 Conceptual Model of Customer Experiential Value in a Blog (Keng & Ting, 2009)**

Babin, et al. (1994) view shopping experience in terms of hedonic and utilitarian values to shed equal light on the hedonic side of shopping value and develop scales for both types of values. The research acknowledges that there are many different consumption values customers could experience. A simple didactic approach would define the complex construct as parsimonious and encompassing.

#### **2.1.4 CUSTOMER EXPERIENTIAL VALUE: INTRINSIC VS. EXTRINSIC VALUE**

Some researchers see value in terms of extrinsic achievement and price or significance with trade-off, while others like Holbrook (1994) and Babin et al. (1994) focus on the utilitarian benefits of value as well as hedonic benefits. Utilitarian shopping considers “whether the particular consumption need stimulating the shopping trip was accomplished” (Babin et al., 1994). The outcome of externally motivated shopping will

have a goal apart from the shopping activity itself. In this view, shopping is more work than pleasure.

Hedonic consumption is to “designate those facets of consumer behavior that relate to the multisensory, fantasy, and emotive aspects of one’s experience with products” (Hirschman & Holbrook, 1982). According to Hirschman and Holbrook (1982), consumers register multi-sensory stimuli of a product and those stimuli can evoke images within the consumers. Some are historic recollections and some are fantasy images created by the mixture of individual experiences and new stimuli. Emotional arousal includes preferences and affects various emotions such as joy and jealousy.

#### *2.1.4.1 HEDONIC AND UTILITARIAN VALUE OF A SYSTEM*

In the area of information systems, attempts to include the hedonic benefits of using technology came later than utilitarian benefits (Shang et al., 2005). Constructs such as playfulness, flow and cognitive absorption were used to identify the pleasurable aspect of using technology.

Playfulness is a construct that has concentration, enjoyment, and curiosity as dimensions (Ahn et al., 2007). Playfulness is studied in the context of technology/system use and e-commerce environment. This was found to positively influence the use of technology and intention. Csikszentmihalyi (1975b) describe the main reasons spending time in many of our activities are “the experiences are rewarding in themselves (autotelic) and the activities provide little world of their (our) own which are enjoyable” and brought the concept of flow (Csikszentmihalyi & Csikszentmihalyi, 1988; Csikszentmihalyi, 1975a; Csikszentmihalyi, 1990; Csikszentmihalyi, 1997). Flow experience in the mediated context is enjoyable experience achieved through continuous system responses

that could come with loss of self and extras sense of playfulness (Hoffman & Novak, 1996). Flow is found to influence behavior of online customers (Lee & Chen, 2010) and some research found positive role of flow on behavioral intentions (Nah et al., 2011; Nah et al., 2010; Shin, 2009). Cognitive absorption is one way to predict the technology users experience by looking at how involved the users are with the technology (Saadé & Bahli, 2005). Cognitive absorption is found to influence both ease of use and usefulness, and has three dimensions: temporal dissociation, focused immersion, and heightened enjoyment (Agarwal & Karahanna, 2000; Saadé & Bahli, 2005)

#### *2.1.4.2 HEDONIC AND UTILITARIAN VALUE OF SHOPPING*

The hedonic side of shopping value did not get as much attention as the utilitarian side (Arnold & Reynolds, 2003; Hirschman & Holbrook, 1982). More and more research is done placing emphasis on both hedonic and utilitarian value of shopping.

Babin et al. (1994) identifies two types of shopping values as hedonic and utilitarian. Yuan's (2008) study saw intrinsic and extrinsic experiential values to be the antecedents of customer satisfaction. The emotional value (intrinsic value) is to have five dimensions comprised of enjoyment, return, relaxation, good feeling, and satisfaction. Functional value (extrinsic value) has two dimensions: shopping desirability and satisfactory price.

Sweeney and Soutar (2001) research identified four dimensions of perceived customer value. Among the four, two are functional (utilitarian) value and consider the benefits in terms of price and quality. The others are emotional and social values covering the intrinsic side of the motivation.

Overby and Lee (2006) saw online shopping value to have utilitarian and hedonic values and defined latter as an “overall assessment of experiential benefits and sacrifices such as entertainment and escapism,” former as an overall assessment of functional benefits and sacrifices.” They have two groups of online shoppers, frequent and infrequent shoppers. While higher levels of either utilitarian or hedonic values showed significant influence on preference and intention for infrequent shoppers, only utilitarian value, for frequent shoppers, has a significant influence on preference forming.

Bridges and Florsheim (2008) recognizes that there are customers who seeks hedonic goals and utilitarian goals during their online shopping; however, they are doubtful that hedonic values can do more, in terms of revenue generation, than attract customers to stick around or come back to the web store.

#### *2.1.4.3 HOLBROOK'S TOPOLOGY*

Holbrook (1994) identified three taxonomic dimensions of value: extrinsic versus intrinsic value, self-oriented versus other-oriented value, and active versus reactive value. Extrinsic and intrinsic axes investigate customer value with the perspective that the customer finds the product instrumentally good or inherently pleasing (1994). Extrinsic value of customer would be realized when goods or services traded are effective in reaching customer goals. In contrast, intrinsic value is appreciation of goods or services notwithstanding any goal.

Self-oriented and other-oriented values of customer dimension emphasize the ultimate beneficiary of a product. Self-oriented value will be high when a product or service fits those preferences.

Holbrook (1994) proposed a topology for a self-oriented experience value by

subdividing extrinsic and intrinsic aspects of customer value by an activity dimension resulting in four quadrants: playfulness, aesthetics, consumer return on investment, and service quality. Activity dimension is divided into the active and passive values. Active value signifies that extrinsic or intrinsic value is gained through the collaboration between the web site and the visitor; while passive value is the product consumption or experience. Figure 2-3 shows the topology of experiential value.

Intrinsic	Playfulness	Aesthetics
Extrinsic	Consumer Return on Investment (CROI)	Service Excellence
	Active	Reactive

**Figure 2-3 The Holbrook's (1994) Topology of Experiential Value**

Playfulness and aesthetics dimensions are relate to the intrinsic values customers gain by accessing and interacting with business web sites in the e-commerce environment. The playfulness dimension is alternatively named escapism and represents self-oriented intrinsic experience (Keng & Ting, 2009). Mathwick et al., (2001) explained this experience as emotional worth of the online shopping process.

Aesthetic value is gained from the immediately satisfying experience through four senses and online stores' entertaining effects (Keng & Ting, 2009). Online stores mostly satisfy the visual sense with the use of color, images, and layouts (Mathwick et al., 2001)

and entertainment effects can be satisfied through games. According to Berthon, Pitt et al. (2009), aesthetics, from the Greek word meaning “to perceive,” is a “science of perception.” Aesthetic is concerned with the ability to discern value and quality. The aesthetic experience comes only through the discerning process. By nature, aesthetics is an ability which gets refined with experience; therefore, is developmental.

Extrinsic values include service excellence and Consumer Return on Investment (CROI). CROI describes what customers receive in exchange for what customers have invested. The customer investment can include monetary, temporal, behavioral, and psychological resources. Service excellence is related to whether or not the customers received reliable services they were promised (Keng & Ting, 2009). Due to its passive nature, customers appreciate the offered service and evaluate it rather than actively achieving certain levels of service. Therefore, this dimension reflects how well the service provider performed its expertise and other tasks related with purchased goods..

Holbrook’s (1994) experiential value was further analyzed by Mathwick et al. (2001) and three of the four quadrants are composed of two sub-dimensions. Aesthetics has visual appeal and entertainment as dimensions. Escapism and enjoyment are the dimensions of playfulness. CROI has efficiency and economic values as dimensions.

### **2.1.5 DEFINITION OF CUSTOMER EXPERIENTIAL VALUE AND DIMENSIONALITY**

For the purpose of this dissertation, intrinsic and extrinsic value customer experience in online stores is termed customer experiential value. Experiential customer value will be defined as “relativistic preference characterizing a subject’s experience of

interacting with some object” as Holbrook did in 1994. While this research subscribes to the construct’s definition by Holbrook and his dimensionality of the construct sound, it takes the general approach of viewing the basic dimensionality of customer experiential value and distinguish customer experiential value in terms of intrinsic and extrinsic value. The reasoning is that while there is a general consensus of defining customer experiential value in terms of intrinsic and extrinsic values, there are different opinions on how to view the dimensions of intrinsic and extrinsic values.

## **2.2 INTERACTION**

### **2.2.1 DIMENSIONS OF INTERACTIVITY**

Interactivity is a multi-dimensional construct and its composition is still controversial (McMillan, 2002). Some researchers view interactivity in terms of what interactive technological features enable it. For example, does the web message board promote level of control by the users? Downs and McMillian (2000) define interactivity in terms of direction of communication, timing flexibility, sense of place, level of control, responsiveness, and the perceived purpose of communication. Timing flexibility emphasizes the flexible nature of an individual’s control in responding to a prompted signal. For example, a customer might receive a message and the individual has control over when to respond to the message. Responses are not necessarily instantaneous and flexibility is the characteristic of interactivity.

Similar to Downs and McMillian, Heeter (1989) identified six dimensions of interactivity assessing a new technology: complexity of choice available, accessibility of

information, responsiveness to the user, information use monitoring, easy of user addition of information, and interpersonal communication facilitation.

Kiouris (2002) viewed interactivity in three categories: structure of technology, communication context, and user perception. Each aspect has different dimensionality. Structure of technology has speed, range, timing flexibility, and sensory complexity. Communication context has third-order dependency (degree of later messages discussing previous messages) and social presence. User perception includes proximity, sensory activation (heightened senses during the encounter) and perceived speed.

Kim (2011) investigated six dimensions of interactivity including product customization, socialization, synchronicity, two-way communication, demonstrability, and information customization.

Unlike researchers looking at what the technology enables, Huang (2003) identified the domains of interactivity in terms of what users feel. He identified six features of interactivity as responsiveness, individualization, navigability, reciprocity, synchronicity, participation, and demonstrability. He identified the characteristics of each dimensional attribute and gave examples of technology or systems enabling the attributes. For example, posting answers to FAQs will allow customers to feel as though they are engaged in bidirectional communication creating a feeling of “reciprocity.”

Hoffman and Novak (1996) saw interactivity to be either person interactivity or machine interactivity. Similarly, Stromer-Galley (2000) categorizes interactivity into human-to-human interaction and human-to-media interaction. Szuprowicz (1995) viewed interactivity in a system use context in a corporation in three layers: user-to-documents, user-to-computer, and user-to-users. User-to-document describes how users access

information within the company. In an online business, users can be generalized into other participants including suppliers and customers. Accessed information includes product listings, corporate news, FAQs, and product supports.

The user-to-computer dimension involves a technological enabler of communication with the businesses and other customers such as a transaction system, customer management system to store customer order history, or a multimedia database, storing product information. In an online retail environment, the users will be customers, and user-to-computer will be customers' interaction with a business or its sales representatives through various features enabled within an e-store.

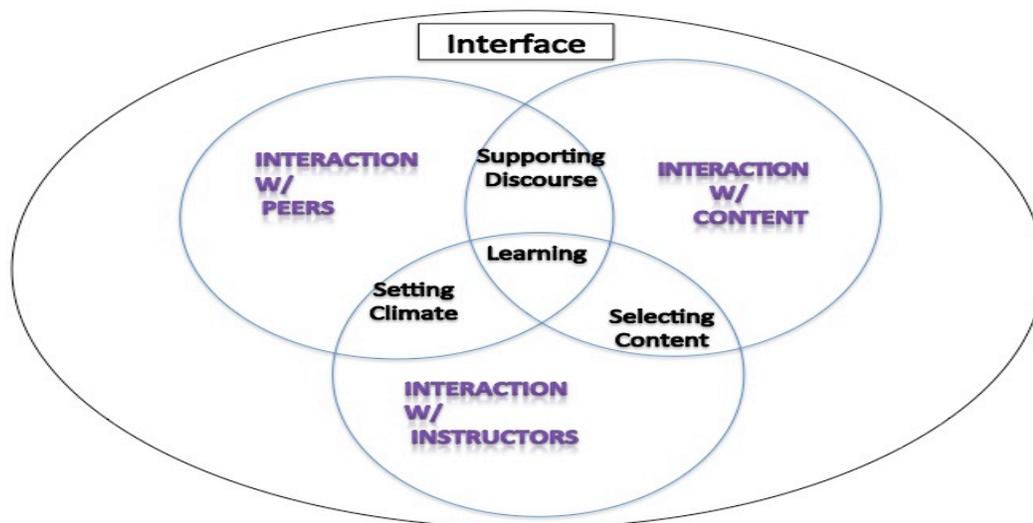
User-to-user interaction in the context of corporate communication is best described by multimedia conferencing. In the context of e-commerce, user-to-user interaction involves customer product ratings, virtual communities within and outside a corporate web site, and other modes of communication among current and potential customers. McMillan (2002) considers the dimensions of interactivity just as Szuprowicz (1995) does but in a mediated communication context. The types of interactivity provided by Szuprowicz and McMillan have comparable categorizations in distance education and media communication research.

