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# WEBSITE INTERACTIVITY AS A BRANDING TOOL FOR HOTEL WEBSITES

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Education in the Rosen College of Hospitality Management at the University of Central Florida Orlando, Florida

Summer Term 2014

Major Professors: Khaldoon Nusair and Fevzi Okumus

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### ABSTRACT

The dissertation explored the relationships among Website interactivity, brand knowledge, consumer-based brand equity and behavioral intentions in the context of hotel Websites. Based on an in-depth literature review, a theory-driven model was proposed and ten hypotheses were developed. The dissertation employed an empirical study based on a survey design, and collected data via a marketing company. Respondents who booked a hotel room online using hotel branded Websites in the last 12 months were approached to complete the online questionnaire. Four hundred ninety six (496) respondents completed the online questionnaire by answering to questions related to their last hotel booking experience.

Analysis was conducted in two phases: (1) Confirmatory Factor Analysis (CFA) and (2) Structural Equation Modeling (SEM). The overall fit of the CFA model and the final SEM model were acceptable, indicating an adequate fit to the data. The results suggested that the two dimensions of Website interactivity, namely system interactivity and social interactivity, positively impacted the components of brand knowledge, and that system interactivity had a stronger impact as compared to social interactivity. Although, social interactivity was not found to have a significant direct effect on brand awareness, the results showed that social interactivity had a significant impact on brand image. Furthermore, the relationship between brand equity and behavioral intentions was positive and significant. The empirical study offered theoretical for utilizing Website interactivity as a branding tool in the hotel context. Additionally, the results provide practical insights into branding strategies, Website development, and behavioral intentions enhancement.

Very few studies have empirically examined and incorporated Website interactivity dimensions and brand knowledge with consumer-based brand equity and behavioral intentions.

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This gap in the literature has been compounded by an absence of empirical studies on Website interactivity as a tool to develop brands and behavioral intentions in the context of hotel Websites. The present dissertation closes this gap in the literature by reporting on a questionnaire of US adult travelers that offered data on those theoretical associations. Conceptually, the results support the influential impact of Website interactivity on brand elements and behavioral intentions.

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## **CHAPTER ONE: INTRODUCTION**

The present dissertation attempts to investigate the influential role of Website interactivity as a branding tool in the context of hotel Websites. This chapter explores the construct of Website interactivity, discusses the overview, the significance, and the problem statement, and describes the research questions, the objectives, the research hypotheses, the limitations, and the definition of terms of the dissertation. A framework of this chapter is displayed below.

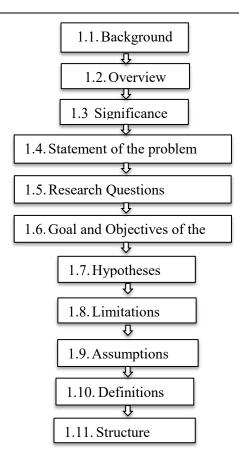


Figure 1. Chapter One Structure

#### 1.1. Background

The Internet originates a new channel for companies to obtain, persuade, and sell to targeted consumers. Several brand managers are questioning whether the existent marketing approaches to position their brands may be enhanced, to operate in a traditional and online setting, (McWilliam, 2012). The Internet is recognized as an influential instrument with virtually unbounded capabilities to improve and alter markets, business models and consumer behaviors (Tang & Yang, 2011); it has changed the manner in which hotel brands conduct business and the way travelers and hotel brands interact (Öğüt & Onur Taş, 2012). Travelers' use of the Internet is increasing (Hashim et al., 2010). According to Huang (2010) after 2001, more than 20 million more US citizens use the Internet.

The hotel industry has expanded this remarkable potential of the Internet as interactive and vending platform and, subsequently, incorporated e-commerce into the structure of their business (Müller, 2011). Marriott's key business, marketing strategy, and inventory applications, for example, includes a comprehensive technology infrastructure that enables more than 69.5 million new reservations to its online booking, averaging 190,000 daily, and sustaining more than 99.99 percent availability (Marriott International, Inc, 2006). In a 2013 study of the implications of e-commerce Websites, Sambhanthan and Good (2013) indicate that the majority of hotel companies permit their costumers to book directly online from their branded Websites rather than through third parties.

The movement from conventional to virtual environments demonstrates that the Internet is becoming one of the most efficient and best manageable sources of interactivity (Herrero & San Martín, 2012; Walraven et al., 2009). An exciting medium that allows global users interact

without much effort (Nikitina et al., 2012). The Internet has grown beyond its early marketing communication use as a one-way medium (banner ads and interstitials), offering more influence over the communication process and the information acquisition development (Adam et al., 2011) allowing travelers to be functional contributors in the marketing practice. Interactivity is the one important attribute that distinguishes the latest marketing channel from conventional media (Wang et al., 2013; Liu, 2012; Jih et al., 2011; Kiss & Esch, 2006).

The definitions of interactivity have not yet been established. The literature suggests a definition range from face-to-face communication to technology-mediated communication (Ye et al., 2012). In online environments, however, interactivity can differ in significance from an attribute of the medium to an attribute of the development of communication. Voorveld et al. (2013) note that "Website interactivity is the degree to which two or more communicating parties can act on each other, on the communication medium, and on the message and the degree to which such influences are synchronized" (p. 610). When purchasing online, therefore, consumers are involved in two vital elements of Website interactivity to acquire vital information of a product/service and to complete a purchase, specifically (1) system interactivity and (2) social interactivity (Jiang et al., 2010; Hoffman & Novak, 1996). For a more specific illustration of the two vital elements of Website interactivity, the present dissertation designates user control as an indication of system interactivity and two-way communication as an indication of human interactivity (Jiang et al., 2010; McMillan & Hwang, 2002). User control exists when consumers have the ability to select the information and direct the interaction (Crutzen et al. 2012; Liu & Shrum, 2002), while two-way communication exists when consumers can communicate with others (Liu, 2012; Novak et al., 2000). User control and two-way communication have been exclusively identified as components of Website interactivity (Kruikemeier et al., 2013; Song &

Zinkhan, 2008; Jiang & Benbasat, 2007; McMillan & Hwang, 2002). Electronic retail provides yet another conceptualization of interactivity: Jiang et al. (2010) define interactivity as the extent to which consumers contribute to the layout and information of a Website in real time.

Rafaeli's initial definition (1988, p. 111) states that interactivity is "An expression of the extent that, in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions." More than five years later, Rogers (1995, p. 314) conceptualizes interactivity as "the degree to which participants in a communication process can exchange roles and have control over their mutual discourse." Downes and McMillan (2000) published a study that includes several assumptions and definitions of interactivity. The authors conduct in-depth interviews with users who operate in the arena of interactive communication in a computermediated communication context. From these in-depth interviews, the authors distinguish the control of the communication process and reciprocal communication between interactive individuals as primary elements that form the basis for Website interactivity. This statement is particularly applicable when contemplating communication that happens throughout the Internet. Interactivity, therefore, involves both humans and technology as components of interactivity (Palla & Zotos, 2013; Lowry et al., 2006). From this broad range of descriptions, the author adapts Vernuccio et al.'s (2012) definition that categorizes Website interactivity as a communication process that presents Web user control and permits them to communicate with the service provider and other users.

Website interactivity is a critical component in creating strong brands (Voorveld et al., 2013; Coyle & Thorson, 2001; Hansell, 1998), a central aspect of technology-mediated communication. Consumer interaction on a Website with the brand augments brand knowledge

and results in strong relationships with consumers (Jih et al., 2011; Christodoulides, 2009). Website interactivity is also a vital contributing factor of brand knowledge components namely brand awareness (Keng & Lin, 2006) and brand image (Müller & Chandon, 2004). Neelotpaul (2011) indicates that "the incorporation of interactivity in brands' Websites has helped companies in successful online branding." Website interactivity is a theoretical concept that deals with the basis of engagement and attraction that can be interpreted as a natural characteristic in technology-mediated communication (TMC) and human computer interaction (HCI) (Chen & Yen, 2004). Website interactivity not only empowers consumers to interact with brands and other consumers but also to originate their own content on user generated content sites resulting in a more cooperative method to branding. In a technology-mediated communication (TMC) and human computer interactivity has become an effective way of advancing the communication value of brand Websites (de Chernatony, 2010) and has been referred to as the interaction between users, between the system and the user and between the message and the user (Lee et al., 2013; Liu & Shrum, 2002).

As a distinctive concept in the developing interactive media of the Internet, Website interactivity is being investigated strictly in disciplines such as social psychology, relationship marketing, economics, information systems, advertising, and communication technology and in different settings such as e-commerce, traditional commerce, and politics. Directed by social exchange theory, Jih et al. (2011) examine the influence of Website design and Website interactivity on customer loyalty and find that the casual impact of Website interactivity is positive on overall loyalty and on transactional relationship loyalty. In a study to examine perceive interactivity and how it affects the user attitudes, Ahn et al. (2014) indicates that perceived interactivity directly and indirectly impact consumer attitudes.

To develop theories of interactivity, mainly as it applies to Web-based mass communication, Sundar (2004) first presents the case that "interactivity is an element of the technology and not that of the user." Sundar concludes that when examining the function played by interactivity in originating action, modifying feelings, and improving the essence of generating information, theoretical explorations should be classified in terms of three types of outcome measures—behavioral, attitudinal, and cognitive. Lowry et al. (2006) suggest that interactivity is effectively capable to augment Website satisfaction. Jiang et al. (2010) explain that Websites that shows user control features influence cognitive and affective involvement. Jiang et al. also suggest that Websites with reciprocal communication results in effective involvement for functional brands. Neelotpaul (2011) studies Websites of particular brands (e.g. Amazon, Pepsi, Land's End, MapQuest, and M&M) to demonstrate how the integration of interactivity in their Websites assists them in successful virtual branding. Wang et al. (2013) suggest that connectedness and reciprocity are essential precursors of trust in members, while responsiveness and user control are central precursors of trust in systems. In another study, Guillory and Sundar (2013) investigate how the application of different dimensions of Website interactivity affects consumers' perceptions of a company's image. The fundamental theoretical mechanism for these relationships is examined by statistically exploring the mediating effect of perceived customization, involvement, and liking. The authors conclude that being amply interactive, is adequate to form a positive perception and mutual interpretive setting among consumers.

#### **1.2.** Overview of the Study

The target population of this dissertation has been US travelers who have booked a hotel room in the last 12 months from a hotel branded Website in any hotel category (e.g. luxury, full

service, mid-scale, economic, boutique hotel, and resort). For the pilot study, the researcher used a sample of US travelers to test the instrument for face validity issues, to determine grammatical or spelling errors, and to ensure respondents comprehend the instructions and item statements before the main study was conducted. For both the pilot and main study, the researcher used Mturk (Amazon Mechanical Turk site) to distribute the link for the online questionnaire and collect data from the selected US travelers sample. The sample size targeted in the pilot phase was 450 participants and 550 participants for the main study. The questionnaire was designed to collect traveler demographic characteristics (gender, income, education, etc.), Website interactivity (social and system), brand knowledge (brand awareness and brand image), brand equity, brand choice, price premium, and buying intention. The instruments selected to acquire data include: (a) Website Interactivity Scale (WIS), modified version of Jiang et al. (2010), (b) Brand Awareness Scale (BAS) and (c) Brand Image Scale (BIS), modified version of Davis et al. (2008), (d) Brand Equity Scale (BES), modified version of Yoo et al. (2001), (e) Brand Choice Scale (BCS), modified version of Hsu et al. (2012). (f) Price Premium Scale (PPS), modified version of Netemeyer et al. (2004), (g) Buying Intention Scale (BIS), modified version of Erdem et al. (2006).

#### **1.3. Significance of the Study**

Distinguished as an innovative business prospect, many businesses consider the Internet as a modern and competitive marketing instrument in advancing business-related information and real-time transaction opportunities (Kumar, 2013). Despite the growth of the electronic market, businesses in general are still exploring for competent ways to establish strong relationships with consumers and to build their brands through traditional and online environments (Shih et al., 2013). Due to the escalating recognition of the Internet, numerous

industries have transferred their information search and business operations online (Moss et al., 2013).

For instance, in the hospitality industry, the Internet has enormous capacity to build brands online. The distinctive value that the Internet offers over conventional media is the capacity to interact with a consumer. In the lodging sector, this permits hotel practitioners to adjust their presentation to adapt to specific travelers' needs and likes. Contrary to other forms of media, the Internet assists hotel brands to create a long-term relationship with its travelers as it allows a unique reciprocal communication. Website interactivity helps a company to communicate its positive brand messages in a mechanized environment the same way as a company does in a traditional environment. Website interactivity includes communicating with consumers directly, generating an exclusive and individual interaction with them. Regardless of the significance of Website interactivity, however, very little research has been found in the hospitality literature that investigates the influential role of interactivity on hotel brand building. Although the substantial empirical investigation of e-commerce Websites in numerous research, and the extensive conviction that Website interactivity is a decisive element of the Internet, to this date very few researchers in the hospitality industry have devoted efforts to examine the influential role of Website interactivity on brand knowledge (brand awareness and brand image), and brand equity, and on consumer behavioral intentions such as brand choice, price premium, and buying intentions.

In the present dissertation, the researcher has developed and tested a theoretical grounded model to contribute to the understanding of the value of the two dimensions of Website interactivity (social and system interactivity) as branding tools in the context of hotel Websites. The purpose is to understand how Website interactivity might be better exploited and managed to

the highest achievable extent to build hotel brands successfully online. As Neelotpaul (2011, p. 15) notes "... Interactivity results in a dialogue between the Website and the consumers across the globe and over a period of time creates a strong relationship and a satisfying branding experience on the users' part".

The findings of this dissertation are expected to provide numerous contributions that will benefit hotel marketers identify new ways to differentiate their hotel brands from competitors and develop strong relationships with their consumers. It emphasizes the influence of Website interactivity dimensions that may assist marketers to design Websites that might help influence hotel brand awareness, to form the desired hotel brand image, to augment brand equity, to influence brand choice, to persuade the willingness to pay a price premium, and to induce buying intention. This dissertation includes a validity study of social and system interactivity in a hotel context and assesses a comprehensive theory-based model of Website interactivity as a hotel branding tool and mediating variables of brand knowledge and brand equity and their impact on traveler behavioral intentions. The ultimate aim is to propose vital information that might augment our comprehension of the role of both Website interactivity dimensions, namely social and system interactivity, on successful online hotel branding and enable the design of hotel Websites that engage travelers directly, creating an exclusive and individual interaction with them. This ideal interactive experience possibly will lead to desired hotel brand knowledge, an improved brand equity, and favorable traveler behavioral intentions, such as brand choice, price premium and buying intentions.

### **1.4. Statement of the Problem**

Website interactivity has been conceptualized and studied in robust marketing and advertising studies from different perspectives. These studies investigate the effects on

psychological and behavioral dimensions, yet minimum attention has been devoted to understanding how Website interactivity might assist hoteliers in successful online hotel branding. Despite its significance, little is known about the essence and function of Website interactivity on hotel Websites and its role to establish a strong brand-consumer relationship across the globe, to create a satisfying branding experience, and to develop hotel brands online. To this date, limited studies have offered insight into the influential role of Website interactivity on hotel online branding. Voorveld et al. (2013) state "hardly any studies have investigated whether interactivity is capable of building brands". The study of branding is essential as empirical evidence indicates that branding exerts a positive effect on consumers' intentions (Qu et al., 2011; Hoeffler & Keller, 2003). Currently, practitioners and scholars have not examined Website interactivity in relation to its capacity to influence hotel brand awareness, to create the desired hotel brand image, to enhance brand equity, to guide brand choice, to motivate the willingness to pay a price premium, to impact buying intention, and most decisively, to function as a unique tool for hotel brand building and as an influential instrument to elicit travelers' behavior. To our knowledge this is the pioneer effort to establish essential theoretical mechanisms of how Website interactivity may be used to build strong brands in the hotel context.

#### **1.5. Research Questions**

Ten essential directional hypotheses for this dissertation have been developed from the research questions presented:

1. Does system interactivity (user control) influences hotel brand awareness, hotel brand image, hotel brand equity, brand choice, price premium and buying intention?

- 2. Does social interactivity (two-way communication) influences hotel brand awareness, hotel brand image, hotel brand equity, brand choice, price premium and buying intention?
- 3. Does hotel brand awareness significantly influence hotel brand image?
- 4. Does hotel brand awareness and brand image significantly influence hotel brand equity?
- 5. Does hotel brand equity significantly influence hotel brand choice, price premium and buying intention?