### **2.2.2 THREE LEVELS OF INTERACTIONS**

Moore (1993) presents three types of interaction in distance education: learner-content interaction; learner-instructor interaction; and learner-learner interaction. He believes that this is the fundamental way to categorize interaction and can be used across different media. Each level of interaction is defined in terms of learners' ability. Learner-

content interaction, learner-instructor interaction, and learner-learner interaction are defined respectively as “the ability of learners to access, manipulate, synthesize, and communicate content information; interaction with instructors,” “the ability of learners to communicate with and receive feedback from their instructors” and “the ability of learners to communicate with each other about content to create an active learning community” (Swan, 2002).

Swan (2004) takes Moor’s classification of interaction and applies it in the online learning experience using Rourke et al.’s (1999) communication of inquiry model. Online instruction can promote positive learning experience through three levels of interaction: interaction with peers, interaction with content and interaction with instructors (refer to Figure 2-4). Interaction with the instructor and interaction with peers create social presence in the online classroom setting. Swan (2002) perceives interaction with content to be related to the design of the online learning site.



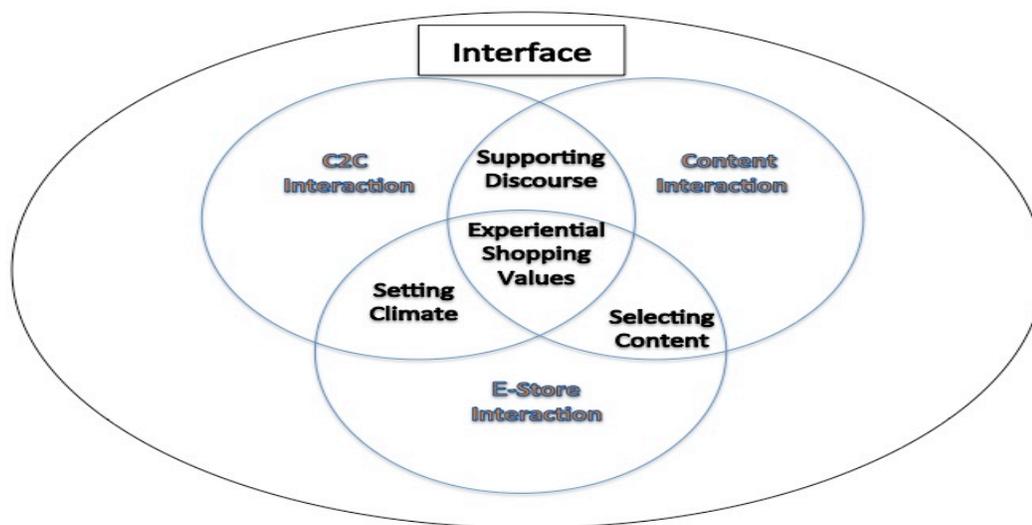
**Figure 2-4 Relationships Between Interactions and Learning in Online Environments (Swan, 2004)**

### 2.2.3 THREE LEVELS OF INTERACTIONS

As briefly explained previously, this dissertation identifies interactivities in three levels, depending on where interactivity applies. The interactivity will be in three levels: e-store interaction, C2C interaction, and content interaction.

E-store interaction is optimized in a friendly environment that the business and the sales/supporting workforce behind the interface create. C2C interaction occurs within a business-supported environment where consumers can interact with other consumers. Content interaction reflects the quality and adequacy of contents in e-stores.

With some modification due to the context, Figure 2-5 is presented below to show how the three kinds of interactions are influencing each other and creating an optimal experiential shopping value.



**Figure 2-5 Relationships between Interactions and Online Shopping Experiential Value (modified from Swan (2004))**

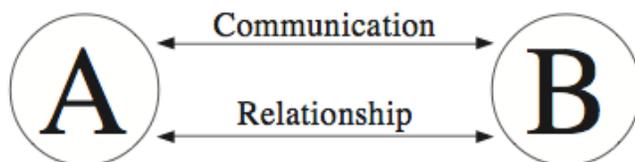
## **2.2.4 INTERACTIONS AND ONLINE SHOPPING EXPERIENTIAL VALUES**

The diagram in Figure 2-5 shows the relationship between different levels of interactions and customers' experiential values while shopping online. While interaction in every level can support experiential shopping value, optimal experiential shopping value can be achieved when all three levels of interactions are harmoniously supporting each other. Discussions on these levels of interaction and overlapping areas follow.

### *2.2.4.1 E-STORE INTERACTION*

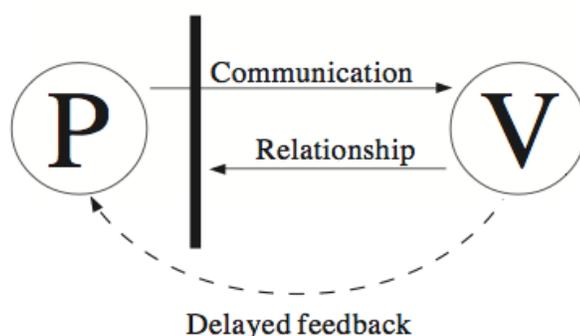
Interaction with Instructors and parasocial relationships are similar to user-to-system category of interaction from human computer interaction (HCI) studies (McMillan, 2002; Szuprowicz, 1995). For the dissertation, user-to-system interaction will be changed into e-store interaction. E-store interaction will be defined as the environment where e-store customers can communicate with sales people, utilize a recommendation system, and interact with the e-store interface, and receive proper feedback.

Interaction with Instructor from Rourke et al. (1999) discusses how an online course instructor makes nonverbal attempts to minimize physical as well as psychological distance felt by the students from the instructor. The nonverbal behaviors include eye contact, posture, and gestures (Rourke et al., 1999). A similar construct, parasocial relationship in media studies, is defined as a "the feeling of being in a social interactions" with persona transmitted through a media (Hartmann & Goldhoorn, 2011). Isotalus (1998) illustrates the difference between an interpersonal relationship and a parasocial relationship with simple diagrams in a television-mediated context.



**Figure 2-6 F2F Interpersonal Interaction (Isotalus, 1998)**

Referring to Figure 2-6, there are direct communication and relationship between person A and B. However, Figure 2-7 shows how a viewer (represented as V) cannot actually build a real relationship with the presenter (represented as P). Also, while there is a direct communication from P to V, feedback from V is not simultaneous as in a face-to-face communication. A television presenter tries to increase the reality of the television-mediated communication by initiating interaction such as looking at the camera (direct eye contacts), addressing the viewers as if they are in the show, and attempting to use conversational tones (Hartmann & Goldhoorn, 2011; Isotalus, 1998).



**Figure 2-7 Mediated Parasocial Interaction (Isotalus, 1998)**

Both Interaction with Instructor and parasocial relationships deal with mediated quasi-interaction. Students and viewers feel the presence of the instructor and presenter through verbal and non-verbal cues such as eye contacts and gestures. Active instructor interactions encourage frequent opportunities for students to interact with the instructor. Practical examples to enhance Instructor Interaction are providing clear guidelines to ensure at least a minimum level of care to be given to students; providing prompt and supportive feedback; and training faculties. This will help the instructors improve their interaction with students (Jiang & Ting, 2000).

Similarly, businesses can design their website to create a welcoming feeling by using web design elements, adding customer-oriented features to the web site, and including human/non-human interactions within the site. Simple FAQs might create an illusion that the business is answering what the customers want to know and minimizing the efforts trying to find the answers to their questions. Key word search reduces customers' time and effort spent in navigating the business site. Simple product program diagnostic program give customers perception of standardized level of quality service while reducing the workload of actual service center (Ghose & Dou, 1998). Simple product program diagnostic program give customers perception of standardized level of quality service while reducing the workload of actual service center (Ghose & Dou, 1998).

#### *2.2.4.2 CONTENT INTERACTION*

Swan (2002) sees Interaction with Content in terms of meeting information requirements of users and designing the interface effectively. Information presentation

style, clear navigation, presence of help menu, consistency in layout, and other design/content issues are mentioned in relation to the Interaction with Content.

Media is defined as “tools used to store and deliver information or data” (Wikipedia, 2011b). Content interaction in terms of meeting customers’ information requirements discusses the basic communication role of the web store. Information regarding products, such as usages or warranty, and news about the company and the industry will be part of the information, which might be required by web consumers.

Interaction with content is similar to the user-to-information category of interaction from human computer interaction (HCI). User-to-information (McMillan, 2002; Szuprowicz, 1995) discusses how needed information is delivered to the system users within a corporate context. When the context is changed to the online shopping, the interaction will be between customers and contents.

Effective design of the interface and the system can easily be related with machine interaction (Hoffman & Novak, 1996) and structure of technology (Kioussis, 2002) in media and e-commerce related studies. Machine interaction can easily be understood in the context of hypermedia computer mediated communications (HCMCs). According to Hoffman and Novak (1996), hypermedia CMCs allow interaction between individuals and firms, *people interaction*, and individuals/firms to networked media, *machine interaction*. Structure of technology is in terms of objective (not perceived) speed, range, timing flexibility (response to a previous message can be timed to the responder’s schedule), and sensory activation.

Interaction with content in online distance learning will be called content interaction and will focus on whether or not the e-store enables access to needed amount

of quality information in well-communicated and timely manner. So, content interaction in e-store will be defined as the environment which guides consumer decision by enabling access to needed amount of quality information in timely manner. Interface and system design aspects will also be studied in web store utility.

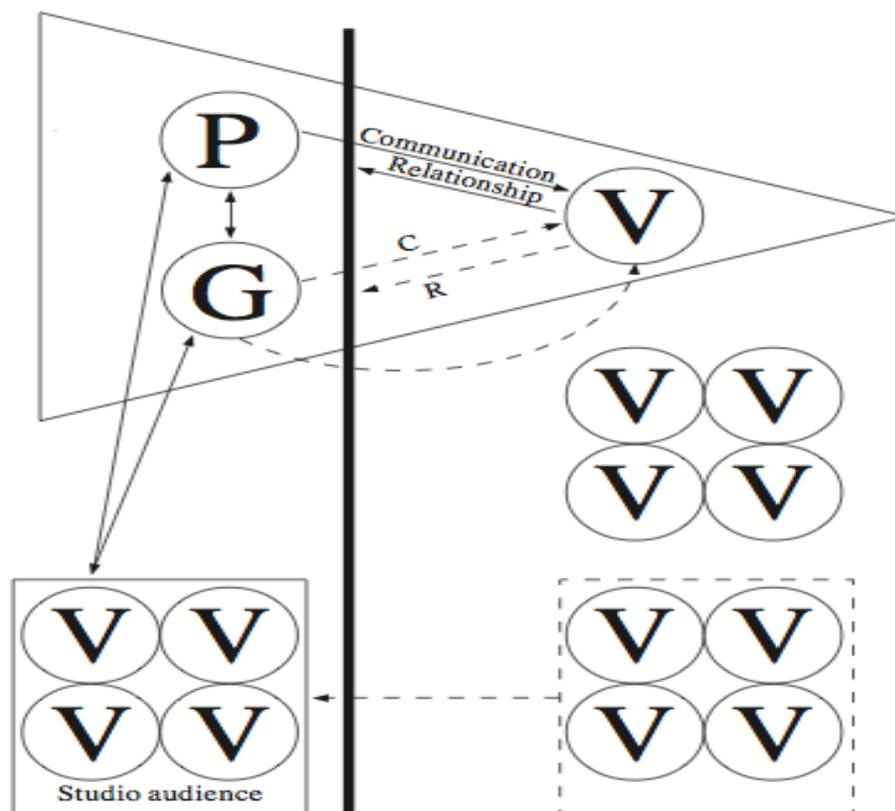
#### *2.2.4.3 C2C INTERACTION*

Interaction with peers is the ability of computer-mediated communication to create affective interpersonal interactions (Garrison et al., 2001). Similar to Interaction with instructors it has an ability to create social presence online (Swan, 2004). The ability to interact with peers is the key in knowledge building (Swan et al., 2000). The social environment facilitated by an instructor is to encourage experimentation, idea sharing, more participation, and collaborative thinking (Swan, 2002).