## 1.6. Goal and Objectives of the Study

This study's overall goal is to propose and empirically test a theory-driven model of Website interactivity as a branding tool. Under this main goal, the main objectives of the present dissertation are to:

Investigate how the first dimension of Website interactivity, namely system interactivity (user control), influences the components of brand knowledge (brand awareness and brand image).
Investigate how the first dimension of Website interactivity, namely system interactivity (user control), influences hotel brand equity.

**3.** Investigate how the first dimension of Website interactivity, namely system interactivity (user control), influences behavioral intentions such as brand choice, price premium and buying intention.

**4.** Investigate how the second dimension of Website interactivity, namely social interactivity (two-way communication), influences the components of brand knowledge (brand awareness and brand image).

**5.** Investigate how the second dimension of Website interactivity, namely social interactivity (two-way communication), influences hotel brand equity.

**6.** Investigate how the second dimension of Website interactivity, namely social interactivity (two-way communication), influences travelers' behavioral intentions such as brand choice, price premium and buying intention.

7. Develop a comprehensive framework of Website interactivity as a branding tool in the hotel context and provide specific theoretical and practical recommendations related to...

#### **1.7. Research Hypotheses and Theoretical Framework**

Based on the extensive literature review conducted, the following hypotheses have been proposed.

Hypothesis 1: There is a significant positive causal relationship between user control of a hotel Website (system interactivity) and hotel brand awareness.

Hypothesis 2: There is a significant positive causal relationship between user control of a hotel Website (system interactivity) and hotel brand image.

Hypothesis 3: There is a significant positive causal relationship between two-way communication of a hotel Website (social interactivity) and hotel brand awareness.

Hypothesis 4: There is a significant positive causal relationship between two-way communication of a hotel Website (social interactivity) and hotel brand image.

Hypothesis 5: There is a significant positive causal relationship between hotel brand awareness and hotel brand image.

Hypothesis 6: There is a significant positive causal relationship between hotel brand awareness and hotel brand equity.

Hypothesis 7: There is a significant positive causal relationship between hotel brand image and hotel brand equity.

Hypothesis 8: There is a significant positive causal relationship between hotel brand equity and price premium.

Hypothesis 9: There is a significant positive causal relationship between hotel brand equity and brand choice.

Hypothesis 10: There is a significant positive causal relationship between hotel brand equity and buying intention.

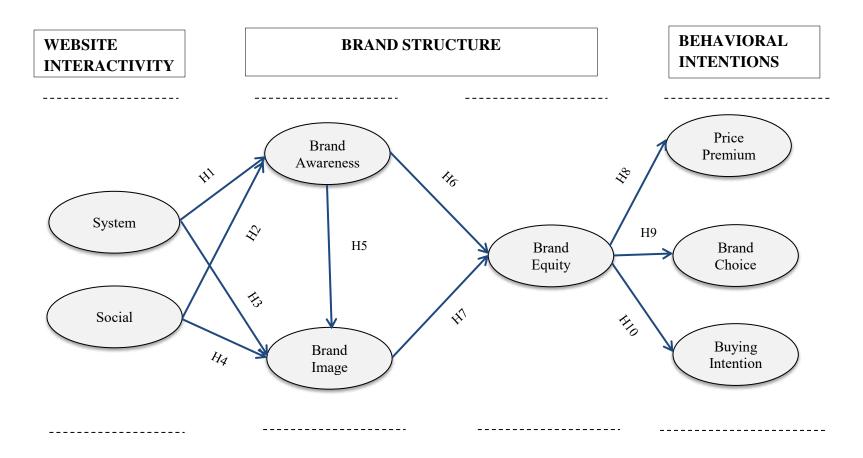


Figure 2. Theory-Driven Model of Website Interactivity as a Branding Tool for Hotels

Note: System = User Control (System Interactivity); Social = Two-way communication (Social Interactivity).

Figure 2 summarizes a theory-driven model designed to meet the research objectives. Additionally, the model displays the hypotheses proposed in the present dissertation. The model is comprised of three structures that help to complete the analysis in this dissertation. First (from left to right), Website interactivity dimensions has been explored to establish the relationships between interactivity and brand knowledge. Second, brand knowledge components, narrowly defined as brand awareness and brand image, and consumer brand equity in this dissertation have been studied to determine whether travelers obtain brand knowledge and perceive hotel brands as valuable based on the type of Website interactivity. The final structure, behavioral intentions, is based on existent research that agrees that consumer behavioral intentions may be distributed into three general elements: 1) brand choice, 2) price premium, and 3) buying intention. The constructs and relationships have been selected for their relevance in the information technology, marketing, branding, and lodging body of knowledge. These constructs and relationships have been largely overlooked in earlier studies of Website interactivity results in hospitality and lodging literature.

#### 1.8. Limitations

Some of the limitations for this dissertation include lack of understanding, generalization and a sole market. Individuals might complete the online survey questionnaire without prudent attention due to lack of understanding of the item questions. The findings and implications proposed might not be generalized to neither any other sector (restaurants, vacation ownership, spas,) etc. of the hospitality industry nor any other industry. Also, this dissertation focuses only on US travelers and US hotels. Finally, interpretation of the survey items might not be consistent across participants. Future studies may focus on other markets, segments and also mobile Websites.

## **1.9.** Theoretical Assumptions

The following assumptions for this dissertation are expected to be:

- 1. This dissertation assumes that the participants have comprehended the content of the survey questionnaire including the demographic section.
- 2. This dissertation assumes that the participants have responded every question in a truthful manner.
- 3. This dissertation assumes that data has been gathered from all participating travelers in a consistent process.
- 4. This dissertation assumes that the distribution of the randomly selected travelers endows an acceptable representation of the US traveler's population.

### 1.10. Definition of Terms

For the purpose of this dissertation, the following concepts are defined:

**Website Interactivity:** A communication process that presents Web user control and permits users to communicate reciprocally (Vernuccio et al.'s (2012).

#### **Dimensions:**

**Social Interactivity** (Two-way communication): Refers to bi-directional flow of communication between communicators (Lowry et al., 2006). It is the ability to communicate between two or more entities" (Jiang et al., 2010).

**System Interactivity** (User Control): Refers to the ability of a Web user to select the information, timing and sequence of a communication to control his/her observing experience (Gao et al., 2010).

**Hotel Brand Awareness:** The ability to recognize and recall the brand under dissimilar circumstances (Aaker, 1996).

**Hotel Brand Image:** Consumers' perception of a brand as manifested by the brand associations held in their memory (Keller, 1993).

**Hotel Brand Equity:** Incremental value that a brand provides to a product (Yoo et al., 2001).

**Brand Choice:** When a consumer is expected to select the hotel brand in high frequency across comparable buying situations, principally in the presence of competitive offerings.

**Price Premium:** The amount a consumer is willing to pay for a brand in relation to other brands offering comparable benefits (Buil et al., 2013).

**Buying (Repurchase) Intention:** The probability that travelers will continue booking from their preferred hotel Website in the future.

**Hotel Branded Website:** A well-defined picture of the hotel company through the information that is displayed, the manner it is displayed, and the traveler experience with the hotel Website.

#### **1.11. Dissertation Structure**

Structure of the present dissertation contains an extensive literature review that explores the dimensions of Website interactivity theory and its potential power to build hotel online brands. The influential power of Website interactivity has roots in the attributes and features of e-commerce Websites. The literature review begins with a description of the two dimensions of Website interactivity namely social interactivity and system interactivity. These two dimensions have been explored as the critical precursors of brand knowledge and consumer-based brand equity. The impact of consumer-based brand equity on behavioral intentions (brand choice, price premium, and buying intentions) is also explored. Later, the author presents the methodology section that describes scale development, sampling technique, and data analysis technique. These sections are then followed by findings and discussions. Finally implications, conclusions and limitations are also discussed. A framework of this dissertation is displayed below.

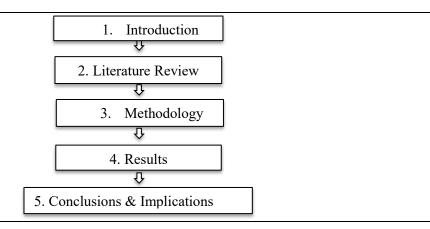


Figure 3. Dissertation Framework

## **CHAPTER TWO: LITERATURE REVIEW**

This section begins by exploring the advancement of the Internet and the challenge for hotels. Additionally, this section provides first a discussion of interactivity theory, and later discusses the branding basics and online branding; second, the chapter covers branding theory and third discusses the dependent variables of interest. The author also presents the proposed theory-based model and the hypotheses for the relationships in the proposed framework. A framework of this chapter is displayed below.

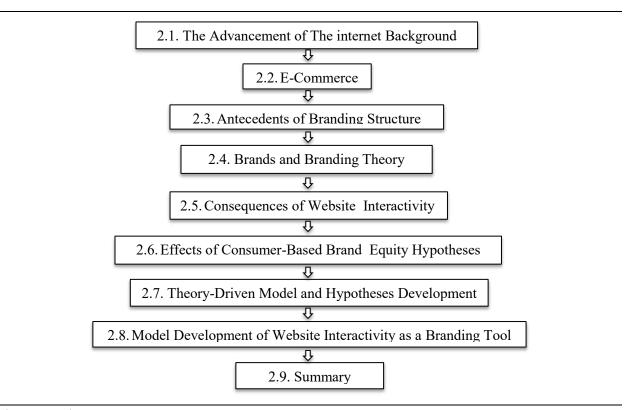


Figure 4. Chapter Two Structure

#### 2.1. The Advancements of the Internet

The Internet is considered an effective medium that has revolutionized the manner in which industry experts approach businesses and how individuals interact (Chang, 2013). The

Internet allows businesses to streamline business processes, to communicate, to decrease operating expenses, to improve productivity, and to establish strong relationships with customers more effectively than ever before (Kim et al., 2011; Pernsteiner & Rauseo, 2000). The capabilities of Web applications are extraordinary (Martins et al., 2014). Today, numerous firms invest substantial amounts of capital into the development and the adoption of Internet-related technologies (Theodosiou & Katsikea, 2012).

Forman et al. (2012) suggest that businesses in US are investing large amounts of money in the Internet across several industries. Since the beginning of the last decade, they have continued investing large amounts of money to advance such initiatives because research shows that information technology using industries (IT) underwent remarkably advantageous economic performance (Bloom et al., 2009) and because firms acknowledge the capacity of the Internet in their financial performance and productivity (Forman & Van Zeebroeck, 2012). According to Liu (2012), the Web is an innovative medium that facilitates the information exchange, that guides firms to an effective communication with its customers and contribute to new product development processes. The Web has also been considered a unique medium that helps the transformation of the marketing function (Ota & Ota, 2011). "The usage of the Internet has growth enormously in recent years, and so has its strategic application" (Taylor & Strutton, 2010, p. 952). For that reason the Internet, as an indispensable channel across marketing arenas, has emerged as a successful and cost-effective platform. The Internet presents the opportunity for cost efficiency, geographic expansion and new opportunities for interacting with consumers (Pantano et al., 2013).

The Internet also plays an essential function in advancing the scale and essence of electronic retailing. For instance, the Internet used in association with sales-based transaction and

users response permits branded Websites to build up substantial cost reductions and also permits consumers to conduct commerce. According to the Internet World Stats (2012), Internet users' worldwide account for 2,405,518,376 of its total users and in North America accounts for 273,785,413 users. The next section provides an in-depth discussion of the role of electronic commerce (e-commerce) in general and in the hotel sector.

#### **2.2. Electronic Commerce: E-commerce**

E-commerce in general has grown precipitously with the propagation of commercial Websites and the escalating approval of virtual transactions by e-customers (Ramsey et al., 2013). By, 2013, worldwide virtual commerce has reached an estimated 1.25 trillion, which represents more than 25 percent of total sales. The total number of online users will expand from 2.2 billion at the end of 2011 to almost 3.5 billion by 2013 (The Interactive Media in Retail Group (IMRG), 2013). The United States continues to be the world's single major electronic market (U.S. Commerce Department, 2013). As an innovative marketing avenue, the Internet varies from the conventional retail settings in numerous manners (Campbell et al., 2013).

With the worldwide environment, migrating towards conducting business electronically, business players have to comprehend that embracing e-commerce to extend conventional manners of executing business requires more than just enhancing productivity (Ramsey et al., 2013). Consumers, from a perspective of challenging expectations, are looking for the correct arrangement of products/services at the best price and at the right time (Chiu et al., 2014). Conventional ways and distributions channels do not represent an alternative to modern consumers (Campbell et al., 2013).

A recent US study demonstrates that more and more e-consumers buy products via the Internet (Evans, 2013). The same study shows that US Internet consumers will spend \$646 US

on gifts during the holiday season, representing an 11% growth over the \$582 they had planned to spend. Because the average dollar spent is increasing, businesses are seeing the consumer mindset changing from "prudent" to "sensible," which is positive for retailers. Growth of online shopping has been distinguished by intense customer requests and the rising number and type of existing products. On average, more than 11% annual increase in parcel volume is expected to remain with Forrester Research expecting that \$248.7 billion online sales by 2014 in the US. Moreover, a compounded increase of 10% is projected for the next five years (Metrics, 2014). This rapid advance of Internet is expected to simplify electronic commerce between businesses and consumers (Campbell et al., 2013).

The distribution of information and content are the essence and attributes of e-commerce, preserving company-consumer relationships, and executing business transactions through telecommunication systems (Karahanna et al., 2013). E-commerce involves the sell-buy relationships and business operations between consumers and businesses and between business and business (Chiu et al., 2014). In the electronic commerce environment, buyers do not have the opportunity to physically experience the service or use other senses to perceive the product quality, as they generally do in a conventional store or service provider; they must base their assessments on the service/product information displayed on the Websites (Karahanna et al., 2013). Another form of electronic commerce that develops rapidly is the increasing acceptance of mobile commerce (MC) (Okazaki & Mendez, 2013). While mobile technologies and applications are quickly and extensively developed for mobile commerce; it is exceptionally relevant to comprehend their acceptance and use in specific contexts, such as the hotel context. The benefits of using electronic commerce in any of its forms present numerous advantages for users and institutions to influence perceptions (Hsieh, 2014).

As a result, the dimensions of Website interactivity (system and social interactivity) play a vital function in influencing customer perception. The fast development of e-commerce and the uniqueness of this innovative exchange station emphasize the significance of comprehending the potential power of Website interactivity as a tool to form relationships between companies and consumers (Palla et al., 2013). Electronic commerce involves a decision-making process in which Web users surf the Internet and visit Websites to gather information, evaluate choices, and decide what to buy, what services to include, what preferences to indicate, at what cost, and from which supplier (Karahanna et al., 2013). These actions in the decision-making process intend to diminish risks about services, product characteristics, substitutes, rates, delivery, and supplier reliability. Due to the technology-mediated context of electronic transactions, a Web user trust the Website when making decisions instead of interacting physically with the firm (Wang et al., 2013). Low-interactive Websites generate insecurity regarding the brand, query response and purchase transaction (Chen et al., 2013).

### 2.2.1. E-Commerce in the Hotel Sector

In the hotel sector, by 2012 most lodging firms have indicated that the Internet would present significant strategic opportunities. These opportunities help to establish a long-lasting relationship with travelers (Lin & Fu, 2012). Also, most of these lodging firms have begun locating hotel room inventory and hotel services for travelers to access through their commercial Websites (Wen, 2012). Because of the development of the Internet as a marketing channel, the hotel sector has intended to maintain the same pace of technology adoption as consumers (Müller, 2011). The Internet as a channel for the circulation of hotel services such as suites, double and single rooms, dinning, and recreational amenities, has altered the context of

transaction and product selection for travelers and the lodging sector (Toh DeKay & Raven, 2011).

Today, hotel businesses have realized the complexity necessary to manage their inventory, optimize profits, establish strong relationships, and maintain a sustainable competitive edge through their commercial Websites (Toh et al., 2011). Prosumers (professional consumers) have more decision and selection power as an outcome of this exposure to this information (Belkhamza, 2013; Hashim Murphy et al., 2010). Travelers have more control to originate dialogue and disseminate content, therefore shifting the conventional retail business model (Jayawardena et al., 2013).

Clearly the Internet is an essential marketing tool for hotel firms (Jiang et al., 2012). According to King and Jainchill (2012) and other studies, between 2009 and 2014, annual US hotel online sales will increase 44 percent, to \$ 39.2 billion, and will account for a third of all hotel bookings. In 2013, US travelers researching hotels online reached 123.3 billion travelers. 92 percent of them will book online. Projections state that the Internet will progressively outpace the present amount of online hotel sales (Munoz, 2014). Additionally, travelers invest more time surfing the Web for information, interactive branded sites and trusted hotel Websites given the amount of information displayed on distinct hotel Websites (Kim et al., 2011). Therefore, in a context where there are an excess of information and unlimited providers, consumers have become more concerned about which hotel Website to trust and with which to establish a relationship (Polites et al., 2012).

In this commercial context, a greater understanding of traveler perceptions about online hotel brands is a criterion. An increasing number of travelers seek and explore hotel reviews, amenities, location, and prices before booking hotel services/products online

(Atchariyachanvanich & Hitoshi, 2011). Consumers also consider the brand (Chiang & Jang, 2007). The brand is a significant and decisive aspect in choosing homogeneous alternatives on the Internet (Boyland et al., 2013). Brand is a central component in hotel e-commerce because travelers care about the consistency of the service, the trustworthiness of the hotel, and the excellence of the relationship (Pan et al., 2013). Brands are habitually associated with value, consistency, and superiority (Kim & Hall, 2014).

The Internet offers substantial opportunities for hotel brands to strengthen its relationship with travelers, who will form brand-value perceptions with their chosen hotels based on their experiences with the hotel branded Website. The next section explores the challenges and opportunities of e-commerce in the hotel sector to understand the impact of technological developments in hotel branded Websites.

### 2.2.2. The Challenges of E-commerce on the Hotel Sector

Numerous businesses across different disciplines are adapting to today's technology, utilizing Websites as a major distribution channel and a dynamic platform to build relationships with consumers (He & Mu, 2012). New research demonstrates that consumers are not physically interacting with firms, but instead are using technology to communicate with their brands of preference (Chun, 2013). Even when consumers and businesses have acknowledged the critical importance of adopting technology into their business models, cultivating and maturing an effective online business model through the use of commercial Websites is not an easy task (Dasgupta & Gupta, 2013).

The role of the Internet within any business environment is vital (Yang & Koo, 2014). For the hotel business, not only is there an escalating frequency in use, but the growing internet user base is also expected to control hotel bookings (Lin & Lee, 2009). Within the hotel industry,

online booking has changed the conventional approach of information search behavior and decision making (Qi et al., 2013). Travelers have decreased interacting with hotel sales representatives or experiencing a face to face encounter with hotels (Ward & Shafaghi, 2013); interaction is now arbitrated through the Internet system (Pang et al., 2013). In 2013, most of the hotel companies have their own Website (Sarkar & Loureiro, 2013) and most of these hotel Websites empowers travelers to book hotel products/services online (Sambhanthan & Good, 2013).

In 2006, Marriott identified their key business, marketing strategy and inventory applications include a comprehensive technology infrastructure. This infrastructure has enabled more than 69.5 million new reservations of its online booking, averaging more than 190,000 daily. Simultaneously, Marriott could sustain an availability of more than 99.99 percent (Marriott International, Inc, 2006). The expanding significance of the Internet as a distribution channel in the hotel sector has made the development of an interactive e-commerce Website a fundamental element to ensure success in the hotel business (Tse, 2013).

Even though the Internet presents remarkable opportunities to a hotel business globally, hoteliers cannot pretend a business will succeed just by developing a Website (Cantoni et al., 2011). Patel et al. (2006) indicate that many businesses erroneously believe that just by designing a Website consumers will browse the hotel Website and eventually buy products/services through it. Many hotels have invested substantial capital to launch Websites without research, expecting to generate attractive profits online (Lee et al., 2005). Miller (2005) notes that "lodging Websites used the principle of if we build it they will come." Hotel-owned Websites are not generating similar revenues for room bookings as generated by offline distribution channels (Miller, 2005). Nevertheless, operating online does not guarantee

undemanding profits for hotels (Williams et al., 2007). There a numerous elements to consider when building a Website; for instance, ensuring the Website is accessible to browsers, searchable by search engines, and that it includes the indispensable content and attributes to provide an interactive experience for visitors (Xiong et al., 2009).

Challenges in Web design includes the structure of the Website, navigation schemes, the layout, the conceptual design with branding and, most importantly, the interactivity features such as user-to-user and user-to-system interactivity (Wang, 2011). The superiority of any Website design (Hofbauer et al., 2010) is to overcome technology challenges; hotel brands may not need to seek financial benefits just by participating online (Amrahi et al., 2013).

Hoteliers who pursue a distinctive competitive advantage might design their hotel Websites with interactivity features to create an exclusive individual exchange with travelers and build their brands. Nusair & Kandampully (2008) suggest that individuals expect Websites to provide information, with appealing and interactive features. Research strongly recommends that the essence of an interactive design is a critical element in influencing the success or failure of a commercial Website (Cyr, 2013). Few studies, however, provide empirical results that may guide hoteliers to include an interactive design that presents an interactive opportunity for Internet users to control the content they want to select and also to communicate with the brand (Wu & Wu, 2011).

There is a solid agreement on the significance of Website interactivity as a brand building tool. In the following sections, the author of this dissertation presents a detailed summary of the theoretical nature for this agreement in the extant literature regarding several aspects of Website interactivity and branding: (1) Antecedents of branding structure including, interactivity as a central component, interactivity theory, Website interactivity, definitions of interactivity,

Website interactivity as a multidimensional construct, and Website interactivity and online branding. (2) Branding theory and online branding. (3) Consequences of Website interactivity, including brand knowledge (brand awareness and brand image), and consumer-based brand equity.

## 2.3. Antecedents of Branding Structure

In the following sections, the antecedents of branding structure are presented. A number of significant conceptual and empirical studies support this dissertation's overall position that Website interactivity impacts the formation of brands in the online environment. These studies, which are based on the information technology, marketing, branding, lodging, and consumer behavior literature, have continuously suggested the need to explore the significant influence of Website interactivity as a branding tool in the retail and hospitality industry--the latter having the most implication and concentration in this dissertation.

# 2.3.1. Interactivity as an Antecedent of Branding

Numerous researchers consider the significance of interactivity as one of the main benefits of the Internet over traditional mass media (Hawkins et al., 2010; Cyr et al., 2010; Jarvenpaa & Todd 1997; Hoffman & Novak, 1996). Auger (2005) suggests that interactivity is one of the most essential design components in any commercial Website. The significance of interactivity for Internet-based e-commerce arises principally from its capacity to have positive short and long-term impact on customer perception and behavior (Schlosser, 2000). Kim et al. (2010) indicate that a Website design in relation to interactivity is correlated with overall performance. Additionally, Lilleker and Malagón (2010) recommend that Website designers incorporate interactivity when building Websites for commercial businesses.

Lilleker and Malagón (2010) indicate that interactivity motivates Website users and browsers to be more attentive to the content displayed to them. Because interactivity might be decisive in making consumers immersed and attentive in the online process (Aryanto, 2008), interactivity might also enhance individuality among Website users and browsers and might offer the business the competence to have a personal contact with its consumers (Lu et al., 2010). Coyle et al. (2012), in their discussion of microblog interactions on consumers' perceptions of brand elements, recognize interactivity as a strategic advance and highlight the demand for empirical research that might advance the comprehension of system-mediated interactivity. Cebi (2012) expresses that interactivity is a fundamental component of a Website. In 2008, Aryanto states that "the interactive nature of Websites has been credited with increasing the desire to browse and purchase online". Interactivity of an e-commerce site provides simplified communications, personalization of given information, image control, and entertainment for the consumer (Mathwick, 2002). This allows consumers to manage their individual encounters and communication (Lowry et al., 2006).

## **2.3.2. Interactivity Theory**

Interactivity theory proposes that interactivity is a process of message exchange (Voorveld et al., 2009). Under this theory, the effectiveness of the interactivity influences individuals' perceptions (Yang & Huang, 2011): the more reciprocal a message exchange, the stronger the perception of interactivity (Voorveld et al., 2009). An extensive body of literature has been presented about interactivity theory in human communications (Boczkowski & Mitchelstein, 2012). Campbell and Wright (2008) state that, from a sociological point of view, interactivity refers to the relationship between two or more individuals who, in specific conditions, reciprocally adjust their conduct and behaviors to each other. Alternatively, body of

knowledge investigates interactivity among consumers and technology, namely Website interactivity (Chen et al., 2010; Cebi, 2012; Cyr, 2013).

This body of research has matured from technology practice and mainly concentrates on refining the interactions between users and technology (Forman et al., 2012; Huang, 2010). Aryanto (2008) indicates that research in the arena of human-technology interfaces have established user control (system interactivity) and users two-way communication (social interactivity) as fundamental elements of interactivity. In this dissertation, the author concentrates on the understanding of Website interactivity in technology-mediated communication. This research narrows the investigation of interactivity by centering on how hotel Web users perceive interactivity in a technology-mediated communication setting.

Although different investigators have expanded differing concepts of interactivity, many of these concepts have a mutual ground. The interactivity concept frequently refers to two-way communication and exchanges in which two or more individuals convey and transmit interconnected messages to each other (Hashim et al., 2007). Rafaeli and Ariel (2007) indicate that interactive communications contain messages in which succeeding messages depend on preceding messages. Liu and Shrum (2009) conceptualize interactivity as a process of mutual effect and stimulus. Sedig and Parsons (2012) reiterate this condition by conceptualizing interactivity as communication with a superior receptiveness and circular relationships between cause and effect, where individuals split the load of communication evenly. Similarly, Guillory and Sundar (2013) suggest that the two central components of interactivity are reciprocal communication and involvement.

Currently, the literature on interactivity frequently concentrates on face-to-face (F2F) interactive communication (Wang et al., 2013). Nevertheless, Song et al. (2008) state that the

construct of interactivity that is based on interactive communication is very limiting to fit the definitions of mechanical communication. This affirmation is principally important when studying research that happens over the Internet (Sambhanthan & Good, 2013). In the field of technology, the construct of interactivity involves both humans and computers as components of the interaction (Lowry et al., 2006).

## 2.3.3. Website Interactivity

In this dissertation, the author considers Website interactivity to be a subsection of interactivity which is centered exclusively on the interaction between Websites and individuals. In this sense, Website interactivity is understood as an essential high-tech capability for a business attempting to establish a long-term relationship with its consumers (Neelotpaul, 2011), and a central determinant for building brands (Voorveld et al., 2013) as it allows a reciprocal communication with the system and other users. Coyle et al. (2012) propose that an advantageous perspective for examining technology-mediated communication (TMC) is Website interactivity. Website Interactivity is a concept that deals with the influence of engagement, interest, and appeal that may be an intrinsic characteristic in technology-mediated groups (Palla & Zotos, 2013).

The significance of effective Website interactivity is fundamental to successful brands because of its capacity to generate continuing effects on consumer perception and behavior (Yoo et al., 2010). For hotel brands specifically, Website interactivity may be generally understood as any act a hotel user or a hotel Website executes when an individual is surfing the hotel Website. In several circumstances, these acts are expected to accomplish pre-established Web users' objectives with the hotel Website. These objectives may include first accessing information about the hotel, its services and its promotions, second seeking specific hotel information or just

browsing, and third finalizing hotel services and products-related transactions. Furthermore, effective Website interactivity might help to influence browsers into loyal users (Liu & Shrum, 2002). While several investigators have expanded different definitions of Website interactivity, in a technology-mediated-communication these definitions have a mutual line.

This dissertation uniquely considers the perceptual attribute of Website interactivity (Vernuccio et al., 2012) in relation to the interactive and collaborative participants. In agreement with Vernuccio et al. (2012), the author defines interactivity as a communication process that presents Web user control and permits them to communicate reciprocally. Current literature specifies that studies devote user control as an expression of system interactivity and two-way communication as an expression of social interactivity to portray the dual dimensions of Website interactivity (Wang et al., 2013).

Other researchers also agree that two-way communication (namely, social interactivity) and, active control (namely, system interactivity), shape the roots of a dominant definition of Website interactivity (Sarkar, 2013; Downes & McMillan, 2000; Jian et al., 2010; Lowry et al., 2006). Others suggests that Website interactivity refers to the ability to communicate between two or more entities, (namely, human interactivity) and to the faculty to choose information and direct an interaction, (namely, mechanical interactivity) (Birnbaum et al., 2012; Jian et al., 2010; Lowry et al., 2006; Hoffman & Novak, 1996).

Two-way communication (social interactivity) refers to reciprocal communication between individuals. The perception of two-way communication recognizes the interaction between the users and the system (e.g. Website, e-mail, chat or toll-free telephone access to customer service, etc.). This social interactivity perspective is more concerned with a two-way flow of communication between users (Lilleker & Malagón, 2010). In most of the literature,

social interactivity is characterized as mutual discourse (McMillan & Hwang, 2002). McMillan and Hwang (2002) note that the Internet offers social interactivity because users have the ability to communicate throughout with tools such as real-time chats, bulletin boards, search engines, etc. Social interactivity also facilitates customer service and supply chain management (Chen & Yen, 2004). The system interactivity perspective is more concerned with the ability of the user to select content and guide the interaction (Lowry et al., 2006). Much of the literature that focuses on system interactivity explores the ways users control computers and other media (Boczkowski & Mitchelstein, 2012; Stromer-Galley, 2000). User control is present when an individual is granted the faculty to select information and influence the interaction. For instance, Web users may feel themselves as possessing user control because they have the capacity to select without restrictions (through an internal search engine). More specifically, the amount of flexibility and independence the Website permits individuals to have in managing the presentation of product/service details is Website's system interactivity (Boczkowski & Mitchelstein, 2012; Ariely, 2000). These two dimensions of Website interactivity social interactivity (two-way communication) and system interactivity (user control), are discussed further in a subsequent section.

Stimulated by increasing attention about the Internet, scholars have also demonstrated an interest for investigating the influence of Website interactivity in different disciplines such as social psychology, relationship marketing, economics, information systems, advertising, and communication technology and in different settings such as e-commerce, traditional commerce, and politics. For instance, Coyle and Thorson (2001) study the effect of incorporating interactivity in Web marketing sites and suggest that Website interactivity lead to more favorable perceptions toward Websites, deeper feelings of telepresence, and stronger attitudes. Johnson et

al. (2006) review interactivity to address numerous relevant limitations in current literature. The authors conclude that "responsiveness, nonverbal information, and speed of response were found to be significantly related to perceived interactivity". In a study to theorize interactivity effects, Sundar (2004) indicates that interactivity is frequently defined but rarely theorized. He provides some suggestions for expanding theories about the impact of interactivity, mainly as interactivity applies to Web-based mass communication. His study also examines the role played by interactivity in originating action, modifying perceptions, and influencing the nature of information processing.

Chen and Yen (2004) validate Ha and James' (1998) interactivity dimensions model and their impact on Website design quality. Their findings indicate that the user control, playfulness, and two-way communication dimensions are essential antecedents of Website quality. Auger (2005) investigates the associations between interactivity and design sophistication, a general measurement of performance and the number of visitors to the Website. He suggests that Website interactivity significantly and positively correlates with overall performance. To investigate the impact of interactivity on Website usability, Lowry et al. (2006) suggest that interactivity is effectively capable to influence Website satisfaction. Additionally, they suggest that increasing interactivity is an ensuring approach of enhancing customer trust in electronic commerce Websites through enhanced Website usability.

To examine a framework that integrates interactive characteristics such as perceived interactivity as a mediator and individual differences as moderators, Bucy and Tao (2007) propose a mediated moderation framework. They conceptualize Website interactivity as technological characteristics of mediated environments that allow two-way communication. This two-way communication characteristic offers interaction between the system and users, or

between users within technology. Yoon et al. (2008) investigates the function of Website interactivity and other marketing tactics in relationship building with consumers in the online retail context. Their findings suggest that two marketing methods (e-mail and material compensation) and two components of Website interactivity namely user control (system interactivity) and two-way communication (social interactivity) are substantial precursors for the relationship- developing process of virtual retail brands.