C2C Interaction in e-business deals with how customers interact with each other creating a social environment facilitated by the business. Broadcast teleparticipation effect in media studies is a similar construct to C2C Interaction and Interaction with Peers while the settings are not identical.

Skumanich and Kintsfather (1998) introduced broadcast teleparticipation effect in a TV shopping setting. Teleparticipation in television shopping gives viewers a feeling of identification when they hear studio audience members or called-in viewers share about product experiences (see Figure 2-8). A live audience in a show is a biased subset of actual viewer population. They directly communicate with the presenter and the guest (represented as G) of the show. They build a relationship with both the presenter and the guest. Isotalus (1998) suggested that viewers would identify with live audiences and feel like they are actually participating in the show. In addition, observing similar individuals

communicating with the target of interest reduces uncertainty on how the target will behave towards the viewers (Berger, 1979).



**Figure 2-8 Teleparticipation**

Interaction with peers, which is a C2C relationship in mediated shopping context, can be thought as a similar concept to teleparticipation (Wong & Fortin, 2000).

Interaction with Peers enables learning and brings collaborative thinking, idea generation and sharing, and experimentation; while teleparticipation promotes feeling of participation in the show and develops emotional attachment such as loyalty, friendship, and affinity through reduction of uncertainty (Berger, 1979).

Interaction with Peers in distance education and teleparticipation in media communication are user-to-user interaction in HCI which are related and deal with how

similar participants are interacting with each other. For the purpose of this research, user-to-user interaction will be termed C2C interaction and is defined as the environment of consumers to communicate with each other about consumption experiences, products, and/or services and where consumers feel a sense of community and develop emotional attachments with other participants.

#### *2.2.4.4 SETTING CLIMATE*

Setting climate is where e-store interaction and C2C interaction overlaps (see Figure 2.5). Interaction with Peers and teleparticipation occur under the social supports/encouragement from the instructor (Swan, 2002) and television persona respectively. Similarly, a business web site sets an atmosphere for customers to interact. The Internet is not just a new sales medium for businesses. Customers' power has grown so much that e-businesses cannot ignore customers' input on products and services.

Examination of the current e-business environment should be able to identify how the web technologies can help businesses set an atmosphere to enhance consumer experiences online. One common way to study the business environment is by analyzing the marketing mix. Marketing mix is a "mixture of elements useful in pursuing a certain market responses." Krueger et al.'s (2003) marketing mix compares the McCarthy's four P's and four C's of e-marketing. Instead of analyzing Product, Price, Place, and Promotion; reviewing of Customers' needs and wants by analyzing Cost to the customers, Convenience, and Communication is recommended. The following paragraph will examine the e-marketing mix using four C's. This examination will help a business understand the current situation and develop a strategy to provide a proper climate to support customer engagement in the business website.

### Customers' needs and wants instead of Product

- Product-centric vs. consumer-centric environment: While traditional marketing was product-centric, the Internet provides customers a centric environment. New product and new pricing are offered due to the lower operating cost (e-plane tickets printable at home) and lower distribution cost (e.g., mp3 music, e-book, and software).
- High search cost: Internet does not have physical limitation like the traditional shops and can display as many products as the site is willing to post. On top of the number of products displayed on the Internet, Internet can provide comparison between similar products in the same or different shops as well as price comparison.
- Availability in terms of time: While most physical stores are restrictive in terms of the time available for shopping, Internet shops operate 24/7.
- Ownership and handling of information: Internet stores allow customers access many of the information typically managed by the company and employees. For example, the company handles customer purchase history and customers have limited access to their record. However, in online stores, much of the individual records are accessible by customers. Also, customers can supply their product-related knowledge and experience to share with the company and other customers. Product reviews provided by other customers on related business sites are accessible to aid better purchasing judgment. Information provision is considered essential in product support.

### Cost to the customer instead of Price

- Cost to the consumer covers not only the price of the product but also time, efforts, and missed opportunity (Krueger et al., 2003). Mental difficulty customers face when they have to make a difficult choice such as size, price range, design, amount of information, and so on can also be a cost (sacrifice) of customers (Pine & Gilmore, 2011)
- Market penetration pricing and niche pricing models to negotiable, segmented, and zero-based pricing models: Online businesses try to reduce the cost as much as possible. Prices can be negotiated; segmented pricing and zero-based pricing models are used. Even the price should be customized to the needs of customers by customizing bundling, future purchases

#### Convenience instead of Place

- Constant accessibility: While traditional shops have physical locations, the Internet stores have minimal use of physical stores and distribution channel. Since there are no physical and temporal limitations, e-stores provide constant accessibility.
- New mode of intermediaries: New modes of intermediaries have appeared. For example, there are sites such as Amazon.com, which started as an online bookstore now connecting many companies and buyers together. Some intermediaries are entirely new in its concept. Auto-by-tel is a new type of intermediary which connects customers with car dealers and manufacturer. Customers learn dealer invoice prices of cars and each car in the business site is sold at fraction of a physical dealer's selling cost (Shunk et al. 2007)
- Informediary: According to Hegel (1999), who coined the word informediary, informediary helps customers maximize their value when they give up some

information about themselves (Sarkar, 2002). For example, Bizrate provides list of sellers and their information when customers provide information on what they want.

- **Disintermediation:** Intermediation is cutting out the middleman in a traditional supply chain linkage (Shunk et al., 2007). More knowledgeable customers have an option of choosing or bypassing intermediaries. Disintermediation can reduce the customer time and spending, accommodate customization, and help customers to gain more information about the products (Eysenbach, 2007).
- **Agents, brokers, and e-tailor:** New types of agents, brokers, and e-tailers has appeared online with minimal cost to entry.

#### Communication instead of Promotion

- **One-to-Many to One-to-One:** Traditional advertising utilizes one-to-many advertising model. However, current online market can easily guess customers' needs and customize their marketing efforts to appeal to the desires. Pine and Gilmore (2011) takes an example of Dell computer. Dell customers can go online and tell what they want and build a customized system. This process is called collaborative customization and the Internet technologies make this process much easier.
- **Personalization of goods:** Personalization of goods is easier using Internet technologies. Customer-oriented cosmetic changes to traditional products can give personalized experiences for customers and makes the essentially comparable products more attractive (Pine & Gilmore, 2011). For example, personalized children books use the name of kid who will own the books. The

Internet is also a popular venue for printing digital photos and many of the personalized products such as mug cups, calendars, and post cards. Easy personalization is a good marketing tool to attract customers to e-stores. Apple offers free engraving for people who buy iPod online.

- Traditional promotion is more expensive than the Internet marketing: Content publishing, online advertising, and online sales promotions are used by the e-tailors.

#### *2.2.4.5 SELECTING CONTENT*

Information quality is defined as “the extent to which users think that the information is useful, good, current, and accurate” (Rieh, 2002). Information quality concerns usefulness of content and adequacy of information (Yang et al., 2005).

Usefulness of contents within a business site discusses the “value, reliability, currency and accuracy of information,” while adequacy of information describes whether or not information necessary to make a product/system decision is provided on the site (Yang et al., 2005). The information might include the selection of product offering, product related services and warranty, company related news and information, industry news, expertise information concerning their products or services, and so on.

Selecting content is an active role business takes to disclose information for customers. According to Rieh (2002), businesses need to be selective about what kind of content they provide to their online customers because different content will give different judgmental impressions, such as good, accurate, useful, and important, and cognitive authorities, such as trustworthy, credible, reliable, scholarly, official, and

authoritative. Therefore, carefully selected content is useful and adequate for the targeted customers and meeting intended purposes.

#### *2.2.4.6 SUPPORTING DISCOURSE*

Supporting discourse occurs when customers offer their knowledge and expertise to the content of a business site. When customers contribute their knowledge, experiences, and opinions, the contributed content will be information other customers can view and adopt as an advice. Communication with other consumers occurs in various forms of virtual communities within or outside business websites. Unlike real communities, virtual communities are formed for defined objectives and common interests are the definite norms (Andreatos, 2007).

Business also can benefit from customers' active content contribution. The Internet offers new ways to interact with customers in new product developments, product improvement, new product launching, and customer relationship management. Customers are not the source of economic value extraction but a source of value creation and value exchange (Prahalad & Ramaswamy, 2004). Ramaswamy (2008) presents the idea of co-creation value through Nike customer experiences using online social network. Nike and apple jointly launched the Nike + where runners can use iPod and connecting device to monitor the exercise while listening to the music. Runners can join online communities where they can spark conversations, support each other's exercise, and challenge one another. Ramaswamy sees this Nike+ as an experience co-creation platform. Both runners and Nike co-create Nike's strategic capital, customers' engaging experiences, and economic value outcomes to both the company and the customers.

Sawhney et al. (2005) compares the differences between user involvement in traditional and virtual environment. In traditional face-to-face mode, the engagement of customers is required on a contingent basis and is passive in nature. When customer participation is required, companies ask for customers' participation and their input on the pending matters. However, customers' involvement online is continuous in nature. Web-based companies continuously inform their web community members of what is going on in terms of products and the company. The customers' responses to information can be instantaneous. When companies ask for user inputs, online customers tend to be active in sharing their experience, information, and knowledge. Not commonly shared experiences and wrong information are commented and corrected by others, creating less biased and less imperfect information.

### **2.3 SUMMARY**

Chapter two introduces the general background literature for this research. Experiential value and interactivity were reviewed and their dimensionalities are defined for this research. Experiential value will have two dimensions, intrinsic and extrinsic value. Interactivity will be investigated in three levels, e-store interaction, C2C interaction, and content interaction.

## CHAPTER THREE

### RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

Chapter Three will present the research model and develop hypotheses among e-store interaction, C2C interaction, content interaction, web store utility, intrinsic customer experiential value, extrinsic customer experiential value and behavioral intentions.

#### 3.1. PROPOSED RESEARCH MODEL

Figure 3-1 shows the proposed research model of this dissertation. The three antecedents: e-store interaction, C2C interaction, and web store utility influence intrinsic and extrinsic customer experiential values, and customer experiential values mediate the influences of the antecedents. Web store utility would have direct influence on behavioral intention as well.

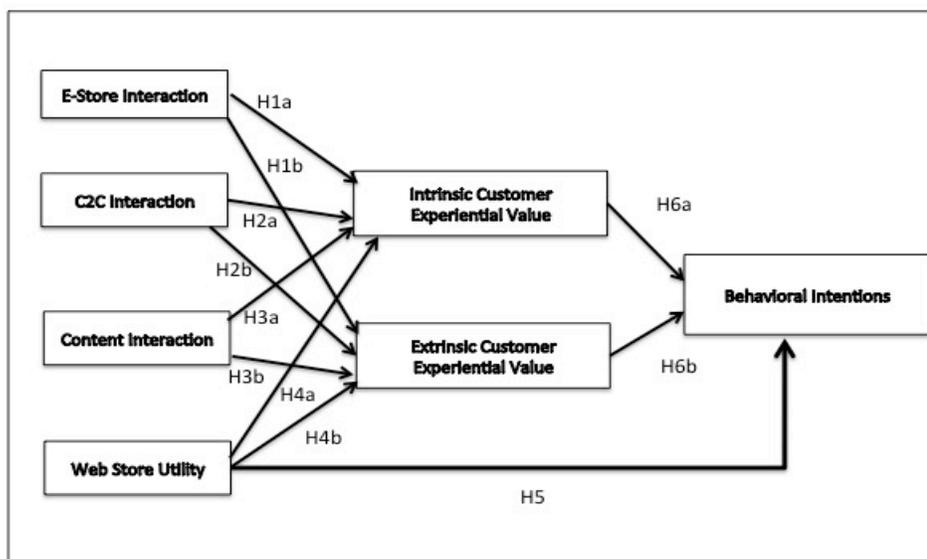


Figure 3-1 Proposed Research Model

## **3.2 HYPOTHESES DEVELOPMENT**

### **3.2.1 E-STORE INTERACTION AND CUSTOMER EXPERIENTIAL VALUE**

E-store interaction in this dissertation deals with the environment where customers can interact with the business, salespeople, and online recommendation system. Web design to enable better e-store interaction can include a warm and welcoming atmosphere, customer support through a recommendation system, live chatting with salespeople, helpful Q&A's, prompt business responses to customers concern and so on.