To study Website interactivity in a model that incorporates efficiency and effectiveness, Cyr et al. (2009) examine five designs of Website interactivity considering distinct Web-poll interfaces. Their results suggest that Website interactivity exerts a positive impact on the user that eventually causes an e-loyal behavior. They indicate that if online Web designers and marketers want to attract new users and maintain their existent ones then development of Web features that permit Web user interactivity is required. In the same year, Voorveld et al. (2009) provide a detailed theoretical examination of elements inducing users' reactions to brand Websites. Their findings suggest that no new theories have been developed to investigate users' responses to brand Websites. With this deduction their theoretical examination indicates that new theories must be developed.

These new theories, as the study states, must consider Website interactivity theory as the basis to develop branded Websites. Lilleker and Malagón (2010) explain that in French Presidential candidates' Websites, the features of interactivity significantly reduce the gap of communication between elected and elector. Website interactivity has the capability to decrease disengagement and regenerate democracy. To investigate the relationships between two dimensions of interactivity (user control and two-way communication), Yoo et al. (2010) suggest that two-way communication is a key interactivity characteristic for consumers' hedonic value

creation in an e-tailing service context while user control is a key for utilitarian value. To examine how Website interactivity (social interactivity and system interactivity) can influence purchase intention through Website involvement, Jian et al. (2010) explain that commercial Websites with system interactivity features lead to perceptive commitment and, in certain occasions, affective commitment. Jian et al. also explain that Websites with social interactivity features direct to emotional commitment for functional products but not expressive products. Neelotpaul (2010) also states that "interactivity involves engaging the customers directly, creating a unique and personal exchange with them." In their work, Websites of several companies were examined from an interactivity stand point to demonstrate how the incorporation of Website interactivity has assisted them in successful online branding.

Surprisingly, Vernuccio et al. (2012) observe no significant direct influence between Website interactivity and e-brand attitude. The authors suggest that the effect of Website interactivity is mediated by personalization and trust. Jih et al., (2011) investigate the influence of Website interactivity on consumer loyalty. Guided by the theory of social exchange in social psychology, Jih et al. examine the causal effect of Website interactivity on transactional and relational loyalty. Their results suggest that Website interactivity, among other elements of Website design, represents an essential component of the enabling information infrastructure. Additionally, they suggest the significant influence of Website interactivity on customer loyalty.

To examine the acceptance of several interactive characteristics on new Websites, Boczkowski and Mitchelstein (2012) look at the thematic configuration of the most clicked, most e-mailed, and most mentioned stories during periods of sensitive political activity. They suggest that dimensions of Website interactivity display a greater occurrence of public affairs content during the period of sensitive political activity than during its habitual counterpart. Wang et al. (2013) study the perceived interactivity perspective in virtual communities. The authors propose a theoretical framework for validating the two dimensions of Website interactivity (social interactivity and system interactivity) as antecedents to trust. Trust in turn influence member retention and duration behavior. Their findings suggest that two-way communication is a critical antecedent to trust in members, while active control is an essential antecedent to trust in systems. In the same year, Voorveld et al. (2013) state that "although the literature on effects of Website interactivity is rapidly evolving, thus far, hardly any studies have investigated whether interactivity is capable of building brands and whether interactivity is important for both existing and new customers."

Different to the above-revealed findings, McMillan et al. (2003) examine the impact of structural factors (Website features & innovative strategies) and perceptual factors (Website involvement and Website interactivity) on Website evaluation in the context of hotel Websites. McMillan et al. propose that the association between Website characteristics and Website is not significant. In 2008, Boushra (p. 32) state that: "When examined within the context of hotel Web sites, they repeatedly supported the findings on the relationship between site features and users' attitude toward a Website features and users' attitudes have not been conclusive in McMillan et al.'s study (2003), the literature suggests possible relationships."

In his study, Boushra (2008) investigates if the amplified degree of Website interactivity has a positive influence on the Web users' feelings, behaviors, and experience online in the setting of hotel Websites. Additionally, the author explores the significances of actual user-site interactivity, precisely how actual user-site interactivity impacts Web users' evaluations. In the same study, Boushra (2008) indicates that little is comprehended about the essence and function of Website interactivity in the hospitality and lodging context. Even when the body of knowledge devotes significant attention to understand Website interactivity in other disciplines, Boushra did not locate investigations that offer insight into the strength, factors, capacity, and influence of Website interactivity in the hospitality, tourism, and lodging industry.

In the present dissertation, the author has located some researchers who have considered interactivity in the design of their investigations in the hospitality, tourism and lodging industry. For instance, Schmidt et al. (2008) have constructed and validated a mechanism for the measurement of Website features including interactivity and connect those features to Website functioning, applying SEM (structural equation modeling). Their findings suggest that small and medium size hotel properties located in the Balearic Islands of Spain and of the South area of Brazil are utilizing hotel branded Websites as mass media instruments; overlooking the capability of Website interactivity and reciprocal communication. Lin et al. (2009) utilizes the extended Model of Internet Commerce Adoption (eMICA) to assess the Website functioning of Chinese travel operators, with several adjustments of the framework for the aim of the research. Lin et al. suggest that many of the Chinese travel operators do not use the Internet to its highest capacity, principally in relation to use their Websites as marketing and branding platforms. The authors suggest that travel agencies may use interactive Website features in order to enhance the experienced of the surfers and regular users. In another study, Bilgihan et al. (2013) suggest that Website interactivity present opportunities to engage in favorable online experiences.

Lin (2009) analyzes Website content of international traveler hotels in order to identify what information Websites provide to their users. The author uses content analysis to assess the Website contents in relation to Website design (Website interactivity, navigation, and functionality) and Website marketing features on the Internet. The study offers instructions for the lodging sector, and also suggests that Websites may attain the highest marketing results with the manipulation of Website interactivity, navigation, and functionality.

Aziz et al. (2011) empirically study the most relevant hotel Website facets to be contemplated with respect to the international travelers' choices. Aziz et al. (2011) assess the hotel Website facets through two groups which are Website interactivity and Website information. Essentially, their study shows the significance of selecting the most adequate Website facet to promote consumers to buy via online. Kim et al. (2011) explore at what extent Website interactivity has a substantial influence on e-loyalty through e-satisfaction and e-trust. Additionally, they explore at what extent e-satisfaction and e-trust mediate e-loyalty and at what extent switching costs have an interacting effect between e-satisfaction, e-trust and e-loyalty. Principally, Kim et al. (2011) sustain their hypotheses and validate both the mediating effect of e-satisfaction and e-trust and the interaction effect of switching costs.

To understand the value of designing an effective hotel Website, Hidayat (2011) uses content analysis to explore five-star hotel Websites in Indonesia, to distinguish the common issues linked to hotel Websites, and to validate certain factors to build a prosperous Website. The author suggests that during the Website development stage, interactive features must be considered in order to consider a Website as effective. To distinguish mainstream characteristics of destination Websites, Luna-Nevarez and Hyman (2012) conduct a content analysis of Websites for leading worldwide destinations by quantity of international arrivals. The authors evaluate six elements including primary focus, navigation and Website interactivity, visual and presentation style, textual information, use of advertising, and use of social media and travel aids. Their findings show three logically arising clusters namely the impact of interactive communication and control of commercial content, the variety and aesthetics of visual elements.

To understand how a Websites is vital medium for hotel online branding and how Website information unequivocally impact consumer choices and behaviors. Ting et al. (2012) design a theoretical framework, which tends to appear to be more factual and convincing than others, to investigate 158 hotel Websites in Taiwan and China, based on three factors: interactive features, phase of Website development, and upgrading features. Their findings suggest that these features are very important for the four categories of hotels under studied (Taiwanese international tourist hotels, Taiwanese ordinary tourist hotels, Chinese five-star hotels, and Chinese four-star hotels).

Being considered such an essential component of the Internet medium, it is alarming how little Website interactivity is comprehended (Van Noort et al., 2012). More empirical work is required to establish the construct of Website interactivity within the medium of the Internet. Because of the critical significance of Website interactivity as a distribution platform and marketing platform in retail and other industries such as the hospitality and lodging industry, in this dissertation, the author focuses to present an argument of the importance of Website interactivity as feature of the user to the formation of brands online in the context of the hotel sector.

The literature shows some discrepancies on the conceptual and operational definition of Website interactivity (Wang et al., 2013; Auger, 2005; Liu & Shrum, 2002; Coyle & Thorson, 2001). In the following section, the author covers an outline of the discrepancies in the existing literature concerning Website interactivity definitions and its two-main dimensions.

# **2.3.4. Defining Interactivity**

Most of the extant literature considers the concept of interactivity with some or no efforts to provide a definition (Liu & Shrum, 2009). Though there are some definitions located in the

literature, they are frequently inconsistent. The interactivity concept is utilized to portray products fluctuating between snoring dolls and Web-based marketing pieces to video games and electronic transactions (Downes & McMillan, 2000). For instance, one body of literature investigates interaction from a human communication stand point. Blattberg and Deighton (1991) define interactivity as the ability of consumers and commercial entities to communicate directly with one another regardless of distance or time.

Based on a sociological point of view, Jensen (1998, p. 188) indicate that, "interactivity is the relationship between two or more people who, in a given situation, mutually adapt their behavior and actions to each other." Another body of research investigates interactivity between individuals and computers (Downes & McMillan, 2000). Rafaeli (1988, p. 111) states that interactivity is "an expression of the extent that, in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions." Rafaeli and Sudweeks (1997) have reviewed that definition and have concluded that " interactivity is the extent to which messages in a sequence relate to each other, and especially the extent to which later messages recount the relatedness of earlier messages." Two years before Rafaeli and Sudweeks reviewed their definition, Rogers (1995, p.314) defines interactivity as "the degree to which participants in a communication process can exchange roles in and have control over their mutual discourse." Similarly, Stromer-Galley (2000) reaffirms this dynamic by defining interactivity as "communication with a high degree of responsiveness and reflexivity, where participants share the burden of communication equally, subverting hierarchical, linear structures of communication" p. 117.

Thorson and Rodgers (2006) define Website interactivity as "the extent to which users perceive their experiences as a simulation of interpersonal interaction and sense they are in the presence of a social other." Cyr et al. (2009) also define Website interactivity as permitting users to control and to retrieve information of the Website in distinct manners. Comparable definition is proposed by Wu (2006), who states Website interactivity "as a psychological state undergone by a site-visitor during the interaction process". Gao et al. (2009) define interactivity in the context of mobile advertisement as a communication process that presents mobile users active control, two-way communication, synchronicity, and playfulness. To examine how Website interactivity (user control and two-way communication) exerts a strong influence on Website involvement which in turns impact purchase intentions, Jiang et al. (2010) define Website interactivity as the degree at which individuals may contribute in adjusting the content of a Website while visiting the site. In Jih et al.'s (2011) study, Website interactivity is understood as the capability of individuals to influence the format or content of the mediated-atmosphere and to communicate with other individuals in a two-way manner. Similarly, in 2012, Voorveld and van Noort define Website interactivity as the extent to which two interconnecting groups may impact on each other, on the medium, and on the message, and the extent at which this impact is coordinated. Wang et al. (2013) agree with Wu's definition stating Website interactivity as a state experienced by the user through the interactive procedure. Voorveld et al. (2013) note that "Website interactivity is the degree to which two or more communicating parties can act on each other, on the communication medium, and on the message and the degree to which such influences are synchronized"

In the present dissertation, the author considers Website interactivity as a subsection of interactivity that is concerned exclusively on the perceived interactivity between Websites and

travelers. With this logic, Website interactivity is mostly understood as one action that either the individual or a Website takes whilst an individual is visiting the Website (Stromer-Galley, 2000). The author has centered the definition of Website interactivity on the new extant of literature that concentrates on technology-mediated communication. For this reason, this dissertation adapts Vernuccio et al. (2012) definition, which states that Website interactivity is defined as a communication process that presents Web user control and permits them to communicate reciprocally.

Numerous researchers have defined Website interactivity as a construct containing two distinct dimensions (Jiang et al., 2010; Lowry et al., 2006; McMillan & Hwang, 2002), namely system interactivity (user control) and social interactivity (two-way communication) (Cyr et al., 2009; Jiang et al., 2010; Yoo et al., 2008, Jian & Benbasat, 2007; Lin, 2008; Preece, 2001; Hoffman & Novak, 1996). In this study, the author defines Website interactivity as a communication process that presents user control (traveler's control) and allows them to have a two-way communication when they visit hotel branded Websites.

From this discussion, it is obvious that as today there is no a general definition of Website interactivity in the literature. Table 1 portrays some of the most cited definitions of Website interactivity proposed by numerous investigators.

Table 1- Synopsis	of Website Interactivity	y Definitions

Author (s)	Year	Definition
Barreda	2014	A communication progression that presents users control (travelers' control) and allow them to have a two-
		way communication when they visit hotel branded Websites
Voorveld et al.	2013	The degree to which two or more communicating parties can act on each other, on the communication
		medium, and on the message
Wang et al.	2013	A state experienced by the user through the interactive procedure
Vernuccio et al.	2012	A communication process that presents Web user control and permits them to communicate reciprocally
Voorveld and van Noort	2012	The extent to which two interconnecting groups may impact on each other, on the medium, and on the
		message, and the degree at which this impact is coordinated
Jih, Lee, and Tsai	2011	The degree at which individuals have the capability to influence the format or content of the mediated-
		atmosphere and to communicate with other individuals in two-way manner
Jiang et al.	2010	The degree at which individuals may contribute in adjusting the content of a Website while visiting the site
Gao et al.	2009	A communication process that presents mobile users active control, two-way communication, synchronicity,
		and playfulness
Cyr et al.	2009	A process that permits users to control and to retrieve information of the Website in distinct manners
Wu	2006	A psychological state undergone by a site-visitor during the interaction process
Thorson and Rodgers	2006	The extent to which users perceive their experiences as a simulation of interpersonal interaction and sense
		they are in the presence of a social other
Lowry et al.	2006	As any action a user or a Website takes while a user is visiting a Website
McMillan	2005	The perceived direction of communication, control, and time
Yadav and Varadarajan	2005	The degree to which computer-mediated communication is perceived by each of the communicating entities
		to be (a) bi-directional, (b) timely, (c) mutually controllable, and (d) responsive
Liu	2003	A communication that offers individuals active control and allows them to communicate both reciprocally
		and synchronously
Liu and Shrum	2002	The degree to which two or more communication parties can act on each other, on the communication
		medium, and on the messages and the degree to which such influences are synchronized
Burgoon et al.	2002	Structural properties of media that enable interdependent interaction examined in this work: mediation,
		proximity, modality, and context richness
Thorbjornsen et al.	2002	A process that embraces both machine and person interactivity

Author (s)	Year	Definition
Zeithaml et al.	2002	The extent to which Website users can (1) communicate with the people behind the Website, (2) interactively
		search for information, and (3) conduct transactions through the Website
Stromer-Galley	2000	Communication with a high degree of responsiveness and reflexivity, where participants share the burden of
		communication equally, subverting hierarchical, linear structures of communication
Jensen	1998	Interactivity is the relationship between two or more people who, in a given situation, mutually adapt their
		behavior and actions to each other
Bezjian-Avery, Calder, &	1998	The immediately iterative process by which customer needs and desires are uncovered, met, modified and
Iacobucci		satisfied by the providing firm
Evans and	1997	It refers to dialogue as opposed to monologue
Wurster		
Alba et al.	1997	A continuous construct capturing the quality of two-way communication between two parties
Rafaeli and Sudweeks	1996	The extent to which messages in a sequence relate to each other, and especially the extent to which later
		messages recount the relatedness of earlier messages
Newhagen and Rafaeli	1996	The extent to which communication reflects back on itself, feeds on and responds to the past
Deighton	1996	The ability to address an individual and the ability to gather and remember the response of that individual.
Straubhaar and LaRose	1996	Situations in which real-time communication, role interchangeability, and user controllability are allowed.
Rogers	1995	The degree to which participants in a communication process can exchange roles in and have control over
		their mutual discourse
Steur	1992	The extent to which users can participate in modifying the form and content of a mediated environment in
		real time
Blattberg & Deigh	1991	The ability of individuals and commercial entities to communicate directly with one another regardless of
		distance or time
Neuman	1991	The quality of electronically mediated communication characterized by increased control
		over the communication process by both the sender and the receiver, either can be a microprocessor
Rafaeli	1988	An expression of the extent that any third (or later) transmission (or message) is related to the degree to
		which previous exchanges referred to even earlier transmissions
Rogers	1986	Individual's communication with a medium
Wiener	1948	Feedback in the medium in cybernetics

Source: Table developed for this dissertation

#### 2.3.5. Website Interactivity as Multidimensional Construct

In Voorveld et al. (2013), the authors indicate that Website interactivity involves a multidimensional concept that might be employed in distinctive manners. These manners include the convenience of electronic response mechanisms, the competence to buy products/services online, and/or the convenience of searchable attributes. The extant literature of Website interactivity embraces multiple dimensions that assist to clarify how Web users perceive interactivity in a technology-based communication context. For instance, Rafaeli (1988) states that "bidirectionality, quick response, bandwidth, user control, amount of user activity, ratio of user to medium activity, feedback, transparency, social presence, and artificial intelligence" are dimensions of interactivity, although they do not fully capture the essence of interactivity (p. 115). Shortly after, Alba et al. (1997) operationalize interactivity as response time and contingency. Ha and James (1998) suggest that Website interactivity includes five dimensions competent to fulfill several communication needs: playfulness, choice, connectedness, information collection, and reciprocal communication.

According to Liu and Shrum (2002) a two-way communication (social interactivity) and user control (system interactivity) model the base of a strong, yet simple concept of Website interactivity. Web users participate in two critical components of Website interactivity to acquire pertinent information and take a decision, specifically system interactivity and social interactivity (Jiang et al., 2010). Similarly, Wang et al. (2013) examine Website interactivity from two dimensions: social interactivity (user-to-user), which concentrates on the two-way communication process, and system interactivity (user-to-computer), which concentrates on the technological attributes.

In line with current research, in this dissertation, the author chooses to employ the twofacets of Website interactivity proposed by Want et al., 2013, Jiang et al. (2010), Lowry et al. (2006), Liu and Shrum (2002), and McMillan & Hwang, 2002 for different reasons. First of all their definition is consistent with an exhaustive review of Website interactivity conceptualizations in disciplines such as branding, consumer relationship, and advertising. This coordinates with the setting of the present dissertation, which is hotel branded Websites. Second, Wang et al. (2013), Vernuccio et al. (2012), Jiang et al. (2010), Lowry et al. (2006), Liu and Shrum (2002), and McMillan and Hwang (2002) not only they postulate a conceptualization for Website interactivity, but also the authors agree with two facets of Website interactivity. These two facets dominate several facets of Website interactivity that are covered in the current body of knowledge. Lastly, a scale is accessible to quantify how Web users identify Website interactivity. Consequently, in the present dissertation Website interactivity is defined as a communication process that presents Web user control and permits them to communicate reciprocally (Vernuccio et al., 2012).

For a more specific illustration of the two dimensions of Website interactivity, the present dissertation uses user control as an indication of system interactivity and two-way communication as an indication of social interactivity. Table 2 portrays some of the most cited dimensions of Website interactivity proposed by numerous investigators. Definitely, two-way communication and user control are consistently distinguished as dimensions of Website interactivity (Wang et al. 2013, Vernuccio et al., 2012; Jiang et al., 2010; Lin, 2010; Sun, 2010; Aryanto, 2008; Jiang & Benbasat, 2007; Lee, 2005).

#### **2.3.5.1.** First Dimension: Social Interactivity (two-way communication)

"Two-way communication refers to bi-directional flow of communication between communicators" (Lowry et al., 2006). Researchers who investigate manners that a computer enables Website interactivity frequently mention the fundamental role of facilitating two-way communication (McMillan & Hwang, 2002). This facet of interactivity focuses on the interpersonal communication stand point (Wang et al., 2013). Different studies validate that intensifying the degree to which two-way communication may influence consumers to be more knowledgeable about the business which could potentially enhance the awareness of the brand and lead to positive perceptions. These positive perceptions and enhance recognition might, in turn, influence to enhancing the perception of the brand as valuable.

Gao et al. (2010) note that "An interactive communication should allow reciprocal communication and the messages in a sequence should relate to each other". Putting differently, the Website must have the capacity of enabling the Web user to respond to the messages received. Both parties in the interactive communication become fully involved and engaged (Yoo et al., 2008). Each party acts as a transmitter and recipient, and has the competence to be involved in a reciprocal communication (Wang et al., 2013). Internet communication, particularly on commercial Websites, is anticipated to offer more opportunities for two-way communication than other Internet technology (Alshahrani et al., 2013). This is because individuals are more comfortable and use to provide feedback with their PCs or laptops than in a face to face interaction (Nettelhorst et al., 2013). Permitting Web users to communicate bidirectionally might influence users to perceive the branded Website as more reachable, which according to Voorveld et al. (2013) might also be valuable for creating brand awareness and for building positive perceptions in consumers' mind. The Website features that facilitate the two-

way communication dimension are chat rooms, bulletin boards, online shopping and possibilities and real-time feedback mechanisms (Voorveld et al., 2013; Kasavana et al., 2010; Song & Zinkhan, 2008).

When examined in the context of hotel Websites, Ho and Lee (2007) indicate that two way communication provides Web users and consumers with the opportunities to reveal attitudes and create and share information among them. The authors also suggest that such reciprocalcommunication dimension that sometimes involves both chat rooms and a Bulletin Board System (BBS) is useful to influence perceptions and knowledge about service providers. These characteristics offered by hotel Websites offers an adequate scenario for travelers to interact with hotel personnel and other travelers (Ye et al., 2011). Close relationships built during the interaction process stimulate travelers to contribute and know more about their hotel of preference (Escobar-Rodríguez & Carvajal-Trujillo, 2013). Similarly, in an online social network (OSN) travel context, Nusair et al. (2013) state that Gen Y users interact with OSN when they perceive OSN Websites as enjoyable, customizable, and stimulating.

Other studies have also contributed to understand the significance of two-way communication as a determinant of Website interactivity. For instance, Kim et al. (2004) suggested that bidirectional communication may influence consumer e-loyalty. Bai et al. (2007) indicate that even when hotel branded Websites do present the basic information of their services, it is recommended that these Websites display up-to-date information on their financial statements as well as integrating more interactive characteristics for two-way communication with their Web users. Chan and Guillet (2011) state that reciprocal communication allows hotel branded Websites to reduce the imbalanced obstacles between travelers and hotel firms. As a result, hotel firms with distinct conditions are able to participate in the market equally because hotel firms will not be able to easily apply price discrimination on distinct sets of consumers.

To distinguish the strategies practiced by Spanish hotel Websites and to assess the association between the hotel's size and Website approach. Escobar-Rodríguez and & Carvajal-Trujillo (2013) suggest that a large number of hotel chains incorporate all the available social media platforms on their branded Websites. This indicates that many of them have decided firmly to interact with travelers and to sustain a genuine two-way communication with them. Two-way communication tools are useful and low-cost and assist all hotel brands, large and small, to interact more fluidly with their travelers (Bonsón & Flores, 2011). Specifically, hotel managers must make gradually utilization on their Websites of those platforms that enable real two-way communication (Facebook, Twitter, YouTube, Instagram, and Flickr).

## **2.3.5.2.** Second Dimension: System Interactivity (user control)

User control is extensively cited as an interactivity dimension in several information technology context including on e-commerce (Sun, 2010) and on human-computer interaction (Preece, 2001), just to name a few. User control exists when an individual is granted the competence to select content, obtain information and direct the interaction (Aryanto, 2008; Lowry et al., 2006). Specifically, this dimension of Website interactivity refers to the competence of Web users to select the information, timing and order of a communication to modify their observing encounter (Gao et al., 2010). Web users during an interactive communication must have the freedom to apply control over the information process (Jiang et al., 2010). User control is similarly related with diminishing energy in the attainment of a task and alleviates users to modify the content (Yoon et al., 2008). For Internet communication, users' observation of complete management over the site is essential. This is because Web users have shown to dislike when they have no control over the information, content, and messages display in the branded sites they just browse or visit frequently (Stark, 2013).

User control is enabled by the existence of navigational tools, search opportunities, and sitemaps (Song & Zinkhan, 2008). Essentially, the Web provides users with more information, content and navigational tools through the interaction (McMillan & Hwang, 2002). The users perceive a sense of control in occasions when they are able to control between "text only" and "text plus graphics", choose the language, or utilize a search engine to locate their desired information. User control has been also related to reducing energy in the realization of an objective. Jiang et al. (2010) indicate the vital effects of user control on the role played during the interactive communication. The role played is shown as a transmitter as well as a recipient. Ariely (2000) states that user control is also connected with recall and knowledge, when Web users perceive they regularly control their interactive communication and encounters; they realize the need to be attentive and cognitively involved. An explicit outcome of this attentive involvement encounter stimulated by features of Website interactivity is stronger brand knowledge. Additionally, user control causes information achievement to be more efficient, because it allows Web users to acquire information in a most appropriate manner to users (Wang et al., 2013; Cyr et al., 2000; Kiss et al., 2006).

When explored in the context of hotel Websites, Gan et al. (2007) suggest that the Internet's universal and multi-faceted connectivity increases interactivity among participants and individualization of consumers' preferences. The Internet as a platform for e-commerce uses the consumer-controlled "pull" method, distinct to many conventional media that will invasively "push" messages at inactive listeners (Sharma, 2011). This suggests that Web users in the hotel sector have the opportunity to control in screening information and the desired activities in which

they want to be involved. The hotel sector is consequently a perfect sector to build solid relationships with travelers by incorporating user control features on their Websites (Gan et al., 2007).

To present opportunities to both travelers and hotel brands to interact and share information without the limitations of geography and time. Williams et al. (2006) indicate that there is no reason for information capabilities being available to disabled travelers, if they cannot control the information required by them. Rachjaibun (2007) states that the travel branded Websites are adequate platforms for the travel industry, as travel Websites may offer travelers control over their travel scheduling and offer a rapid and simple method to select their travel arrangements based on their preferences. Additionally, user control in self-service contexts has been conceptualized as the capacity to direct the flow of the transaction and the degree of interactivity underwent (Collier & Sherrell, 2010). In the setting of the virtual store atmosphere, user control is perceived as the amount of control that a Web user considers she/he possesses when visiting the Website (Vrechopoulos, 2010).

To present a better comprehension of the perceived user control as a precursor of traveler perceptions toward travel branded Websites. Manganari et al. (2014) define user control as the degree at which travelers perceive that the travel Website layout, (i.e. online design, Web atmospherics, the organization and flow of the transaction, the Website interactivity, and layouts characteristics) accelerates the communication, navigation and the buying ambition realization. The delivery of user control to travelers is exceptionally critical in the interactive process of virtual environments, as the quality of the platform allows the anticipation of one-to-one control, with no required human interaction (Kim et al., 2011).

Travelers' perceptions about the control they possess when visiting a branded Website are antecedents of online traveler perceptions and consequently travel behavior (Manganari et al., 2014). Not only does user control impact positively on travelers' perceptions and behaviors but the absence of user control, across limiting navigational signals, may end in unwanted perceptions and absence of brand knowledge, lower brand evaluations, and intentions to stay away from the travel branded Website (Dabholkar & Sheng, 2009).

In spite of the significance of the dimensions of Website interactivity, to date only a few investigations have offered results that can guide hoteliers in the design of effective hotel branded Websites. The following section presents an in-depth discussion of the potential power of Website interactivity as a branding tool for hotel branded Websites.

# 2.3.6. Website Interactivity and Online Branding

Over the Internet consumers interact in a mechanize setting contrary to a human mediated traditional face to face setting (Gallos et al., 2012). An effective branded Website is interactive (Salciuviene et al., 2013). It provides answers and recommendations. Numerous researchers ask themselves how a firm could transmit its desired brand messages in a computerized environment in the same manner as firms frequently do in a traditional setting? (Yu et al., 2013; McWilliam, 2012; Michaelidou et al., 2012; Siamagka & Christodoulides, 2011). The response is Website Interactivity aspects of the Internet (Voorveld et al., 2013; Altarteer et al., 2013; Gensler et al., Wiertz, 2013).

Brand managers continuously propose strategies expecting and controlling unexpected outcomes, and technology is a great tool for controlling these unexpected outcomes (Rubera & Droge, 2013). Website interactivity has become an important instrument on the Web that has transformed this medium into a dynamic medium that offers the opportunity to have a dual

communication with messages (Hart et al., 2013). Website interactivity implicates involving consumers openly, generating an exclusive and individualized relationship with them (Guillory & Sundar, 2013).

# Table 2- Dimensions of Website Interactivity

Author (s)	Year	Dimensions
Barreda	2014	Traveler control and two-way communication
Wang et al.	2013	Social interactivity (user-to-user) and system interactivity (user-to-computer)
Vernuccio et al.	2012	Active control and reciprocal communication
Jiang et al.	2010	Reciprocal communication (human interactivity) and active control (mechanical interactivity)
Auger	2005	Amount and quality of two-way communication
Liu and Shrum	2002	Synchronicity, two-way communication (social interactivity) and user control (system interactivity)
McMillan and Hwang	2002	Direction of communication, user control, and time
Coyle and Thorson	2001	Range, mapping, and speed
Burgoon et al.	2000	Interaction involvement, mutuality, and individuation
Ha and James	1998	Playfulness, choice, connectedness, information collection, and reciprocal communication
Alba et al.	1997	Response time and contingency
Novak	1996	Machine interactivity and person interactivity
Deighton	1996	Individual-level communication and degree of responsiveness
Zack	1993	Degree of social presence, and continuous feedback
Steuer	1992	Speed of response, range, and mapping
Rafaeli	1988	Bi-directionality and responsiveness
Williams, Rice, and Rogers	1988	Control, exchange of roles, and mutual discourse

Source: Table developed for this dissertation

Based on de Chernatony (2012), the supreme component of branding on the Internet is the Internet's changing model from conventional one-way media mode that brand managers should comprehend. The traditional media has demonstrated to have numerous limitations in relation to the interactive ability of the Internet (Green, 2012). The Internet presents the opportunity to provide marketers with a remarkable opportunity to augment touch points with consumers and eventually increase pleasant perceptions and loyal behaviors (Rafiq et al., 2012). Even though interactivity is perhaps present with current communication methods such as face to face selling approaches, the Internet permits high-level of Website interactivity that concentrates on the consumer in a manner that considers his/her individual needs, expectations, and style (Jih et al., 2011). Traditional media such as TV, radio, and newspaper do not present the capacity to involve into a dialogue with consumers (Kitamura, 2013).

Current research clearly recognizes the Internet as a global and dynamic system where surfers do not just observe businesses but present their messages (Dewan & Ramaprasad, 2014). Website interactivity refers to the capacity of Web users and brands to exchange messages and establish a dual relationship without the limitation of geography and time (Palla & Zotos, 2013). Website interactivity develops a conversation between branded Websites and Web users across the world and after a while establish and enhance a durable connection and an enjoyable branding experience (Yang et al., 2013). Also, interactive Websites empower brand managers to economically appeal individuals into person-to-person relationships stimulated by reciprocal dialogues (Guillory & Sundar, 2013). Website interactivity not only permits a reciprocal dialogue but also eventually expedites the advance and conservation of business-consumer relationships (Lascu & Clow, 2013).

The Internet is not just an automated brochure where consumers search for products and pay for them. Internet is a collaborative system (Wong, 2010). On the Internet individuals seek to locate information and generate content by themselves. This dynamic participation generates a significant attaching experience (Loureiro, 2013). The power of this virtual worldwide platform intimacy comes from Website interactivity (Lascu & Clow, 2013). Website interactivity let consumers to find information during dynamic searching that frequently involves, positing their questions, purchase status tracking, comments, advices, experiences, and virtual games, etc. (Salciuviene et al., 2013) For brand managers Website interactivity impacts the perceptions of Website's excellence in consumers' mind. This perception accelerates the process to build brands online (Hart et al, 2013).

In an online environment the necessity of brand development has augmented with the increased of competitors across different industries, specially the hotel industry (Xiang & Law, 2013). Website interactivity presents simplified communications, personalization of displayed content and information, and also enjoyment for Web users (Yang et al., 2013). According to de de Chernatony (2012), the brand building process has shifted essentially because Website interactivity offers the opportunity for businesses to formulate and execute branding strategies that permit consumers to participate in a conversation with the business behind the brand. Website interactivity allows businesses to participate in instantaneous and real conversations with current and prospective consumers, in that way refining significantly the superiority of communication between the brand and its consumers (Rafiq et al., 2012). This guarantees a deeper and long-term relationship between the brand and consumers (Jih et al, 2011). The Internet clearly presents this distinctive tool of Website interactivity for brand development that has not existed within the conventional media (Palla et al., 2014; Voorveld et al., 2013;

Neelotpaul, 2010). In the virtual environment, where there are numerous alternatives and opportunities, travelers quick develop a feeling of the hotel company. Hoteliers who associate hotel services (e.g. rooms, bar & restaurant, spa, clubs) with an experience (e.g. interaction, judgments, and perceptions) may potentially be more successful than hotel brands that center their efforts to present just the facts of their hotel products.