In a physical store, the interaction with the physical environment is found to positively influence the perceived aesthetics and playfulness values: an intrinsic dimension of the experiential value (Keng et al., 2007). In an e-business site, there is no physical environment where customers interact. Instead, the web design aspect of the business site is evaluated to assess the atmospheric effect of e-business site. Chen and Yen's (2004) study found that playfulness, choice, and connectedness features increase the quality of web design, which should be logically related with all four dimensions of the experiential value. Having more interactive features within business sites should influence the attractiveness of the sites (Ghose & Dou, 1998). Interpersonal interaction facilitated by web-related person also improves perceived experiential value (Keng & Ting, 2009). Also, Kim (2011) found relationships between web interactivities and experiential values. Especially, six dimensions of interactivity, when considered as a

group, influences hedonic aspects of experiential values better. Thus, the following hypotheses are proposed.

*H1a: The degree of perceived e-store interaction has a positive relationship with intrinsic customer experiential value.*

*H1b: The degree of perceived e-store interaction has a positive relationship with the extrinsic customer experiential value.*

### **3.2.2 C2C INTERACTION AND CUSTOMER EXPERIENTIAL VALUE**

Personal interaction in general increases the perception of extrinsic experiential value in a physical retail environment (Keng et al., 2007). The Internet allows more active participation of individuals and B2C and C2C interactions are highly likely to influence customer experiential values. According to Novak et al. (2000), the Internet is a radically different from traditional distribution channels due to consumers' contribution of contents. C2C interaction is found to increase the firm performances (Libai et al., 2010). Keng and Ting (2009) found a similar way of thinking among blog users brings interactivity among them, and the level of perceived interactivity will increase both intrinsic and extrinsic aspects of customers' experiential values by enhancing playfulness and service excellence. Interpersonal interaction is found to increase aesthetics and playfulness dimensions of the experiential values (Keng and Ting, 2009). Also, Balasubramanian et al. (2005) suggest that people enjoy both similar and dissimilar views while shopping with others, strangers or not. When online shoppers feel the presence of

other customers, the perceived level of intrinsic customer experiential value seems to increase. For example, in Lin and Bhattacharjee's (2008) research, network externality brings network benefits, C2C interaction among Instant Messenger (IM) users, which bring perceived enjoyment among IM users. Providing a mechanism to communicate between customers is a service provided by the web store rather than a product the store is selling. Reading and sharing product experiences should increase the play aspect of shopping, enhance the economic value of the product, and decrease the obscurity of the products or services. Thus, the following hypotheses are suggested:

*H2a: The degree of perceived C2C interaction of a business website has a positive relationship with the intrinsic customer experiential value.*

*H2b: The degree of perceived C2C interaction of a business website has a positive relationship with the extrinsic customer experiential value.*

### **3.2.3 CONTENT INTERACTION AND CUSTOMER EXPERIENTIAL VALUE**

While e-store interaction and C2C interaction are tapping the hedonic aspect of interactivity in online shopping, content interaction, in this dissertation, views a utilitarian side of interaction. If e-store interaction and C2C interaction deal with service quality, content interaction deal with information quality of e-business offerings. Creating a website emphasizing only hedonic features could generate "stickiness" to the site but might not be generating revenue and frequent shoppers tend to seek more of the utilitarian values (Overby & Lee, 2006). Not only the hedonic features, but also perceived

utilitarian values can create perceived switching costs for online users (Ray et al., 2012). Wang (2008) found that information quality along with system and service quality influences perceived value and user satisfaction of e-commerce systems and lead to intention to reuse. To find out the channel preference and usage intention among online mortgage consulting customers, Li et al. (1999) investigated how perceived channel utility influences online buying behavior.

Communication utility can positively influence experiential values. According to Keng and Ting's (2009) research, machine interactivity in terms of whether the blog provides frequent updates, diverse contents, and requested information delivery increase both intrinsic and extrinsic customer experiential values by positively influencing aesthetics, service excellence, and CROI dimensions. Machine interaction in this case is communication utility of a blog as an information channel.

*H3a: The degree of perceived content interaction of a business website has a positive relationship with the intrinsic customer experiential value.*

*H3b: The degree of perceived content interaction of a business website has a positive relationship with the extrinsic customer experiential value.*

### **3.2.4 WEB STORE UTILITY AND CUSTOMER EXPERIENTIAL VALUE**

Web store utility in this research focuses on distribution and accessibility of the e-business. Li et al. (1999) investigated how perceived channel utility influences online buying behavior. They identified three dimensions of channel utility: communication, distribution, and accessibility. Communication deals with sufficient content update and coverage to enable consumer decision-making and content interaction in the dissertation

will be covering communication dimension of channel utility. Distribution utility is whether the online store processes business transactions smoothly from product selection to post purchase services. Channel accessibility is “the degree to which time and effort are involved in using a channel” (Li et al., 1999). Since communication dimension of the channel utility is well covered in content interaction, this paper will have web store utility cover only communication and accessibility aspects of utility.

Consumers with higher perceived distribution and accessibility utilities are found to make more frequent online purchases (Li et al., 1999). Having smooth monetary transaction (distribution utility) and an intuitive platform (accessibility utility) are expected to help reduce the unnecessary waste of time and energy customers expend with an inefficient web storefront.

Machine interaction in terms of the mechanism behind the customer interface is covered in accessibility utility in web store utility. Hoffman and Novak’s (1996) research shows that machine interactivity is expected to bring a feeling of flow, “process of optimal experience,” which leads to positive subjective experiences.

The web store utility, therefore, should increase the level of extrinsic customer experiential value. Also, having a high web store utility will help customers focus on the experience they are seeking during shopping. When customers are less occupied due to the inefficiencies of communication, accessibility and distribution, the customers should be able to create more intrinsic and extrinsic values. Thus, the following hypotheses are provided:

*H4a: The degree of perceived web store utility of a business website has a positive relationship with the intrinsic customer experiential value.*

*H4b: The degree of perceived web store utility of a business website has a positive relationship with the extrinsic customer experiential value.*

### **3.2.5 WEB STORE UTILITY AND BEHAVIORAL INTENTIONS**

When customers experience a web store and evaluate the store based on communications, accessibility and distribution, they are rating the store based on the product and information they carry, the ease of use, and the soundness of economic transaction. Accessibility and distribution are ease-of-use and usefulness aspects of an online store. According to technology acceptance model (TAM), ease-of-use and usefulness lead to intention to use (Davis, 1986), and the perceived web store utility will similarly affect the behavioral intention to visit the web store. When the cost of searching valuable information is low in online stores, customers seeking information in various purchasing steps are likely to come back to the online shop (Balasubramanian et al., 2005). The following hypothesis is proposed:

*H5: The degree of perceived web store utility has a positive relationship with the behavioral intention to visit the web store.*

### **3.2.6 CUSTOMER EXPERIENTIAL VALUE AND BEHAVIORAL INTENTIONS**

Experiential value in this research reveals customers' satisfaction from the trade-off of resources. Customers who feel their experience was worth the time and/or money

are more likely to return to experience that feeling again (Hoffman and Novak, 1996). Gefen et al. (2003) point out two major antecedents predicting purchase intentions. The two are customers' perceived usefulness and ease of use, and trust in e-vendors. Extrinsic experiential value covers the aspects of both dimensions. Extrinsic experiential values such as advantages in price, quality, convenience, and service level explain usefulness and ease of use of the e-shopping experience. Therefore, when the extrinsic experience of shopping is satisfactory, we can assume the intention to purchase the product/service will be greater.

Brides and Florsheim (2008) showed that hedonic values customers perceive creates "stickiness" to the web store and repeat visits. People who perceive business advertisement as entertaining are more likely have higher intention to purchase the brand (Stern & Zaichkowsky, 1991). Many researchers found positive experiences, such as flow or perceived enjoyment, in their web activities to influence behavioral intention (Jeong et al., 2008; Nah et al., 2010; Nah et al., 2011; Shin, 2009).

Perceived economic value with the current e-business can, also, create vendor related switching costs such as costs related with losing current benefits, cost of uncertainty in terms of a new vendor's service level, and cost of losing brand relationship. (Ray et al., 2012). Wang (2008) found perceived value of e-commerce systems leads to intention to reuse. Utilitarian values perceived by shoppers influence patronage intention (Jones et al., 2006). Thus, the following hypotheses are suggested:

*H6a: The degree of perceived intrinsic customer experiential value of a business web site has a positive relationship with the behavioral intention to visit the web store.*

*H6b: The degree of perceived extrinsic customer experiential value of a business web site has a positive relationship with the behavioral intention to visit the web store.*

### **3. 3 SUMMARY**

Chapter Three proposed the research model to examine the role of web store interactivity and utility on experiential value and behavioral intentions. Eleven hypotheses were developed to test the relationship between e-store interaction, C2C interaction, content interaction, web store utility, intrinsic customer experiential value, extrinsic customer experiential value and behavioral intentions.

## CHAPTER FOUR

### METHODOLOGY

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This chapter describes how data was collected and analyzed to empirically test the hypotheses developed in the research model proposed in Chapter Three. The sample and measurement items are presented, and the analysis method is described.

#### 4.1 SAMPLE

This dissertation is to measure how interactivity in online shopping influences shoppers' experiential value. While consumers with different backgrounds have different shopping behaviors, this research is trying to identify the role of interactivity on experience. Korean young adult population who has sufficient experience with interactive online stores is chosen for the study.

The data gathering was designed and conducted in Korean for two reasons. First, South Korea has the best IT infrastructure in the world to access e-commerce sites. The International Telecommunication Union's report (2011) ranks South Korea as the number one in the global ICT development index. The report shows that the country has the best speed in terms of fixed broadband services. Also, Korea ranks number one in terms of the percentage of mobile broadband service subscription. Following Norway, Korea has the second highest percentage of people aged 3 and older using the Internet. Secondly, while it might be possible for people of different generations to react differently, this research assumes that age does not make much difference in terms of how C2C, e-Store, and

content interactivity influence online customers' experiential value. Younger generations purchase online more than the elders (Allred et al., 2006; Sweeney & Soutar, 2001).

## **4.2 MEASUREMENTS**

### **4.2.1 E-STORE INTERACTION**

E-store interaction is defined as “the environment where e-store customers can communicate with sales people, recommendation system, and the e-store interface and receive proper feedback.” As discussed earlier, e-Store interaction deals with the atmospheric effect of the store site enabling interaction with the business, sales people and other virtual designs of the website. The parasocial interaction of a website explains how mediated one-sided relationship is built by interacting with mediated persona over a repeated period of time by Hoerner (1999). Similarly, in the e-store a mediated social relationship within a business website can create a perception of real-life interaction with the business, business people, and recommendation system which may give individuals a favorable impression of the business, products and services. In this study, the parasocial interaction website scale developed by Hoerner (1999) will be adopted with slight modification and used to measure the e-store interaction.

Component	Measurement Items	Scale	References
E-Store Interaction	I would tell my friends about this e-store.	5 point Likert	Modified from Hoerner's (1999) parasocial interaction.
	This e-store is interested in my opinions and comments.		
	I feel as if I am part of a close-knit group when I visit this e-store.		
	Visiting this web site helps me form opinions about the topics and issues presented at this e-store.		
	The personality of this e-store is friendly and down-to-earth.		
	Visiting this e-store made me relax and have fun.		
	I wanted to say something to this e-store.		
	The personality of this e-store makes me feel comfortable, as if I am with friends.		

**Table 4-1 E-Store Interaction Measurement Items**

#### 4.2.2 C2C INTERACTION

As discussed earlier, C2C interaction deals with the environment of consumers to communicate with each other about consumption experiences, products, and/or services and where consumers feel a sense of community and develop emotional attachments with other participants. The broadcast teleparticipation effect scale by Skumanich and Kintsfather (1998) was developed for a television home-shopping situation. While the context is different from online stores, broadcast teleparticipation effects occur in a mediated context between active “show” participants with questions about or experiences with the products on sale and observing potential participants/purchasers. This situation is typical of what consumer interactions within e-stores are like. There are active opinion

forming/information sharing/question asking participants who influence potential buyers' information, perception, and future actions related with the products or services.