One of the first, essential components toward attaining a superior comprehension of how to build strong brands is to comprehensively explore the definitions and theories used in order to establish whether the dimensions of Website interactivity may have the enormous capacity to the development of a more holistic and context-specific brand online. The following section presents a comprehensive overview of brands, branding theory, and online branding.

## **2.4. Brands and Branding Theory**

We live in an era of branding (Roper & Parker, 2006). Branding theory has advanced from the marketing literature to embrace the retail sector, the services sector, non-for-profit institutions, and even destinations and countries (Chabowski et al., 2012). This accomplishment has frequently received positive acceptance. For instance, the marketing literature has greatly advanced their comprehension in terms of their relationships with consumers (Kavaratzis & Hatch, 2013). Branding has been explored in detailed in terms of the progress of the theory and principles that have been established to sustain each of the four branding stages (e.g. branding as identification, as a differentiation, as a personification, and as an asset) (Roper & Parker, 2006).

The understanding of current branding theory and the advancement of the topic within the retail sector are well-documented (Chabowski et al., 2012; Roper & Parker, 2006). In the lodging sector, there is a lack of branding research in the academic literature, with which to lead hotel brands organizations (Baltescu, 2009; Pike, 2005). The study of branding first started in the

marketing literature five decades ago, and most of the available research since that time seems to provide an important resource for buyer goods marketers (Hirschman, 2010). In this respect lodging branding research has only emerged moderately lately. This dearth of research appears to contrasting with research implications that the prospect of branding and marketing will be a combat of brands, and that hotels are one of the lodging sector's biggest brands (Wilson, 2011). Nodaway's consumers are accurately spoilt for selection of accessible hotel businesses, and within an intense competition and numerous alternatives, hotel firms have become gradually replaceable and challenged to differentiate (Vila et al., 2012).

Branding theory involves much more than just the branding of products or services (Omar & Heywood, 2010). Branding theory proposes that branding is effective, profitable, and victorious in communicating an absolute comprehension of products and services to a targeted market (Aaker, 2007). According to the American and Marketing Association (AMA) (2013), "A brand is a costumer experience represented by a collection of images; often, it refers to a symbol such as a name, logo, slogan, and design scheme." In consumer marketing, a brand represents more than a symbol or logo. Brands frequently postulate the major elements of differentiation among competitors, and as such strong brands are essential to the triumph of organizations (Wood, 2000). Brand is the sum of all the mental connections consumers have around it (Brown, 1992). Brand is the plus of a product and service (Styles & Ambler, 1995). Brand is an added value (De Chernatony & McDonald, 1992) that is translated as a consumer benefit (Wood, 2000).

According to Alt & Griggs (1988) a brand is a collection of customer's perceptions that are crucial for different selection and buying decision making. It might also refer to the perceived anticipations that consumers connect to a product (Balmer, 1995). Payne et al. (2009) state that a

brand can also be understood as the overall experience those consumers perceive with products and/or services. When these consumers' anticipations are satisfied, then only a brand name is perceived as successful (De Chernatony, 1999). Brand functions as markers for the offerings of the company (Madden et al., 2006). For consumers, branding condenses choices, influence behaviors, guarantee a specific degree of excellence, decrease risk, and/or propagate trust (Keller & Lehmann, 2006). For marketers, branding plays a critical function in establishing the efficacy of marketing strategies (Cliffe & Motion, 2005).

Branding theory is understood as the process that companies utilize to communicate, represent, and to distinguish from their competitors (Fournier, 1998). Additionally to these three dynamics, branding is also understood as the process to influence emotional reactions (Veloutsou, 2009) (Hilton with a sense of social responsibility and Ritz Carlton with a sense of pleasure). The supreme goal of branding is to generate a different perception among consumers that develops greater demand and guarantee a strong financial performance (Madden et al., 2006).

With the advent of the Internet, this supreme goal of building branding theory becomes even more vital for organizations. The Internet and its associated e-technologies have at some degree made the branding process more complex for brand managers. Now, buyers are not only allowed to interact with brands and other buyers but also to generate their own content on user generated content Websites directing to a more collaborative method to branding (Christodoulides, 2009).

Indeed, effective branding strategies in a technology-mediated setting include establishing long-term relationships, permitting interactivity, and improving personalized products and services (Yadav & Pavlou, 2014). One particular strategy that is mentioned in the

literature repeatedly is to enable the incorporation of interactivity features in the design of a commercial Website (Voorveld et al., 2013). This strategy is projected to guide to profounder and greater relationships between brands and customers and more successful brand-consumer communication (Neelotpaul, 2010). Park et al. (2013) indicate that a brand is a brand irrespective of the environment. What varies is the presentation of the brand (King, 2013). The notion of brand in a virtual setting, research indicates, is represented by features such as physical delivery, finding the brand, time to download, Web design, navigational tools (Stevens, 2012; de Chernatony & Christodoulides, 2004), and most importantly Website interactivity aspects such as reciprocal communication and control of the retrieved information (Jain et al. 2013; Voorveld et al., 2013).

The notion of building and managing strong brands has been observed as a fundamental driver of sustainable competitive advantage in the hospitality industry (Kwun, 2012). The reason for this is because multiple new lodging properties including hotels, motels, resorts, timeshares, etc., have been developed. Hotels have multiple competitors that frequently compete just based on price (Guo et al., 2013). Strategic brand management in the lodging sector is critical in order for hotel brands to create a strong identity for products and services, build and maintain long-term relationships and to differentiate their brands from competition (Nam et al., 2011).

This competition is intense among hospitality businesses, especially hotels. Current research indicates that in the lodging market, there is an over-inventory of hotel rooms (O'Neill & Mattila, 2010). This make difficult for hotel guests to understand and assess the current number of hotels, their products and services. Lodging firms have to incessantly position (reposition) their brands and differentiate their services for continuous development. In view of that, the extraordinary development of hotel branding rests on the definition that brands offer

added value (equity) to both travelers and lodging firms (O'Neill & Xiao 2006). From a corporate perspective, well-established hotel companies achieve expanding market share (O'Neill & Mattila, 2010). A well-established hotel company builds a distinguished association and identity in hotels where functional attributes of the offerings cannot be noticeably discriminated. Thus, brand knowledge (brand awareness and brand image) and brand equity (value-added) may be a significant motive for brand choice, for the motivation to pay a price premium and for the intention to buy from that specific hotel brand.

A brand certainly encompasses perceptions and emotions held in travelers' mind (Tsai, 2013). The brand's main importance is to determine in consumers' mind an emotional connection that is view as added-value (Maxian et al., 2013). This perception of value of a brand arises from the amount of knowledge and the positive perceptions that consumers have (Shen et al., 2013). Travelers count on hotel brand names to diminish the uncertainty connected with lodging at an otherwise unknown hotel (Shen et al., 2013). Beyond this, brands are known to influence behavior in consumers (King & So, 2013). Brands are also expected to be interactive and dynamic, to associate on emotions, and to be a reminder of a satisfying experience (O'Neill & Mattila, 2010).

## 2.4.1. Online Branding

The extant of literature reveals that the Internet is essentially modifying the way marketing experts direct their brands (Christodoulides, 2009). Gommans et al. (2001) indicate that the advancement of popular brands through the Internet suggests that a brand has the ability to develop and ensure consumer loyal behaviors. The Internet has the capacity to complete longterm marketing activities by presenting several customized products (Gommans et al., 2001) and by strengthening the bond with consumers (Chiagouris & Wansley, 2000). The Internet embraces

a more relaxed perspective on brand management, which entails the consumer in vital phases of the brand building process (Christodoulides, 2009). Through the Internet the focus changes from just a brand to a branded encounter (Rubinstein & Griffiths, 2001). Numerous online brands are out of business due to mediocre branding strategies (Meyers & Gerstman, 2001) a due to increase of competing brands (McWilliam, 2012). With this scenario, branding has become an exceedingly fundamental topic for business in general (Geerts & Veg-Sala, 2011), including hotels (Xiang & Law, 2013).

"A brand is a synthesis of physical, aesthetic, rational and emotional elements (Hart & Murphy, 1998)." In other words a brand is mostly viewed as a name or symbol which is distinctly recognized by consumers with a distinctive competitive advantage (Doyle, 1990). On the Internet, this recognition is developed through consumers' experience (Van Noort et al., 2012). Online branding is formed from the experience of a consumer with the brand Website (Gabisch & GWebu, 2011). In the online world where there is a high degree of competitors that are just one click away (Reichheld & Schefter, 2000); consumers are rapid to develop a feeling and perception of the company. Companies that connect their offerings with these feelings and perceptions have more chances to be more valuable than companies that focus just on the details of their offerings (Liao & Cheng, 2012). In the online setting, the concept of brand as experience is endorsed (Rose et al. 2011).

In the online setting, the importance of brand building has growth with the increasing number of competing companies that emerge in short periods of time (Wirtz et al., 2013). Branding theories that are appropriate in the traditional setting are appropriate in the online setting (Chiagouris & Wansley, 2000). "There is no difference between building an Internet brand and a traditional brand (Zyman, 2000)." These theories just must be adapted to the online

setting. To build strong brands, there are certain Internet aspects (e.g. easiness to find and compare products, variety of choices, and the detailed of product information) that must be taken into account (Delgado-Ballester & Hernández-Espallardo, 2008). These aspects that represent an opportunity for the company to build its brand online are not available in an offline setting. Brand managers must have the competence to take advantage of these aspects as leverage for the firm (Allen & Fjermestad, 2001). They should understand the function of Internet with respect to a conventional setting. De Chernatony (2001) noted that numerous marketers believe that Internet is an unconnected unit with its distinctive applications that could not supplement conventional branding. Other marketers consider that despite the fact that Internet has its own distinctive applications; it might be seen as an extension of traditional branding strategies (Tarkiainen et al., 2009).

A branded Website represents the most important marketing tool that a business uses to communicate their brand promise online (Miller, 2005). For Website users and surfers, a Website is a retailer, a catalog, a sales representative and is anticipated to deliver an outstanding assistance (Morosan & Jeong, 2008). Websites have unlocked a surplus of opportunities for hotel market managers (Baloglu & Pekcan, 2006). The method for building brands online has embraced a more relaxed posture on brand management (Hoffman, 2000). Now under this new approach, the brand manager is no longer a "custodian" of the brand but becomes a brand "host" (Christodoulides, 2009). Individuals are now encouraged to interact with brands and other individuals and to form their own content heading to a more collaborative approach to branding (Stock, 2003). The complete process is visible from the time the user visits the Website to collect information and order a product/service, to the time the user pays for a product. Moreover, the process communicates the message of the brand promise (Borenstein & Saloner, 2001).

Website interactivity empowers consumers to be dynamically engaged in every phase of online encounters and transactions (Neelotpaul, 2010). To sustain the consumer experience Websites must make consumers aware of the brand and communicate an image (Müller & Chandon, 2003). Websites also must create value through the persuasive offer and consumer experience consistent with brand promise (Ibeh et al., 2005). Ha and Perks (2005) define Web experience as "a consumer's positive navigations (i.e. using Web-based communities and participating in events) and perceptions (i.e. the attractiveness of cookies, variety and uniqueness of visual displays and value for money) with a specific Website." These perceptions of brand experience are established in consumers' mind as a consequence of the Website interactivity between consumers and branded Websites (Voorveld et al., 2013; Coyle et al., 2012; Müller & Chandon, 2004; Campbell & Wright, 2008).

## 2.5. Consequences of Website Interactivity: Branding Structure

In the following sections, the consequences of Website interactivity are presented. A number of relevant investigations support this dissertation's overall position that the formation of branding online is critically and fundamentally influenced by Website interactivity. These investigations, which are based on the information system, advertising and marketing, branding, hospitality, lodging, and consumer behavior literature, have constantly implied the necessity to investigate the noteworthy effect of Website interactivity in the formation of different brand elements in general businesses and in the hospitality industry. The later having the most attention in this dissertation.

#### 2.5.1. Brand Knowledge

The principal objective is this section is to present the author' current comprehension of how brand knowledge influence individuals' value perception of brands. Substantial stream of research has recently stated the significance of studying the components of brand knowledge as the foundation of a branding building process in the online environment (McWilliam, 2012). Useful arguments for studying brand knowledge as the pivotal element in a pyramid model are presented by Keller (2012), Delgado-Ballester (2012), and Wirtz et al. (2013). Other studies have explored such brand elements as critical aspects of brand management in traditional settings (Zenker & Beckmann, 2013). Many of these studies indicate that the components of brand knowledge are the most critical elements for building brands (von Wallpach & Kreuzer, 2013; Sirianni, 2013).

Consequently, in the following paragraphs, a concise summary is offered of the two main dimensions of brand knowledge. The author also reviews the particular details of brand knowledge dimensions, and their definition in current marketing literature and in this study. In relation to brand knowledge, researchers have extensively embraced one conceptualization of brand knowledge that includes the associative network memory framework. "The associative network memory framework views semantic memory or knowledge as consisting of a set of nodes and links (Keller, 1993).

Based on this framework, a brand has a node in consumer's mind that is related to a range of other nodes. Every class of brand node is connected to the brand to form its brand associations in consumers' mind. Additionally, there are different components by which these distinct classes of brand association are distinguished. For instance, the brand associations may differ in how

intensely they are associated to the brand, how distinctive or ordinary they are, and how positively individuals perceive them (Hoeffler & Keller, 2003).

To understand brand knowledge in its truly essence, it is necessary to state that brand knowledge refers to the perceptive illustration of the brand (Esch et al., 2006). Brand knowledge is understood regarding the individual meaning about a brand stored in the minds of consumers (Peter & Olson 2001). These individual meanings are known as "brand identities" and their sum "the brand" (Keller, 1993). Understanding brand knowledge is critical to consumer decision making. Brand knowledge influences what comes to mind when individuals think about a brand in specific (Keller, 2003). Specifically, brand knowledge is defined as a consistent of brand node in consumers' mind to which a diverse set of associations are connected (Keller, 1993). In general terms a brand is defined as "a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors" (Kotler 1991; p. 442). These individual brand elements have been named in the marketing literature as "brand identities" and their sum "the brand." These essential memory determinants might be utilized to comprehend brand knowledge and how this multidimensional brand construct affects consumer-based brand equity.

The most broadly established definitions of memory structure include part of the views of the associative framework formulation (Wyer & Srull, 1989; Keller, 1993). For instance, the associative network memory framework contemplates knowledge as containing a group of associations. Associations are accumulated information linked by associations that differ in intensity. Ratcliff and McKoon (1988) indicate that a "spreading activation" progression from associations to associations governs the degree of retrieval in memory. An association becomes a possible cause of activation for other associations either when information from outside is being

prearranged or when information from inside is being recovered from lasting memory. Keller (1993) describes that activation can spread from this association to other related associations in memory. He also describes that when the initiation of another association surpasses an established limit, the information comprehended in that association is recognized and remembered. Therefore, the intensity of relation between the stimulated association and all connected associations establishes the information that is being recovered from memory. For instance, in contemplating a luxury room booking, a traveler may consider JW Marriott because of its intense and robust association with the hotel category. Traveler knowledge most intensely associated to JW Marriott may also come to his/her mind, such as perceptions of its elegance, its personalized service, its distinctive rooms and amenities, or even remembered images from a new advertising campaign or from a previous visit.

In line with the associative network memory framework, the present dissertation defines brand knowledge as consisting of brand associations in travelers' memory to which a diversity of connections is related. The significance of knowledge in traveler' mind for the decision making process is widely accepted. Comprehending the formation and composition of brand knowledge is critical because the components of brand knowledge impact what appears in the mind of customers when they intentionally think about a specific brand. For instance, when what comes to consumers' mind when they see an advertisement for JW Marriot as presented in our previous example. Establishing the adopted brand knowledge definition in the present dissertation, it is critical to examine what dimensions does brand knowledge have?