Component	Measurement Items	Scale	References
C2C Interaction	I enjoy reading customer comments at the e-store's Internet site.	5 point Likert	Modified from Skumanich & Kinstsfather's (1998) teleparticipation effects
	I can often identify with what many customers comments at the e-store.		
	Reading the customer comments at the e-store makes me feel as if I'm shopping with friends.		
	I like the idea that I can write my personal experience with the e-store's product if I ever wanted to.		
	I get good advice about products from comments from the people who write their experiences with the e-store's product(s)		
	It's interesting to hear about other viewers' personal experiences family and friends.		

Table 4-2 C2C Interaction Measurement Items

### 4.2.3 CONTENT INTERACTION & COMMUNICATION WEB STORE

#### UTILITY

Content Interaction and Communication Channel Utility are considered the same in this dissertation. As discussed in the previous chapter, Content Interaction is defined as the "environment that guides consumer decision by enabling access to needed-amount of quality information in a timely manner." Communication utility deals with sufficient content update and coverage to enable consumer decision-making. Li et al.'s (1999) measurements are used to capture the content aspect of interaction and channel utility.

Also, some machine interaction measure from Keng and Ting (2009) also captures content aspect of interactivity by allowing customers access website's rich content.

<b>Component</b>	<b>Measurement Items</b>	<b>Scale</b>	<b>References</b>
Content Interaction	How satisfied are you in terms of the e-store's wide selection of goods.	5 point Likert	Modified from Li et al.'s (1999) communication utility and Keng & Ting's (1999) machine interaction.
	How satisfied are you in terms of the e-store's updated information.		
	How satisfied are you in terms of the e-store's quality information.		
	The e-store offers a rich source of information and updates its content regularly.		
	I am satisfied with the e-store's content and presentation.		
	Through texts and images of the e-store's website, I know exactly how other users feel.		

**Table 4-3 Content Interaction Measurement Items**

#### **4.2.4 DISTRIBUTION AND ACCESSIBILITY UTILITY OF WEB STORE**

Distribution utility deals with whether the online store processes business transactions smoothly from product selection to post purchase services. Smooth business transaction necessitates ease of use and usefulness facets of the e-business system and Li et al.'s (Li et al., 1999) instrument for perceived distribution utility is modified to fit the e-commerce context.

<b>Component</b>	<b>Measurement Items</b>	<b>Scale</b>	<b>References</b>
Distribution Utility	How satisfied are you with the e-store in terms of ease of exchange and returns.	5 point Likert	Modified from Li, et al.'s (1999) distribution
	How satisfied are you with the e-store		

	in terms of prompt access of goods purchased.		utility
	How satisfied are you with the e-store in terms of post-purchase service.		
	How satisfied are you with the e-store in terms of security of payment means.		
	How satisfied are you with the e-store in terms of pre-purchase inspection		

**Table 4-4 Distribution Utility Measurement Items**

Accessibility to a web store should include physical as well as emotional accessibility to the business site. Machine-allowed interactivity behind the customer interface should enable seamless and instantaneous access to the web site. Making web features intuitive should reduce any emotional burden. Customizable information should allow for less time spent in finding the right information for information searchers. Li et al.'s (1999) questionnaire for accessibility is used for this dimension of web store utility.

<b>Component</b>	<b>Measurement Items</b>	<b>Scale</b>	<b>References</b>
Accessibility Utility	How satisfied are you in terms of effort for using.	5 point Likert	Modified from Li et al.'s (1999) accessibility utility
	How satisfied are you in terms of degree of interactivity.		
	How satisfied are you in terms of convenient accessing.		
	How satisfied are you in terms of ease of information customization		

**Table 4-5 Accessibility Measurement Items**

#### 4.2.5 CUSTOMER EXPERIENTIAL VALUE

Customer experiential value is defined as customers' perception of a product or service following direct consumption or indirect observation (Mathwick et al., 2001; Yuan, 2008). Adopting Holbrook's (1994) topology, this research views self-oriented customer experiential value has intrinsic and extrinsic dimensions. Aesthetics and playfulness will be intrinsic values customers might experience while shopping online, and service excellence, and CROI will be extrinsic customer values.

<b>Component</b>		<b>Measurement Items</b>	<b>Scale</b>	<b>References</b>
<b>Intrinsic Experiential Value</b>	<b>Aesthetics</b>	The way e-store displays its contents is attractive.	<b>5 point Likert</b>	<b>Mathwick et al.'s (2001) experiential value</b>
		The e-store is aesthetically appealing.		
		I like how the e-store looks.		
		I think the e-store is very entertaining.		
		The e-store doesn't just sell products – it entertains me.		
	<b>Playfulness</b>	Browsing the e-store "gets me away from it all."		
		Browsing the e-business makes me feel like I am in another world.		
		I get so involved when I browsing the e-business that I forget everything.		
		I shop from the e-business site for the pure enjoyment of it.		
<b>Extrinsic Experiential Value</b>	<b>Service Excellence</b>	When I think of the e-store, I think of excellence		
		I think of the e-store as an		

		expert in the contents it offers.		
		The e-store puts customer satisfaction as the number one priority.		
		The e-store provides the best service to each customer.		
	<b>CROI</b>	Contents of the e-store are a good economic value.		
		The prices of the product(s) I purchase are not too high, given the quality of the merchandise.		
		The prices of the product(s) I purchased from the e-store are satisfactory.		
		Shopping from the e-store is an efficient way to manage my time.		
		Shopping from the e-store makes my life easier.		
		Shopping from the e-business site fits with my schedule.		

**Table 4-6 Experiential Value Measurement Items**

Playful behavior brings enjoyment that is not related to goals or objectives, rather with a feeling of escapism (Mathwick et al., 2001). Both aesthetics and playfulness are related to appreciation of features and activities provided by the e-business environment. Passive aesthetics behavior becomes active playful behavior when the customer decides to act on using the features and activities provided. Both service excellence and CROI are related to consumers' shopping goals and cover service and other extrinsic values. The

measurement from Mathwick et al. (2001) will be modified to fit the online retail situation and used in this research.

#### 4.2.6 INTENTION TO PURCHASE/REVISIT

To predict the customers' future behavior, intentions are used as the dependent variable. Behavioral intentions are used instead of attitudes since attitudes are not antecedents, co-determinants, or mediators of behavior and a good predictor of actual behavior (Davis, 1989). Weisberg et al.'s (2011) intention measure and Mathwick et al.'s (2001) retail preference and future patronage intent will be modified to fit the research context better.

Component	Measurement Items	Scale	References
Intention to Purchase/ Revisit	I would buy from other e-business sites as well.	5 point Likert	Modified from Weisberg, et al.'s (2011) intention and Mathwick, et al.'s (2001) retail preference and future patronage intention
	I might buy again from the e-business site.		
	The e-business site is the best place to shop.		
	When it comes to shopping the e-store is my first preference.		
	I intend to shop from the e-store in the future.		
	In the future, the e-store is one of the first places I will look when I need to find certain kind of merchandise.		

Table 4-7 Behavioral Intentions Measurement Items

#### 4.3. DATA COLLECTION

To empirically analyze the influence of perceived interactivity on customers' experiential value and intention to purchase/return to an e-store, a questionnaire was developed to test the proposed model. The questionnaire included some demographic

items for the respondents. All measurements were based on a 5 point Likert scale to accommodate variability of perceptions.

Since the original measurements were in English and the survey was to be conducted in Korea, an English version was made to translate into a Korean version. This research utilized the double translation protocol. To test the equivalence of both versions in terms of meanings, the English survey questionnaire was translated into Korean by a management researcher/faculty in South Korea and then the Korean version was translated back into English by a bilingual IT expert. The initial and the last English versions were compared for the significant differences in meanings. Some wordings in the Korean version were changed to ensure there would be no significant differences in meanings.

When the final version showed no significant differences from the original English version, the translated Korean version was test in a pilot survey involving about 100 Korean students. Minor changes, e.g., from a negative question to a positive question, order of items, and design of the form to fit an online survey better, were made to the survey questionnaire.

To obtain data, participants were solicited through a network of friends. Brief description of the research and a link to a survey site was given. 406 participated between January and April 2012. Among 406 participants, 349 completed the online survey. In the following Chapter Five, the results of data analysis will be presented.

#### **4.4 STATISTICAL ANALYSIS**

The data was analyzed utilizing SPSS 18.0 and the AMOS 18.0. The reliability and validity will be ensured by testing Cronbach's alpha value, confirmatory factor and principal component analysis. To see the model fit of the data structural equation model (SEM) will be utilized.

#### **4.5. SUMMARY**

To find out the effects of interactivity on customers' experiential value, and of customer experiential value and web store utility on customers' intention to revisit or purchase on the web store, a survey based empirical study is designed. Measurements are borrowed from previous research and modified to apply in this research context as shown in the section 4.2. Description of the sample, the double translation process, and the pilot survey is given. The following chapter will describe the gathered data and present analyzed data.

## **CHAPTER FIVE**

### **ANALYSIS AND DISCUSSION**

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Chapter Five shows the result of statistical analysis of the data gathered from about 400 South Korean young adults. The result will be used to: 1) discuss the characteristics of the respondents and their Internet shopping usage; 2) report the reliability and the validity of the measurements; 3) test the paths of the research model; and finally 4) test the hypotheses and discuss the result.

#### **5.1 DEMOGRAPHIC INFORMATION OF THE RESPONDENTS**

Respondents were solicited from the network of friends who are residing in or the vicinity of metropolitan areas of South Korea between January and April of 2012. The survey gathered 406 respondents among Korean young adults of whom 52 people did not complete their surveys, thus the sample included 354 respondents. About sixty percent were male and the rest were female. Fifty four % of the sample were aged between 20 and 29 and 32.2 % belonged in the age group between 30 and 39. Students constituted almost 47 % of the total and the rest working and household adults.

The survey first asked about general demographic information, Internet use, and online shopping patterns. Subjects were also asked about their online purchased experiences as well. To measure their shopping experiences and their perception of the interactivity of the site, they were asked to remember the last online shopping experience

and jot down a name of the site they visited/purchased from. They were asked to answer the rest of the survey based on the experience they had with the site they wrote down.

Table 5-1 shows the Internet usage patterns of the sample respondents. On average, 4% of people self-reported that they use the Internet 1 to 2 days per week, 11% 3 to 4 days, 30.2% 5 to 6 days, 54.8% seven days per week. The 29.9% of respondent spend 30 minutes to 1 hour each time they use the Internet. 47.7% reported they spend about 1 to 2 hours each visit, 14.1% 2 to 3 hours and 8.2% of people spend more than 3 hours for each time they use the Internet. Most of the survey respondents are heavy

Category		Frequency	Percentage
Gender	Male	210	59.3%
	Female	144	40.7%
Age	20-29	191	54%
	30-39	114	32.2%
	40-49	37	10.5%
	50 and over	12	3.4%
Occupation	Student	166	46.9%
	Employed	148	41.8%
	Self-employed	7	2%
	Professional	25	7.1%
	Homemaker	6	1.7%
	Others	2	.6%
<b>Total</b>		354	100%

Internet users, 85% of people using Internet more than five days a week.

#### Table 5-1 Demographic Information

347 (98%) respondents out of 354 had a history of purchasing a product/service online. During the past month, 14.4% of the respondent answered that they made a total Internet purchase of less than \$10, 46.6% \$10 to \$100, 24.6% \$100 to \$200, 8.2% \$200 to \$300 and 6.2% of more than \$300. Each time they shop online, 36.4% of people spend less than 30 minutes, 37.9% spent 30 minutes to 1 hour, 19.2 % 1 to 2 hours, 4.5% 2 to 3

hours, 2% more than 3 hours. While 15.3% people do not regularly visit e-shops any day of the week, 62.1% of the people said they visit the e-store 1 or 2 days per week. 14.7% people said they visit 3 to 4 days per week, 4% people said they visit 5 to 6 days, and another 4% people said they visit every day of the week. All the responses related to Internet usage are shown in Table 5-2 and online shopping patterns among the respondents are shown in Table 5-3.