Investigators have examined these dimensions for years, with distinctive areas obtaining more importance (Alba & Hutchinson, 1987). The most accepted dimensions of brand knowledge are brand awareness and brand image (Esch et al., 2006; Mackay, 2001; Agarwal &

Rao, 1996). These two dimensions of consumer brand knowledge have been frequently suggested in the marketing literature (Esch et al., 2006; Pappu et al., 2005). As developed in this dissertation, the appropriate components that discriminate brand knowledge and influence consumer perception of value are the elements of brand awareness in terms of brand recall and brand recognition and brand image in terms of the positive, strong, and distinctive brand perceptions hold in consumers' memory. These two dimensions are discussed in the following section.

# 2.5.1.1. Brand Awareness

Brand awareness is a critical consideration as a first dimension of brand knowledge. "Brand awareness refers to the strength of the brand node in memory, i.e. how easy it is for the consumer to remember the brand" (Keller, 1993). It is understood as the ability of the individual to identify a brand within a category and within specific conditions (Huang & Sarigöllü, 2012). In essence, brand awareness associates to the probability that a brand name might arise to consumers' mind and the simplicity with which this happens (Aaker, 1991).

Brands that consumers identify have better chances to be considered in the consumers' consideration set (Huang & Sarigöllü, 2012; MacDonald & Sharp, 2000). Brand awareness involves recognition and recall of the brand (Lerman & Garbarino, 2002). Brands recognition refers to the ability of an individual to verify previous experience with the brand when this brand is presented as a signal (Holden, 1993). "Brand recognition requires that consumers correctly discriminate the brand as having been seen or heard previously (Keller, 1993)." Brand recall refers to ability of an individual to retrieve the brand when offered the category of the product, the necessities satisfied by the category, and/or similar forms of probe as a signal (Davis et al.,

2008). In other words, brand recall requires individuals to accurately form the brand from memory (Janiszewski & Van Osselaer, 2000).

The notion of building brand awareness in the hospitality industry has also been studied. For instance, to investigate how travelers assess lodging brand portfolios and how brand portfolio influence brand evaluations toward extended hotel brands. Kwun and Oh (2007) suggest that there are two main approaches to evaluating brand awareness. (1) Brand recall that refers to travelers' ability to remember the hotel brand when offered the hotel service/product category. (2) Brand recognition that refers to travelers' competence to approve previous experience with the hotel brand. The authors also suggest that the function of hotel brand awareness is essential in comprehending travelers' behavioral intentions and decision-making process.

Some studies have investigated the possible relationship between a Web page configuration and brand awareness, particularly the association between Website interactive features and brand awareness. At a summit convention that involved both Internet and consumer goods, many of the topics rotated around how Website interactive features may be exploited to create strong brands (Hansell, 1998). For instance, Keng and Lin (2006) report that individuals can recall and recognize brand elements such as logo, slogan and other symbols through interactivity and vividness. When individuals perceive interactivity with Websites and a capacity to process communication, these individuals recall and recognize the brand easily under various situations or circumstances (Keng & Lin, 2006). Ghose and Dou (1998) suggest that the greater the interactivity, the more likely is for a consumer to be aware of the quality of the branded Website.

Macias (2003) suggests that interactivity has a positive influence on the recognition of the advertising itself and the advertised brand. Consumers need first to have interactive efforts in the Web before a strong awareness of the advertisement is generated (Hoffman & Novak, 1996). Neelotpaul (2011), in his study to determine if Website interactivity can be used as branding tool in the Internet, suggests that in contrast to any other marketing tool in the offline environment, the interactivity of a Website provides a very substantial opportunity to form brand awareness. This is because interactivity involves involving consumers directly, generating an exclusive individual relationship with them (Klopper, 2002; Neelotpaul, 2011).

Based on the review of the literature, none research has investigated comparable relationships in the context of hotel Websites. Empirical research is required to better comprehend the relationship between hotel brand awareness and hotel Website interactivity.

#### 2.5.1.2. Brand Image

Brand image is the second consideration of brand knowledge suggested in the literature. Consistent with the associative network memory model of brand knowledge, brand image is conceptualized as perceptions about a brand as revealed by the brand associations retained in the mind of consumers (Keller, 1993). Brand image refers to strong, favorable, and unique brand associations (Esch et al., 2006). These associations are created from different sources including branded experiences, product details, product benefits, price details, and packaging, just to name a few (Gwinner & Eaton, 1999). According to Keller (1993), these associations can be influenced when individuals interact with the brand.

In the lodging industry, brand image has been referred as the robust, favorable, and different hotel brand associations held in travelers' memory (Wu et al., 2012). Hotel brand image has been also observed as synonymous to status that relates to the general status and perception

of a hotel brand (Kwun & Oh, 2007). The current literature shows that few studies have explored the prospective relationship between a Web page configuration and brand image, specifically the correlation between Website interactivity features and brand image. This statement has been supported by several authors that state that little research has been devoted to explore the effects of Website interactivity on brand image (Chang et al., 2003; Chen, 2001; Chang et al., 2002). For example, Keller noted that:

"The challenge for marketers in building a strong brand is ensuring that customers have the right type of experiences with products and services and their accompanying marketing programs so that the desired thoughts, feelings, images, beliefs, perceptions, opinions, and so on, become linked to the brand (Keller, 2001)."

To the author of this dissertation's knowledge, there have been just three attempts to understand the relationship between interactivity and brand image. The first two attempts were made by the same authors. The first attempt was an exploratory study that recognized the interactive Website features influencing a good perception of the site (Chang et al., 2002). In this attempt the authors provide suggestions of how to form brand image on Internet sites. The second attempt indicate that a Website that users perceive as possessing and interactive personality is a critical factor to influence the strength and direction of brand (Chang et al., 2003). The third attempt has been an empirical study that describes the influence of a visit to an interactive site on brand image in the motor vehicle and mobile telephone industries (Müller & Chandon, 2004). They add that brand image is influenced by the experience perceived whilst surfing the brand's interactive Website. They also suggest the importance of examining the impact of interactivity on brand image in other settings.

## **2.5.2.** Consumer-Base Brand Equity

The goal of building brands that provide value for stakeholders is considered a leading trend in the hotel sector globally. For instance the ratio of brand diffusion in the Americas lodging sector between branded and non-branded is higher than 70 percent (Kayaman & Arasli, 2007; Forgacs, 2006). With this equivalent the desire to understand how to build hotel brand equity has received significant devotion from hoteliers, scholars and brand managers (Hsu et al., 2012). Different arguments have been mentioned in the literature of the importance of hotel brand equity in the online (Simmons et al. 2010) and offline environment (So & King, 2010). Building brand equity is perceived as a critical aspect of brand building (Keller, 1998). Brand equity is assumed to create numerous advantages for consumers and for a business.

For consumers, brand equity means added value, diminution of risks and search expenses, and a positive influence of their responses such as intentions to pay price premiums (Aaker, 1992), to choose the same brand (Valette-Florence et al., 2011), and to repurchase the brand (Nah et al., 2011). For brand managers, brand equity means an ability to charge price premiums, to increase market share, and to maintain increase customer-base (Kim et al., 2003). Despite the desire to understand how to build hotel brand equity, the empirical and theoretical research is still scarce (Kayaman & Arasli, 2007); particularly lacking is research on building hotel brand equity in an online environment.

While brand equity connected with hotel services shows some degree of attention in the current literature, most of what is understood about how to create brand equity is based on two different perspectives, the consumer-based perspective and the financial-base perspective. Customer-based brand equity is created when consumers are aware of the brand attributes and associate positive, solid and different benefits with the image of the brand (Davis et al., 2008).

Keller (1993) note that "customer-based brand equity is defined as the differential effect of brand knowledge on consumer response to the marketing brand." Through the use of a Website, consumers are encouraged not only to interact with other customers and with the brand but also to form their own content that leads to a more collaborative approach to branding (Christodoulides, 2009). The financial-based perspective is created through the use of valuebased techniques of the financial market to approximate a business's brand equity (Kim et al., 2003). These techniques obtain the brand equity's value from the value of the business's other assets (Simon & Sulivan, 1993). It is the consumer-based perspective that is the specific concern of this dissertation.

The customer-based brand equity is also a means of establishing the presence of marketing benefits for valuable brands. Under this view, Hoeffler and Keller (2003) state that "brand equity is defined in terms of the differential response to marketing activity that results from the existence of strong, favorable and unique brand associations." In the lodging industry, brand equity refers to the value that travelers and hoteliers relate to the hotel brand, and the effects of this association on travelers' behaviors and consequent financial performance of the hotel brand (Tsang et al., 2011). In the present dissertation consumer-based brand equity refers to the added (incremental) value that a brand provides to a product (Yoo et al., 2001).

Among the numerous works about hotel brand equity, Bailey and Ball (2006) indicate that lodging is a brand equity business. By developing equity in its brand, a hotel firm has the capacity to sell its brand name to investors and developers, and also has the capacity to reach customers, thus creating demand to sustain growth. Bailey and Ball (2006) define hotel brand equity as "the value that consumers and hotel property owners associate with a hotel brand, and the impact of these associations on their behavior and the subsequent financial performance of

the brand (p. 34)." Hsu et al. (2012), however, identify the value of a hotel brand built in the minds of travelers, affected by its essential assets, namely, brand image, brand awareness, management trust, brand reliability, perceived quality, and brand loyalty of travelers. Scholars exploring the antecedents of brand equity suggest that brand knowledge structure forms brand equity (Pappu et al., 2005). Other scholars suggest that consumer-based brand equity influence consumer behaviors (Cobb-Walgren et al., 1995).

## **2.5.2.1.** Theory of Brand Equity

Brand equity proposes that individuals prefer products and services that represent strong and unique brands (Keller, 1993). Brand equity influence consumer behaviors including choices, buying intentions, and repurchase behaviors (Stahl et al., 2012; Pappu et al., 2005). For instance, Cobb-Walgren et al. (1995) explore the impact of brand equity on consumer preferences and purchase intentions. Their findings suggest that brands with a higher degree of consumer-based brand equity positively impact consumer preferences and buying intentions in traditional settings. Buil et al. (2013) tested a model to better understand brand equity in manufacturing companies in Europe. Their findings suggest that consumer-based brand equity is an important antecedent of favorable customer behavior.

In another study, Hsu et al. (2012) develop a customer-based brand equity framework in the lodging industry for use in global branding efforts and research. Their results indicate that travelers considered management trust and brand reliability as important to their lodging brand loyalty and consumer choice. According to other researchers, brand equity is a vital topic in the hotel sector, and its influential power on consumer behavior can successfully ensure long-term marketing strategy (Xu & Chan, 2010; Kim et al., 2008; Kayaman & Arasli, 2007; Bailey & Ball, 2006).

When travelers consider hotel services, they leave with only the recollections of their encounter (Hsu et al., 2012). The principal obstacle for the hotel sector today, therefore, is tangibilizing the intangible hotel experience (Kayaman & Arasli, 2007). One strategy to overcome this obstacle can be the development of an interactive strong brand, which symbolizes the hotel offerings and appeals to travelers' as real features of a tangible product/service (Bian & Liu, 2011). Well-managed hotel brands allow travelers to better picture and comprehend the intangible margin of the hotel's offerings (Alonso-Almeida & Bremser, 2013).

The Internet and its interactive capabilities present new opportunities for hotels to build and maintain strong brand equity through interaction in the Website experience. Rios and Riquelme (2010) state "the Internet has the potential to erode brand equity for several reasons: the emergence of new business models on the Internet (e.g. "name your price"); the availability of large amount of information including price, product characteristics and tools (e.g. price comparison); and the access to a large number of suppliers." For the hotel sector, brand equity is a vital asset (Oh & Hsu, 2014), therefore building hotel brand equity is an intelligent investment (Xiao et al., 2012).

Some scholars have begun examining brand equity for online businesses either theoretically or empirically. Most of these studies support the idea of building online brand equity from two dimensions of brand knowledge namely brand awareness and brand image (Rios & Riquelme, 2010; Keller, 2003, Aaker, 1996). Christodoulides et al. (2006) suggested that brand equity is an intangible asset that is built on interactive Websites. This interaction takes place between the site user and the branded Website. Through the fascinating nature of an online setting, consumers might develop greater brand awareness and brand image. With the experience of interactivity in the online context, consumers could develop and boost their positive

associations, recognition and recall of a specific hotel brand. This might positively influence the sources of online brand equity.

Given its significance in e-commerce (Coyle et al., 2012), the author of this dissertation also emphasizes interactivity as a source of brand equity for online hotel brands. Voorveld et al. (2013) also recognize this relationship in their study of brands and Müller et al. (2004) state that the interactive experience in branded Websites might influence brand equity through the effect of other primary brand elements such as brand awareness and brand perceptions. Considering that non-attribute products have been shown to be more influential than promotions and product attributes (Park & Srinivasan, 1994), interactive commercial Websites also offer new avenues to interact and communicate with consumers. The Internet offers interesting opportunities to interact with consumers, which can then influence the hotel brand awareness and brand image. The enhancement of hotel brand knowledge may directly influence online hotel brand equity, which in turn, influences consumer responses.

## 2.6. Effects of Consumer-Base Brand Equity: Behavioral Intentions

The theory of reasoned action (TRA), used as a basis for predicting behavioral intentions and behaviors, proposes that behavioral intentions are antecedents to certain actions and behaviors of consumers (Liu et al., 2004). The consumer's perception and feeling may affect his/her actions when he/she considers that specific behavior is associated with a particular result. The extant literature defines behavioral intention as the individual's intent to use the technology (Luarn & Lin, 2005). Behavioral intentions dimensions include intentions such as brand preference (Cobb-Walgren et al., 1995), purchase online, positive remarks, recommend to others (van der Heijden & Verhagen, 2002), price premiums (Ba & Pavlou, 2002), and buying intention (Hoeffler & Keller, 2003). In this dissertation, the authors investigate the influence of online hotel brand equity on consumer behavioral intention (brand choice, price premium, and buying intention) towards hotel brand. The literature suggests that brand equity has a prominent influence on consumers' behavioral intentions (Netemeyer et al., 2004; Ailawadi et al., 2003; Yoo & Donthu, 2001). Moreover, the literature review shows that these key customer reactions have the competence to offer sustainable competitive advantages to businesses (Gounaris et al., 2010). Exclusive devotion has been offered to these consumer responses because they have the capacity to provide greater sales, the ability to expand and provide an overall firm performance (profitability, growth, market share, market value, satisfaction, etc.) (Tian-Cole et al. 2002; Baker & Crompton, 2000).

The intention to pay a price premium demonstrates the amount of money an individual has agreed to pay for a brand over other brands presenting comparable attributes (Steenkamp et al., 2010). Brand choice refers to the selection of a specific brand (Raju & Asifulla, 2013). Online buying intention refers to the willingness to buy a specific product from a particular brand (Lu et al., 2010). Online buying intention reveals the desire of individuals to book a hotel room (Kim et al., 2006) and to make a purchase through the Website (Chen et al., 2010). The present dissertation expects that online hotel brand equity will influence different consumer responses concerning hotel branded Websites.

The impact of online hotel brand equity on the aforementioned variables, which is examined in the following section, might offer greater profitable operations and effectiveness to hotel brands, given the hotel's competence to demand higher prices and attain greater sales as a result of the higher prices, higher hotel brand choice, and buying intention.

#### 2.7. Theory-Driven Model and Hypotheses Development

The present dissertation develops a theory-driven model for comprehending the travelers' perception of Website interactivity as a branding tool for hotels. Therefore, the purpose of the dissertation is to propose and test a theory-driven model regarding the influential power of Website interactivity in hotel branded Websites. The particular objectives of this dissertation are to (1) assess the effectiveness of Website interactivity dimensions, namely system interactivity and social interactivity on brand knowledge structure (brand awareness and brand image); (2) test the impact of the components of brand knowledge on the creation of higher brand equity; and (3) examine the impact of brand equity on consumer responses, such as the intention to pay price premium, the intention of brand choice and the intention to buy hotel products and services. The present dissertation will attempt to empirically examine and respond the following questions:

(1) Is system interactivity of a hotel Website significant enough to impact the components of brand knowledge?

(2) Is social interactivity of a hotel Website significant enough to impact the components of brand knowledge?

(3) Which dimension of hotel Website interactivity is more critical for influencing a hotel brand knowledge structure?

(4) Is brand knowledge a significant antecedent of online hotel brand equity?

(5) Is online hotel brand equity a significant precursor of consumer responses (price premium, brand choice and buying intention)?