Category		Frequency	Percentage
Internet usage per week	0	0	0%
	1 to 2 days	14	4.0%
	3 to 4 days	39	11.0%
	5 to 6 days	107	30.2%
	7 days	194	54.8%
Internet hours per visit	Less than 30 min	0	0%
	30 min up to 1 hour	106	29.9%
	1 hour up to 2 hours	169	47.7%
	2 hours up to 3 hours	50	14.1%
	More than 3 hours	29	8.2%
<b>Total</b>		354	100.0%

**Table 5-2. Internet Usage**

To summarize, people who spent less than \$10 during the past month constituted about 14% of the total while most people (70%) shopped amounts between \$10 and \$200. In average, majority (62.1%) of people shopped between 1 to 2 days a week, and most people spending less than 1 hour (74.3%) for Internet shopping. There were only seven people (2%) out of 354 respondents with no Internet purchasing experience. The high percentage of exposure to online shopping should be beneficial for this survey since the study is trying to investigate perception of value from online shoppers.

Category		Frequency	Percentage
Purchased online before (y/n)	Yes	347	98%
	No	7	2%
Total online shopping spending during the past month	Less than \$10	51	14.4%
	\$10 to less than \$100	165	46.6%
	\$100 to less than \$200	87	24.6%
	\$200 to less than \$300	29	8.2%

	More than \$300	22	6.2%
<b>Average online shopping days per week</b>	0	54	15.3%
	1 to 2 days	220	62.1%
	3 to 4 days	52	14.7%
	5 to 6 days	14	4%
	7days	14	4%
<b>Average time spend on online shopping per visit</b>	Less than 30 min	129	36.4%
	30 min up to 1 hour	134	37.9%
	1 hour up to 2 hours	68	19.2%
	2 hours up to 3 hours	16	4.5%
	More than 3 hours	7	2%
<b>Total</b>		354	100.0%

**Table 5-3 Online Shopping Usage**

## 5.2 ASSESSMENT OF MEASUREMENT INSTRUMENTS

Assessment of the measurement instruments used for the study will be tested in two phases. First Cronbach's alpha values will be calculated for each construct under study using SPSS 18.0 and reliability of the measurement will be assessed. SPSS will be used for the principal component analysis (PCA) to see whether different constructs are captured as different factors. Items failing to capture the intended factor or capturing more than factors are removed to ensure validity of the measure. Secondly, remaining items from PCA were used for confirmatory factor analysis (CFA). Structural equation modeling allows for CFA and tests of the goodness-of-fit. It is one way of validating scales for the measurement (Hair et al., 1998, pp. 616-627).

Among many measures of reliability test, Cronbach's alpha is typically used to measure reliability of predictive variables. Cronbach's alpha values range from 0 to 1 and the threshold value is .70. All seven constructs prove to be reliable in terms of the Cronbach's alpha testing and the test result is summarized in the Table 5-4. Behavioral

intentions has the lowest Cronbach's alpha value of .725 which is still greater than the threshold.

To test the validity of the measure, principal component analysis (PCA) with Varimax rotation is used using SPSS 18.0. PCA is used to find out whether patterns of the measurement data are similar for the same factor. The result of PCA is shown in Table 5-5.

<b>Factor</b>	<b>E-Store Interaction</b>	<b>C2C Interaction</b>	<b>Content Interaction</b>	<b>Web Store Utility</b>	<b>Intrinsic Customer Experiential Value</b>	<b>Extrinsic Customer Experiential Value</b>	<b>Behavioral Intention</b>
<b>Cronbach's Alpha</b>	.772	.835	.832	.859	.898	.857	.725

**Table 5-4 Cronbach's Alpha of Factors**

The research model consists of seven components including three interaction levels, two experiential values and the final dependent variable, behavioral intention. Among the seven, there are three multidimensional constructs with second order latent variables. Web store utility has distribution utility and accessibility, intrinsic customer experiential value has aesthetics and playfulness, and extrinsic customer experiential value consists of CROI and service excellence. The rest are uni-dimensional constructs.

Construct	Variable	Eigen -Value	% of Variance Explained	Factor Loading
<b>E-Store Interaction</b>	Store_Int3	10.006	10.348	.735
	Store_Int4			.755
	Store_Int5			.743
<b>C2C Interaction</b>	C2C_Int1	2.935	8.474	.878
	C2C_Int2			.809
	C2C_Int5			.782
<b>Content Interaction</b>	Con_Int1	2.256	8.025	.685
	Con_Int2			.784
	Con_Int3			.677
<b>Web Store Utility</b>	Web_Util2	1.869	8.003	.806
	Web_Util3			.639
	Web_Util4			.782
	Web_Util7	1.448	7.789	.730
	Web_Util8			.568
	Web_Util9			.780
<b>Intrinsic Customer Experiential Value</b>	Int_Exp_Val1	1.286	7.644	.622
	Int_Exp_Val2			.871
	Int_Exp_Val3			.867
	Int_Exp_Val6	1.241	6.848	.787
	Int_Exp_Val7			.835
	Int_Exp_Val8			.886
	Int_Exp_Val9			.712
<b>Extrinsic Customer Experiential Value</b>	Ext_Exp_Val1	1.101	6.764	.731
	Ext_Exp_Val3			.850
	Ext_Exp_Val4			.826
	Ext_Exp_Val8	.901	6.628	.816
	Ext_Exp_Val9			.827
	Ext_Exp_Val10			.854
<b>Behavioral Intentions</b>	B14	.754	6.240	.728
	B15			.819
	B16			.809

**Table 5-5 Result of PCA**

PCA was performed with SPSS 18.0 using Verimax rotation since this research used measurements validated through previous research. While selecting factors with eigenvalue greater than 1 is a conservative norm, there were two factors under web store utility below 1. The next lowest eigenvalue was 1.153. With the results of PCA, items with weak factor loadings or items loading on more than one factor were dropped. All the items remaining had items strongly loading only on one factor and most of them had

factor loading greater than .6. Table 5-6 shows all the items tested for PCA, survey questions, and dropped items (marked with \*).

<b>Construct</b>	<b>Variable (* deleted)</b>	
<b>E-Store Interaction</b>	*Store_Int1	I would tell my friends about this e-store
	*Store_Int2	This e-store is interested in my opinion and comments
	Store_Int3	The personality of this e-store is friendly and down-to-earth.
	Store_Int4	Visiting this e-store made me relax and have fun.
	Store_Int5	I feel as if I am part of a close-knit group when I visit this e-store.
<b>C2C Interaction</b>	C2C_Int1	I enjoy reading customer comments at the e-store site.
	C2C_Int2	I can often identify with what many customers comment about the e-store site.
	*C2C_Int3	Reading the customer comments at the e-store makes me feel as if I'm shopping with friends.
	*C2C_Int4	I like the idea that I can write my personal experience with the e-store product if I ever wanted to.
	C2C_Int5	I get good advice about products from comments from the people who write their experience with the e-store products.
	*C2C_Int6	It's interesting to hear about other viewers' personal experiences family and friends.
<b>Content Interaction</b>	Con_Int1	How satisfied are you with the e-store in terms of amount of product related information.
	Con_Int2	How satisfied are you with the e-store in terms of the updates of the web site information.
	Con_Int3	How satisfied are you with the e-store in terms of the quality of the web site information.
	*Con_Int4	Through texts and images I know exactly how other customers feel.
	*Con_Int5	The e-store has wide selection of goods
	*Con_Int6	The e-store has updated information.
	*Con_Int7	The e-store has quality information.
<b>Web Store Utility (Distribution)</b>	*Web_Util1	The e-store is easy to customize to find personalized information.
	Web_Util2	The e-store provides easy exchange and returns.
	Web_Util3	The e-store provides prompt access of goods purchased.
	Web_Util4	The e-store provides excellent post-purchase service.

	*Web_Util5	The e-store provides security of payment means.
	*Web_Util6	The e-store provides pre-purchase inspection
<b>Web Store Utility</b>	Web_Util7	The e-store takes little effort to use.
<b>(Accessibility)</b>	Web_Util8	The e-store is easy to communicate.
	Web_Util9	The e-store is convenient to access.
<b>Intrinsic Customer</b>	Int_Exp_Val1	The way e-store displays its contents is attractive.
<b>Experiential Value</b>	Int_Exp_Val2	The e-store is aesthetically appealing.
<b>(Aesthetics)</b>	Int_Exp_Val3	I like how the e-store looks.
	*Int_Exp_Val4	I think the e-store is very entertaining.
	*Int_Exp_Val5	The e-store doesn't just sell products – it entertains me.
<b>Intrinsic Customer</b>	Int_Exp_Val6	Shopping from the e-store gets me away from it all.
<b>Experiential Value</b>	Int_Exp_Val7	Shopping from the e-store makes me feel like I am in another world.
<b>(Playfulness)</b>	Int_Exp_Val8	I get so involved when I shop from the e-store that I forget everything else.
	Int_Exp_Val9	I shop from the e-store for the pure enjoyment of it.
<b>Extrinsic Customer</b>	Ext_Exp_Val1	When I think of the e-store, I think of excellence.
<b>Experiential Value</b>	*Ext_Exp_Val2	I view the e-store as an expert in what they do.
<b>(Service Excellence)</b>	Ext_Exp_Val3	The e-store puts customer satisfaction as the number one priority.
	Ext_Exp_Val4	The e-store provides the best service to each customer.
<b>Extrinsic Customer</b>	*Ext_Exp_Val5	The e-store contents are a good economic value
<b>Experiential Value</b>	*Ext_Exp_Val6	Overall, I am happy with the e-store's prices.
<b>(CROI)</b>	*Ext_Exp_Val7	The prices of the products I purchased from the e-store are not too high, given the quality of the merchandise.
	Ext_Exp_Val8	Shopping from the e-store is an efficient way to manage my time.
	Ext_Exp_Val9	Shopping from the e-store makes my life easier.
	Ext_Exp_Val10	Shopping from the e-store fits with my schedule.
<b>Behavioral Intention</b>	*B11	I intend to shop from the e-store in the future.

*BI2	I would buy from other e-store as well.
*BI3	I might buy again from the e-store.
BI4	The e-store is the best place to shop.
BI5	When it comes to shopping the e-store is my first preference.
BI6	In the future, the e-store is one of the first places I will look when I need to find certain kind of merchandise.

**Table 5-6 Measurement Items after PCA (\*: dropped)**

Component factor analysis was performed to measure the goodness-of-fit, overall model fit, and measurement model fit using AMOS 18.0. The statistics for the goodness of fit test of CFA is shown in Table 5-7. AGFI, RMSEA, and RMR showed that the matrix had a general good fit with the model. P-value was lower than the recommended value of over .05, but was is hard to get a high value with a large sample size. GFI indicates a poor fit. The goodness of fit test results are shown in the Table 5-7

Model	$\chi^2$	df	$\chi^2 / df$	p-value	GFI	AGFI	CFI	RMSEA	RMR
Study Model	982.769	407	2.415	.000	.852	.820	.908	.063	.056
Recommended Value			<3 good; <5 sometimes permissible	>.05	>.9	>.8	>.9 good; >.95 great	<.05 good; .05-.10 moderate; >.10 bad	<.08

**Table 5-7 Goodness of Fit Test of CFA**

The tests of measurement model fit, the estimates of the reliability and the variance-extracted measures were calculated (see Table 5-8). The composite reliability (CR), estimate of the reliability, had a recommend level of .70 or higher and average variance extracted (AVE) had a recommended level of 50% (Hair et al., 1998). All CRs were greater than .916, much greater than recommended cutoff point of .70. Having higher than .70 for CRs show that all the measurements are reliable. Also, all the AVE

values were greater than .90, higher than the suggested level of .50 for validity of each construct. The CR and AVE were calculated with the following formula.

$$\text{CR} = (\text{Sum of standardized loadings})^2 / ((\text{Sum of standardized loadings})^2 + \text{Sum of indicator measurement error})$$

$$\text{AVE} = (\text{Sum of standardized loadings}) / ((\text{Sum of standardized loadings}) + \text{Sum of indicator measurement error})$$

	E-Store Interaction	C2C Interaction	Content Interaction	Distribution	Accessibility	Aesthetics	Playfulness	Service Excellence	CROI	BI
CR	0.940	0.943	0.936	0.924	0.938	0.916	0.952	0.947	0.964	0.939
AVE	0.921	0.932	0.914	0.902	0.914	0.897	0.943	0.935	0.957	0.924

**Table 5-8. Critical Ratio and Average Variance Extracted**

A summary of CFA is shown in Table 5-9. The values of standardized regression weight of e-store interaction, C2C interaction, content interaction, web store utility, intrinsic customer experiential value, extrinsic customer extrinsic value, and behavioral intentions were all above .5 and at the significance level of .001.

Construct	Variables	Standardized Loading	t-value	p-value
<b>E-Store Interaction</b>	Store_Int3	.587	10.384	.000
	Store_Int4	.855	14.904	.000
	Store_Int5	.766		
<b>C2C Interaction</b>	C2C_Int1	.826	15.810	.000
	C2C_Int2	.793	16.046	.000
	C2C_Int5	.844		
<b>Content Interaction</b>	Con_Int1	.736	13.432	.000
	Con_Int2	.774	13.121	.000
	Con_Int3	.799		
<b>Web Store Utility</b>	Distribution Web_Util2	.727	10.570	.000
	Web_Util3	.578	9.115	.000
	Web_Util4	.756		
	Distribution	.685		

	Accessibility	Web_Util7	.812	14.816	.000	
		Web_Util8	.613	11.201	.000	
		Web_Util9	.808			
		Accessibility	.922	8.220	.000	
<b>Intrinsic Customer Experiential Values</b>	Aesthetics	Int_Exp_Val1	.667			
		Int_Exp_Val2	.926	14.580	.000	
		Int_Exp_Val3	.906	14.518	.000	
		Aesthetics	.627			
	Playfulness	Int_Exp_Val6	.763			
		Int_Exp_Val7	.795	15.269	.000	
		Int_Exp_Val8	.886	17.070	.000	
		Int_Exp_Val9	.805	15.483	.000	
Playfulness		.728	7.592	.000		
<b>Extrinsic Customer Experiential Values</b>	Service Excellence	Ext_Exp_Val1	.774			
		Ext_Exp_Val3	.828	15.888	.000	
		Ext_Exp_Val4	.885	16.605	.000	
		Service Excellence	.663	7.730	.000	
	CROI	Ext_Exp_Val8	.783	17.157	.000	
		Ext_Exp_Val9	.834	18.473	.000	
		Ext_Exp_Val10	.895			
		CROI	.576			
<b>Behavioral Intentions</b>	BI4	.781				
	BI5	.880	17.290	.000		
	BI6	.852	16.838	.000		

Table 5-9 CFA Results

### 5.3 PATH ANALYSIS OF THE MODEL AND RESULTS

SEM path analysis was performed using AMOS 18.0. Among many of the SEM tools, AMOS is known for its ease-to-use graphical representations and interfaces (Lee, 2011). The results for the research model and the goodness of fit test results are shown in Table 5-10 and Figure 5-1. Model fit was found to be good based on the  $\chi^2 / df$  (12.997), GFI (.953) and CFI (.960). Compared to the recommended values, p-value (.000), AGFI (.739), RMSEA (.184), and RMR (.010) did not reach the fit levels.

Model	$\chi^2$	df	$\chi^2 / df$	p-value	GFI	AGFI	CFI	RMSEA	RMR
Study Model	64.987	5	12.997	.000	.953	.739	.960	.184	.010
Recommended Value			<3 good	>.05	> .9	> .8	> .9 good; >.95 great	<.05 good; .05-.10 moderate; >.10 bad	<.08

Table 5-10 Goodness of Fit Test of Path Analysis

Path	Un- standardized Path Coefficient	p-value	S.E.	t-value	Standardized Path Coefficient
E-Store Interaction to Intrinsic Customer Experiential Value	.128	.000***	.025	5.076	.341
E-Store Interaction to Extrinsic Customer Experiential Value	.064	.199	.049	1.283	.081
C2C Interaction to Intrinsic Customer Experiential Value	.050	.017*	.021	2.394	.136
C2C Interaction to Extrinsic Customer Experiential Value	.006	.893	.042	.135	.007
Content Interaction to Intrinsic Customer Experiential Value	.088	.008**	.033	2.671	.225
Content Interaction to Extrinsic Customer Experiential Value	.153	.018*	.065	2.366	.187
Web Store Utility to Intrinsic Customer Experiential Value	-.038	.358	.041	-.920	-.060
Web Store Utility to Extrinsic Customer Experiential Value	.451	.000***	.082	7.369	.451
Web Store Utility to Behavioral Intentions	.192	.001**	.060	3.222	.120
Intrinsic Customer Experiential Value to Behavioral Intentions	1.036	.000***	.077	13.404	.410
Extrinsic Customer Experiential Value to Behavioral Intentions	.644	.000***	.044	14.562	.536

Table 5-11 Significance Test Result for the Path of the Model

The significance test for the paths of the model are shown in Table 5-11. The unstandardized coefficients are reported with significance denoted with stars (\* p<.05; \*\*

$p < .01$ ; and \*\*\*  $p < .001$ ) and the standardized coefficients are reported within parentheses. The path leading from e-store interaction to intrinsic customer experiential value was found significant (unstandardized coefficient = .128,  $p < .000$ ) while path from e-store interaction to extrinsic customer experiential value was insignificant (unstandardized coefficient = .064,  $p > .05$ ). C2C interaction was found to have a significant effect on intrinsic customer experiential value (unstandardized coefficient = .050,  $p < .05$ ) and a non-significant effect on extrinsic customer experiential value (unstandardized coefficient = .006,  $p > .05$ ). Content interaction influenced both intrinsic customer experiential value (unstandardized coefficient = .088,  $p < .01$ ) and extrinsic customer experiential value (unstandardized coefficient = .153,  $p < .05$ ). Web store utility had no influence on intrinsic customer experiential value (unstandardized coefficient = -.038,  $p > .05$ ) and had a strong influence on extrinsic customer experiential value (unstandardized coefficient = .602,  $p < .000$ ). All three paths to behavioral intentions were found to be significant.

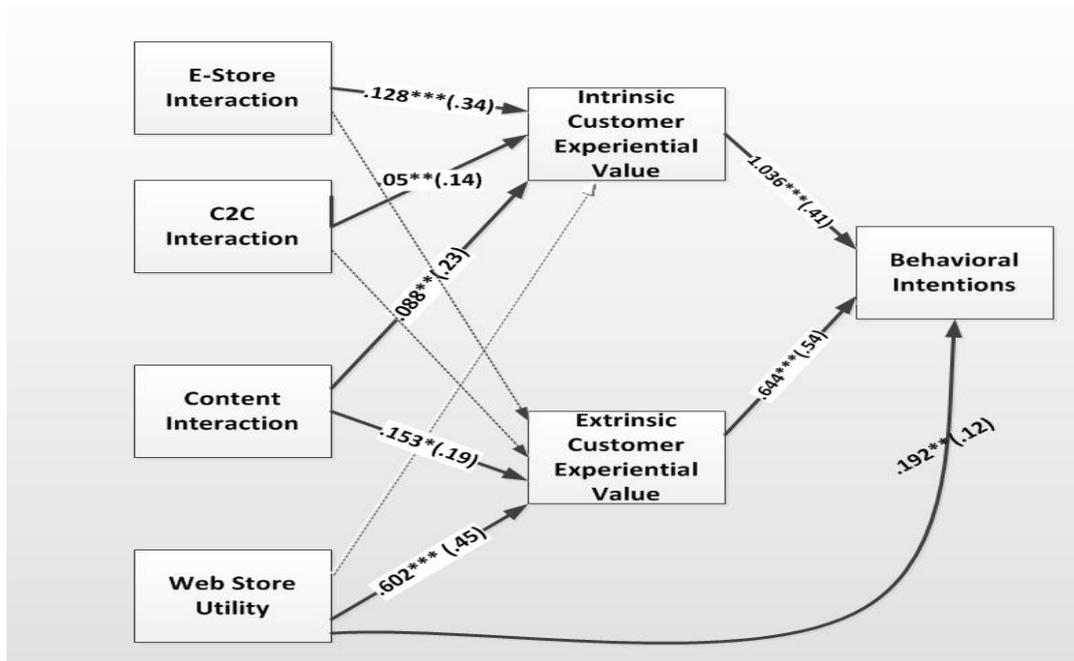


Figure 5-1 Path Analysis with SEM (unstandardized coefficients with significance denoted with stars (\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ), standardized within parenthesis)

## 5.4. TEST OF HYPOTHESES

### 5.4.1 RELATIONSHIPS BETWEEN E-STORE INTERACTION AND CUSTOMER EXPERIENTIAL VALUE

Result of the hypotheses test is summarized in Table 5-12. Hypothesis 1a and Hypothesis 1b proposed positive relationships between the degree of perceived e-store interaction and intrinsic and extrinsic experiential values.

*H1a: The degree of perceived e-store interaction has a positive relationship with intrinsic customer experiential value.*

*H1b: The degree of perceived e-store interaction has a positive relationship with the extrinsic customer experiential value.*

The unstandardized path coefficient between the degree of perceived e-store interaction and the intrinsic customer experiential value was .128 and significant at the .001 level. Thus H1a is supported. To promote high level of intrinsic customer experiential value in an e-store, creating an inviting, friendly, and fun atmosphere is important (Ghose & Dou, 1998). However, the unstandardized path coefficient between perceived e-store interaction and the extrinsic customer experiential value was .064 with the p-value of .199. There was no positive influence of e-store interaction on extrinsic customer experiential value. Online shoppers' appreciation of fun, friendly, and interactive environment does not necessarily translate into customers' perception of service excellence or customers' return on their money, time, or an effort to visit and shop. Similar to this result, Overby and Lee (2006) found that frequent online shoppers tend to seek more utilitarian values. Dholakia et al.'s (2000) research proposed that playfulness dimension of interactivity is less important assuming that consumers like quicker and easier shopping.

#### **5.4.2 RELATIONSHIPS BETWEEN C2C INTERACTION AND CUSTOMER EXPERIENTIAL VALUE**

Hypothesis 2a and Hypothesis 2b proposed positive relationships between the degrees of perceived C2C interaction and intrinsic and extrinsic experiential values.

*H2a: The degree of perceived C2C interaction has a positive relationship with intrinsic customer experiential value.*

*H2b: The degree of perceived C2C interaction has a positive relationship with the extrinsic customer experiential value.*

The unstandardized path coefficient between the degree of perceived C2C interaction and the intrinsic customer experiential value was .050 and significant at the .05 level as shown in Table 5-11 and Figure 5-1. Thus, H2a is supported. To promote a high level of intrinsic customer experiential value in an e-store, the e-store can design the website community friendly (Balasubramanian et al., 2005; Lin & Bhattacharjee, 2008). However, the unstandardized path coefficient between perceived C2C interaction and the extrinsic customer experiential value was .006 with the p-value of .893. While it was assumed for C2C interaction to positively influence some extrinsic values such as the perceived service level or external values, there was no relationship found for extrinsic value. There was no positive influence of C2C interaction on extrinsic customers' experiential value. This could be understood in two ways. Frequent shoppers to the same site might be more focused on utilitarian values (Overby & Lee, 2006). Also, shoppers who are more goal-oriented in their shopping tendencies might not appreciate interactions with other shoppers or the C2C interaction features (Dholakia et al., 2000).

<b>Hypotheses</b>	<b>Path</b>	<b>Predicted Relationship</b>	<b>Result</b>
<b>H1a</b>	E-Store Interaction to Intrinsic Customer Experiential Value	Positive	Supported
<b>H1b</b>	E-Store Interaction to Extrinsic Customer Experiential Value	Positive	Not supported
<b>H2a</b>	C2C Interaction to Intrinsic Customer Experiential Value	Positive	Supported
<b>H2b</b>	C2C Interaction to Extrinsic Customer Experiential Value	Positive	Not supported
<b>H3a</b>	Content Interaction to Intrinsic Customer Experiential Value	Positive	Supported
<b>H3b</b>	Content Interaction to Extrinsic Customer Experiential Value	Positive	Supported
<b>H4a</b>	Web Store Utility to Intrinsic Customer Experiential Value	Positive	Not supported
<b>H4b</b>	Web Store Utility to Extrinsic Customer Experiential Value	Positive	Supported

Customer Experiential Value			
<b>H5</b>	Web Store Utility to Behavioral Intentions	Positive	Supported
<b>H6a</b>	Intrinsic Customer Experiential Value to Behavioral Intentions	Positive	Supported
<b>H6b</b>	Extrinsic Customer Experiential Value to Behavioral Intentions	Positive	Supported

**Table 5-12 Result of Hypotheses Test**

### **5.4.3 RELATIONSHIPS BETWEEN CONTENT INTERACTION AND CUSTOMER EXPERIENTIAL VALUE**

Hypothesis 3a and Hypothesis 3b proposed positive relationships between the degrees of perceived content interaction and intrinsic and extrinsic experiential values.

*H3a: The degree of perceived content interaction has a positive relationship with intrinsic customer experiential value.*

*H3b: The degree of perceived content interaction has a positive relationship with the extrinsic customer experiential value.*

The unstandardized path coefficient between the degree of perceived content interaction and the intrinsic customer experiential value was .088 and significant at the .01 level (see Table 5-11 or Figure 5-1). Thus, H3a is supported. To promote a high level of intrinsic customer experiential value in an e-store, the e-store can design the website community friendly. Also, the unstandardized path coefficient between perceived content interaction and the extrinsic customer experiential value was .153 and significant at the .05 level. There was a positive influence of content interaction on extrinsic customers' experiential value. Satisfaction in terms of the amount of product related information, timely updates, and quality of information are good predictor for both

intrinsic and extrinsic values customers feel (Keng & Ting, 2009). Information quality is to influence perceived value which leads to intention to reuse eventually (Wang, 2008).

#### **5.4.4 RELATIONSHIPS BETWEEN WEB STORE UTILITY AND CUSTOMER EXPERIENTIAL VALUE**

Hypothesis 4a and Hypothesis 4b proposed positive relationships between the degrees of perceived web store utility and intrinsic and extrinsic experiential values.

*H4a: The degree of perceived web store utility has a positive relationship with intrinsic customer experiential value.*

*H4b: The degree of perceived web store utility has a positive relationship with the extrinsic customer experiential value.*

The unstandardized path coefficient between the degree of perceived web store utility and the intrinsic customer experiential value was  $-.038$  and not significant (see Table 5-11 or Figure 5-1). Thus H4a was not supported. Aiming for a high level of intrinsic customer experiential value in an e-store and having web store functionalities for distribution and accessibility were found not to have a significant relationship. However, the unstandardized path coefficient between perceived web store utility and the extrinsic customer experiential value was  $.602$ , significant at the  $.001$  level. There was a positive influence of web store utility on extrinsic customers' experiential value. It is intuitive to see the positive relationship since enabling better web store utility through distribution and accessibility should help customers manage their resources better (Li et al., 1999).

#### 5.4.5 RELATIONSHIPS LEADING TO BEHAVIORAL INTENTIONS

There were three hypothesized relationships with behavioral intentions as the final dependent variable. Web store utility is to have a positive relationship with behavioral intentions based on many previous TAM related research. Role of intrinsic and extrinsic customer experiential values on the behavioral intention to revisit or purchase at the e-business was tested.

*H5: The degree of perceived web store utility has a positive relationship with the behavioral intention to visit the web store.*

*H6a: The degree of perceived intrinsic customer experiential value of a business web site has a positive relationship with the behavioral intention to visit the web store.*

*H7b: The degree of perceived extrinsic customer experiential value of a business web site has a positive relationship with the behavioral intention to visit the web store.*

The unstandardized path coefficient between the perceived web store utility and the behavioral intention was .192, significant at the .01 level. Thus, H5 is supported (Davis, 1986). Also, both hypotheses involving experiential values and the behavioral intentions, H6a and H6b, were supported. The unstandardized path coefficient between the intrinsic customer experiential value and the behavioral intentions was 1.036 and significant at the .001 level. The unstandardized path coefficient between the extrinsic customer experiential value and the behavioral intentions was .644, also significant at

the .001 level. Therefore, both H6a and H6b were supported (Balasubramanian et al., 2005; Overby & Lee 2006; Wang, 2008).

## **5.5 Summary**

This chapter has presented the result of data analysis and the results. To ensure reliability and validity of the measurement and the overall model, Cronbach's alpha, PCA, and CFA were performed and the results were reported. SEM using AMOS 18.0 was conducted to test the path model and hypotheses. Eleven proposed hypotheses were tested for the relationship between interactivities, web site utility, experiential values and behavioral intentions. Eight hypotheses were supported, while three were not supported.

## CHAPTER SIX

### CONCLUSIONS

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Chapter Six presents a summary of the study and discusses implications, limitations, and directions for future research.

#### 6.1 SUMMARY

The starting point of this study were the basic idea that customers' online shopping behavior would be influenced by their intrinsic and extrinsic values they perceive while they spend time in an online store. The source of experiential value is not limited to the experience that customers have while they are in the process of browsing or purchasing. Everything including information gathering for the product or service, the product searching, shop environment, customer services, shopping companions, post-purchase experience, etc. contributes to the overall experience of online customers.

There should be a way to enhance experiential value, which is comprised of hedonic and utilitarian aspects, and experiential value should lead to certain behavioral outcomes of customers. The role of Internet as a market changed from an "economic function entity" to a "community center" enabling entertainment as well as socializing (Kim, 2002) and this research focuses on the role of interactivity in making the transition possible. That is, interactivity would play a role of encouraging experiential value.

Value is defined as a “relativistic preference characterizing a subject’s experience of interacting with some object” (Holbrook, 1994). Dimensionality of the customer’s value was investigated and regrouped for our research into intrinsic customer experiential value and extrinsic customer experiential value. Interactivity was investigated and defined in three levels: e-store interaction, C2C interaction, and content interaction. Web store utility, capturing ease of use and usefulness aspects of the e-commerce, was introduced to explain system use and predict the behavioral intentions. Finally, the research model (see Figure 1-1) was presented for this study.

To test the model, a survey instrument was created to gather demographic information, the perception of interactivity in e-businesses, web store utility, intrinsic and extrinsic experiential value perception, and behavioral intention to revisit the site and/or purchase from the site. The survey was distributed in South Korea where the e-commerce infrastructure is one of the best in the world.

A total of 406 responses were gathered and 354 were usable for analysis. About 40% female and more than 85% of people were between the ages of 20 to 39. About half of 354 respondents were students (See Table 5-1). About 55% of the respondent answered that they used the Internet everyday of the week and more than 75% of the people use online shopping mall between one to four days a week (See Table 5-2 and Table 5-3).

The path analysis showed that there were positive relationships of e-store interaction and C2C interaction on intrinsic customer experiential value while failing to show an influence on extrinsic customer experiential value. Content interaction was found to influence both intrinsic and extrinsic value. Web store utility and intrinsic

customer experiential value did not show a significant relationship. However, web store utility had positive influences on extrinsic customer experiential value and behavioral intentions. Both intrinsic customer experiential value and extrinsic customer experiential value were found to strongly influence behavioral intention.

The role of antecedents (e-store interaction, C2C interaction, content interaction, and web store utility) on intrinsic and extrinsic value appeared to be straightforward. Interactions which were related with intrinsic features influenced intrinsic value and utility focused web store utility influenced extrinsic value strongly. Content interaction, which could be both utilitarian and hedonic depending on the information and the information receiver, influenced both intrinsic and extrinsic value.

One significant finding of the research was that both intrinsic customer experiential value and extrinsic customer experiential value strongly influenced behavioral intention. This finding signifies that intrinsic value such as playfulness or aesthetics can influence future intention to purchase or return to the site. While there is theoretical research suggesting the relationship from intrinsic value to behavioral outcomes (Kim, 2002), there has not been much empirical research showing the relationship in an e-commerce context. Instead, there has been some research showing a negative influence of intrinsic customer experiential value on behavioral outcomes (Oberby & Lee, 2006).

## **6.2. LIMITATIONS**

There are several limitations of this research. First, the sample is not representative of overall population. Korea is known as the most leading e-commerce

country in the world (Reuter, 2010), and 98% of the survey participants had an online purchasing experience. While this research benefits most by gathering previous online shoppers' experiences, it is not likely to find similar groups of people in other places than Korea. Also, the survey was gathered through the author's network of friends. Due to the way the survey was solicited, the sample is likely to be biased. Secondly, this research did not consider any controlling variables such as the size of the e-shops customers visited, and the types of products customers purchased. There are many factors influencing customer experiences or perceptions and this research did not control any of them.

Thirdly, there could be a relationship between the intrinsic experiential value and extrinsic experiential value. In most research defining value dichotomously into intrinsic and extrinsic values do not consider any relationship between them (Chang & Wang, 2008; Kim, 2002; Kim, 2011; Lin, 2007; Overby & Lee, 2006). However, it is logical to see one influencing the other. Finally, while the relationship between C2C interaction and extrinsic customer experiential value is assumed, this study failed to show a positive influence of C2C interaction on extrinsic customer experiential value. It is assumed that mature online buyers have less to benefit from C2C interaction in terms of extrinsic value (Overby & Lee, 2006). However, finding a meaning relationship between C2C interaction and extrinsic customer experiential value would support the benefits of customer-oriented contents to the business and the customers.

### 6.3 PRACTICAL IMPLICATIONS

This research shows that an e-store can be enhanced with interactivity attributes to promote either intrinsic or extrinsic value customers might feel. Also, both intrinsic and extrinsic experiential value influence customers' behavior to return to the site and to purchase. To facilitate for a better financial outcome, companies can design their websites to enhance interactivity. Designing the e-business site and services with the three interaction levels can help business make sure they are providing interactive features satisfying different levels of customer value. Depending on the products or services the business carries, focusing on just one type of experiential value might be more important. Or, reexamining what they have in terms of levels of interaction might be helpful in estimating the current level of customers' experiential value.

Pine and Gilmore (1999; 2011) used the word "staging" in providing an experiential product/service. This research looked at "staging" through a device called interactivity. By providing interactivity in "staging" goods or services, customers' experiential value would be heightened. Results of the path model in this research show that both intrinsic and extrinsic value can have a significant influence on the behavioral intentions to revisit/purchase.

Similarly, Thongpapanl and Ashraf (2011) showed that without staging through website personalization there is no influence of information content on customer satisfaction and purchase intention in an online store. When the researchers saw the effect of information content on customer satisfaction and purchase intention, the paths came out to be non significant. However, when they placed a moderator, website

personalization, they found that information content positively influenced customer satisfaction and purchase intention.

Online business providing extrinsic experiential value can create vendor related switching costs for the consumers. Also, it is likely that having a web store attractive enough to entice customers and keep them there, creating an opportunity to invest time and efforts, with intrinsically pleasing features, can build vendor as well as user related switching costs (Ray et al., 2012). Huang (2003) shows that interactivity attributes of the web can improve utilitarian and hedonic web performances through flow experiences.

#### **6.4. FUTURE RESEARCH DIRECTIONS**

The role of interactivity on experiential value is a less studied area. For this research, only the general perception of the interactivity is investigated. However, it would be meaningful to find out some affordance features of the Internet working with different levels of interactivity. Park et al. (2008) defined an affordance as “a property of an object, animal, or environment that affords, or makes available, certain actions.” In this research, Park et al. gave examples of affordances influencing interactivity in virtual worlds. Social networks, sports events, event hosting, concierge services, and reactive objects are listed as affordances enabling virtual world’s interactivity. Similarly, finding out and suggesting affordances enabling three levels of interactivity would be helpful for business to refer to in enhancing their e-store features.

For this study, a survey was conducted in South Korea due to its advancement in ICT and e-commerce. However, it would be interesting to have a cross-cultural study

between different nations. Different countries have different infrastructures and cultures which might influence the perception of the online customers differently.

It would also be interesting to have some control variables or antecedents in the model. For example, product type might be a good control variable. Depending on products or features of the product, varying degree of information gathering, product testing, vendor trusts and post-purchase warranty might be required. Therefore, different product should require different strategy in terms of building interaction with the e-store, other customers, contents, and convenience. Similar to the product type, there could be other control variables that could be included in future research as well. The year of business launch, merchant type (Thongpapanl & Ashraf, 2011), personality type (Lin, 2007), shopping orientations (Li et al., 1999), trusting tendency, preference or attitude (Overby & Lee, 2006) could all be candidates to be considered in future research.

## **6.5 SUMMARY**

This chapter concludes the research by providing a summary of the whole study, providing limitation and implications of the study. Also, future directions to follow this stream of research are suggested.

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