#### 2.8. Model Development of Website Interactivity as a Branding Tool

Website interactivity has been substantially conceptualized, tested, and investigated in vital marketing constructs in the extant literature, but not in the context of hotels. Little is understood about the function of Website interactivity as a branding tool and its influence on travelers' perceptions and behaviors. To the author's knowledge, not a single study in any discipline examines the powerful role of Website interactivity in creating strong hotel brands, nor have hoteliers explored how Website interactivity could build hotel brand knowledge, influence brand equity, and stimulate travelers' intentions.

To develop and sustain current research, the author proposes a theory-driven model to assess social interactivity and system interactivity as two precursors of brand awareness, brand image, and brand equity, which, in turn, will influence travelers' intentions in the hotel Website setting. The relationships proposed are essential to accelerate additional theoretical and empirical research in the field of branding for hoteliers, brand managers and researchers in the lodging industry. The proposed framework is based on an amalgamation of current research to underpin upcoming investigations. In the next section a theory-driven framework illustrates the proposed relationships. This model originates from theory and current literature in relationship marketing, information technology, and lodging.

The theoretical model portrays a Website interactivity structure, a brand knowledge structure, a brand value-added structure, and a behavioral intention structure. Although all Website interactivity dimensions of hotel Websites impact brand elements, only brand constructs were selected for their ability to develop strong brands.

## 2.8.1. Website Interactivity and Brand Knowledge

The present dissertation adapts the definition of Vernuccio et al. (2012), who state that Website interactivity is as a communication process that gives Web user control and permits them to communicate reciprocally. Website interactivity is the result of two dimensions: (1) system interactivity that is interchangeably referred as user control and (2) social interactivity that is interchangeably referred as two-way communications. Many believe that it seems instinctive that hotel Websites that incorporate features of Website interactivity have tremendous capacity to build a hotel brand online. However, there is little research and empirical support to sustain this assertion. Neelotpaul (2010) and Voorveld et al. (2013) state that while the integration of interactivity in business Websites might assist firms in prosperous online branding, this assumption has not been empirically investigated in any context, including the hospitality industry. Research on Website interactivity efficiency has generated interesting findings, however.

Lowry et al. (2006) propose a theoretical model that explores and foresees the association between interactivity and usability as a sub-construct of satisfaction. They hypothesize that the two dimensions of Website interactivity (reciprocal communication and user control) should have a linear relationship with Website satisfaction. Their findings suggest that Website interactivity has the capacity to augment Website satisfaction. Wu (2010) defines Website interactivity as a psychological state experienced by a user Website throughout an interactive process. He indicates that the perceived user control over the commercial Website and the reciprocal communication among users influence consumers' attitudes and perception of the quality of the site and the attitude towards the ad and the brand.

In addition to Website satisfaction and attitudes towards the brand, recent information technology research reveals that Website interactivity does influence consumer perceptions of online advertising (Fortin & Dholakia, 2005; Jiang & Benbasat, 2003). However, limited research empirically tests the influence of Website interactivity in the marketing and information technology context (Campbell & Wright, 2008). Of the few attempts to understand the effects of Website interactivity on consumers' perceptions, current literature shows a significant and positive impact of interactivity on consumers' perceptions (Johnson et al., 2006). A feature of Website interactivity frequently is not only a positive usability feature for Website users and browsers, but it is also an essential component for commercial Websites that appeal to and retain its online users. Other researchers test the impact of interactivity on interactive advertising. For instance, Ko et al. (2005) propose a structural equation model of interactive advertising that connects different motivations for visiting marketing Websites to Website interactivity, Website attitude, brand attitude, and visit intention. Their findings suggest that site users who possess high system features motivations tend to be involved in human-machine interaction on a Website, while social interaction motivations are highly strongly associated to human-human interaction.

Past research has shown that Website interactivity has a strong, direct and positive effect on consumer attitudes and perceptions. Very limited research has attempted to examine more continuing affective behaviors like long-term brand relationships. Initial findings of past research demonstrate that Website interactivity is correlated with favorable perceptions of the emotional connection with the brand (Müller & Chandon, 2004) and commercial Websites (Coyle & Thorson, 2001). Nevertheless, these studies present a critical methodological limitation. For instance, Müller and Chandon (2004) used a two-stage process. In the first stage the participants

were asked to fill in the first portion of the survey and then were invited to visit two Internet sites. As a result, the participants experienced the brand's Internet site only once and as a forced experience. Müller and Chandon consequently call for research in which other researchers might duplicate the study to expose participants to the same Internet site numerous times and through a longer time period.

The influence of interactivity to reciprocal communication and control, the essential components of this dominant construct in e-commerce (Aryanto, 2008) and relationship marketing research (Coyle et al., 2011), clarifies the dimensions of brand knowledge. An intrinsic component of Website interactivity is that it enables a social interaction in a form of a two-way communication (Jiang et al., 2008) between brands and site users and offers them control over the communication process (Stevenson, Bruner, & Kumar, 2000). Interactivity is the process that establishes a strong connection among consumers, the organization, and its brands (Madhavaram et al., 2005). The perceptions of control and a two-way communication help to establish this strong connection and also indicate that a reciprocal relationship exists between customers and brands. The more brands know about their consumers and about the information they seek, the more positive the brand is perceived by consumers. User control lets consumers be properly selective about their own information necessities, therefore, augmenting the fit between users' diverse needs for information and the content presented in the Website (Ariely, 2000). High user control provides users with the competence to tailor the information by filtering out what is important. This allows users to be more collaborative and participative in their interactions with the Website (Jiang et al., 2010) to be more aware of the brand features and benefits.

For the consumer to be able to choose the content, sequence of communication and timing represents a unique opportunity of brand awareness. Interactivity plays a key role in brand awareness given its capacity to product research and knowledge about the brand. The greater the user control the more likely it is for a consumer to remember the experience with that branded Website. Keng and Lin (2006) indicate that when users experience interaction and the ability to control the communication process, they will recall and recognize a brand more so than a person who experiences no interactivity. In another study, Dholakia et al. (2001) indicate that user control refers to the degree to which a user can select time, information and order of an interaction. Environment psychology demonstrates that those individuals who feel they possess more control are more likely to form positive perceptions and to behave more supportively (Lee, 2005). Madhavaram et al. (2005) and Fiore and Jin (2003) propose that those who perceive that they guide the interaction tend to perceive brand recall, brand recognition, brand image and brand association. Other researchers report that positive perceptions and strong brand awareness may be increased by dialogical communication that replies to and interrelates with users. Based on the above literature review, it is reasonable to assume that user control will affect user perceptions, recognition and recall of the experience with the hotel branded Website. Therefore, we hypothesized that:

H1: There is a significant positive causal relationship between active control of a hotel Website (system interactivity) and hotel brand awareness.

H2: There is a significant positive causal relationship between active control of a hotel Website (system interactivity) and hotel brand image.

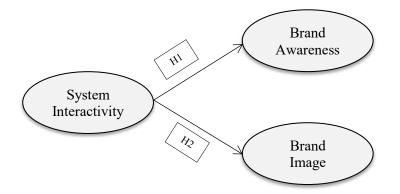


Figure 5. Impact of System Interactivity on Brand Knowledge

In a social interaction setting, two-way communication takes place when individuals use a Website to participate in social communication with hotel sales representatives. Website interactivity then becomes an attribute of this technology-mediated communication (TMC) context that influences the awareness and the perceptions of the brand through diverse features to select and receive information (Coyle & Thorson, 2001). These interactive features of the Internet permit brands to generate brand knowledge. This social interactive process is beneficial to the participants and the positive perceptions of the participants might enhance the degree of brand knowledge (brand image and brand awareness) as they are exclusively engaged in the process. Communicating directly with the brand enables receptive customer assistance, and might even allow personalization in the service they will experience from the brand (Jih et al., 2011), such as hotel brands. Current research shows that the impact of Website interactivity on brand knowledge components has not been examined empirically (Voorveld et al., 2013), however several researchers suggest the influence of Website interactivity on brand knowledge (Müller & Chandon, 2004; Kiss & Esch, 2006; Keng & Lin, 2006).

Existing literature suggests that the concept of two-way communication means that Website users may switch functions (senders and receivers) and be involved in reciprocal communications instead of a monologue (Wang et al., 2013). Several researchers indicate that two-way communication as a component of Website interactivity has a direct and positive impact on brand awareness (Madhavaram et al., 2005; Keng & Lin, 2006) and brand image (Fiore & Jin, 2003; Kiss & Esch, 2006). In the dual dimension of interactivity, two-way communication acts a positive precursor on positive perceptions, favorable associations, brand recognition and brand recall. Recently, Voorveld et al. (2013) suggest that Website interactivity not only influences a more favorable brand attitude but also strongly influences the creation of a brand image that is in harmony with the image displayed on the brand's Website. Based on the above literature review, it is rational to expect that two-way communication will affect user perceptions, recognition and recall of the experience with the hotel branded Website. Therefore, we hypothesized that:

H3: There is a significant positive causal relationship between two-way communication of a hotel Website (social interactivity) and hotel brand awareness.

H4: There is a significant positive causal relationship between two-way communication of a hotel Website (social interactivity) and hotel brand image.

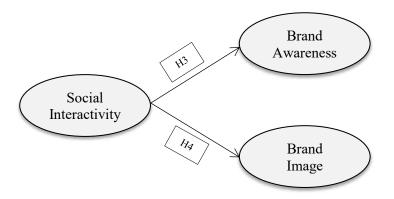


Figure 6. Impact of Social Interactivity on Brand Knowledge

#### 2.8.2. Brand Knowledge and Brand Equity

Consistent with the associative network memory theory (ANM), brand knowledge is defined as a brand node in a consumer's memory to which distinct associations are linked (Keller, 1993). Comprehending the effects and components of brand knowledge is essential because they affect what comes to mind when an individual thinks about a brand (Alba et al., 1991). The fundamental components that characterize brand knowledge structure and influence consumer behaviors are brand awareness (brand recall and recognition) and the positive, strong, and distinctive brand perceptions stored in consumers' memory, namely brand image (Peter & Olson, 2001). According to Keller's (2003) CBBE model, consumer-based brand equity comprises two elements of knowledge: brand awareness and brand image. Research indicates that these components influence other brand elements, such as consumer value perceptions and consumer behaviors (Hoeffler & Keller, 2003).

Consistent with the literature, the present dissertation defines brand knowledge as comprising two components, brand awareness and brand image; brand awareness refers to the consumer's ability to recall and recognize the brand under different circumstances and "Brand image refers to the set of associations linked to the brand that consumers hold in memory (Keller, 1993)." Brand equity occurs when an individual is familiar with the brand under any specific product or service category and possesses positive, different and intense perceptions of the brand (Keller, 2003). The existence of high and positive customer-based brand equity occurs when individuals respond more (less) positively to the service, product details, product attributes, price, marketing, or circulation of the brand than they respond to identical marketing when it is accredited to a falsely named or unnamed version of the product or service (Park 1991; Keller, 2003). Keller (1993) noted that "establishing brand awareness and a positive brand image in

consumer memory creates different types of customer-based brand equity, depending on what marketing mix element is under consideration."

Between the brand knowledge components, Esch et al. (2006) indicate that the strength of the brand node in consumers' memory influence the formation of positive brand perceptions. According to Keller (1993), brand awareness is an essential condition for the formation of a positive, strong and unique brand image. The author indicates that when a brand is totally established in consumers' memory, it is easier to attribute associations to the brand and to strongly establish these associations in memory. Schuiling and Kapferer (2004) also confirm that brand awareness is undeniably and significantly associated with brand image. Yoo et al. (2000) suggest that brand awareness with strong associations develops an exclusive brand image. These associations are deeper when they are built on numerous interactions and experiences, instead of a few interactions (Alba & Hutchinson, 1987); if consumers have no interaction or experience with the brand, there are no associations (Davis et al., 2008). Recognition and recall help to draw out those associations. When brand awareness is high among customers, it means the brand is familiar and respectable (Yasin et al. 2007). Research shows that when customers recognize and recall a brand, they tend to form positive perceptions in their mind because recognizable products are frequently preferred to those that are less recognizable (Macdonald & Sharp, 2000). Therefore, we hypothesized that:

H5: There is a significant positive causal relationship between hotel brand awareness and hotel brand image.

As mentioned in the literature, brand awareness is "the ability for a buyer to recognize or recall that a brand is a member of a certain product category" (Aaker, 1991, p. 61; Yoo & Donthu, 2001). Huang and Sarigöllü, (2012) examine the association of brand awareness with

both customer mindset and product market outcome measures. Their findings suggest that there is positive and direct association between brand awareness and brand equity. Other researchers also support the awareness-equity relationship (Kim & Kim, 2004; Yoo & Donthu, 2001; Yoo et al., 2000), with the exclusion of Gil, Andres, and Salinas (Gil et al., 2007)'s study. In 2013, Loureiro's study in the banking industry indicates that brand awareness results in positive brand equity because it is an indication of excellence and commitment and help the consumer to consider the brand as valuable. A consumer's consideration set consists of selected and valued preferences of brands with superior brand awareness in a business sector (Aaker, 1991).

Yasin et al. (2007) also suggest that consumer-based brand equity is partially evaluated in terms of the awareness it evokes. This role differs on the degree of awareness that can be accomplished. In this dissertation, the author argues that the relationship between brand awareness and consumer-based brand equity established in other contexts will hold in hotel Websites as well. Therefore, we hypothesized that:

H6: There is a significant positive causal relationship between hotel brand awareness and hotel brand equity.

Brand image is the result of positive, strong and unique perceptions of the brand stored in consumer's memory. Brand image is frequently perceived as the combined influence of brand associations. It is the individual's perceptions of the tangible and intangible brand associations. Marketing researchers indicate that brand image is an essential element of consumer-base brand equity (Faircloth et al., 2001). Chen (2010) indicates in his study of green practices that high equity brands tend to represent more positive brand associations (brand image) than low equity brands. Davis et al. (2008) indicate that in a B2B context, positive brand image is strongly associated with brand equity. Capella and Alford (2001) note that "brand image resides in an

associate memory network that is critical to consumer decision making and potentially provides biased brand evocation and evaluation, ultimately contributing to brand equity."

Researchers indicate that consumer-base brand equity is partially controlled by the associations that form brand image. Keller (1993) suggests that a positive, different and strong brand image differentiates the brand in the mind of consumers, influencing the possibility to develop higher brand equity. Carpenter and Nakamoto (1989) state that brands with positive, different and strong brand images occupy advantageous perceptual positions in consumers' mind that are difficult to duplicate and expensive to compete against, therefore generating a dominant competitive advantage. Davis et al. (2008) hypothesize that brand image is positively related to brand equity in the service context. Yet current empirical investigation has not categorically explored the effect of positive brand image on brand equity in the context of hotel Websites. We hypothesized that:

H7: There is a significant positive causal relationship between hotel brand image and hotel brand equity.

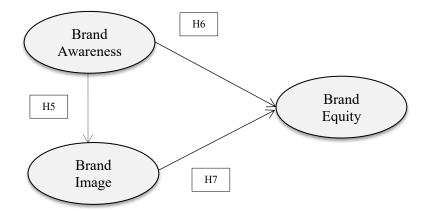


Figure 7. Impact of Brand Awareness on Brand Image and Brand Knowledge on Brand Equity

## 2.8.3. Brand Equity and Behavioral Intentions

Building a strong hotel brand with high and valuable consumer-base brand equity positively affects the hotel overall operations through its impact on travelers behavioral intentions towards hotel brands. The present dissertation examines three of the most behavioral intentions mentioned in the literature: willingness to pay a hotel price premium, brand choice, and buying intentions.

The willingness to pay a price premium is defined as the amount a consumer is willing to pay for his/her selected brand over equivalent/lesser brands of the similar package size/quantity and services provided (Netemeyer et al., 2004). It is one of the robust indicators of loyalty and is the most practical summary measure of overall brand equity (Aaker, 1996). Current research suggests that consumer-base brand equity has remarkable influence on consumers' willingness to pay a price premium (Lassar et al., 1995).

Consumer theories show a basis for establishing relationships between price premium and consumer-based brand equity facets (Netemeyer et al., 2004). Based on memory theory, once information is saved, an associative network arises that links the associations in particular ways (Alba et al., 1990). Pricing theories also show that strong relations between the brand equity and willingness to pay a price premium. For instance, Monroe (1990) proposes a framework that postulates the intention to pay a certain price for a brand service/product as a function of the overall perceived value and excellence of the brand service/product. Others share a similar perspective in which brand equity influences consumers less sensitive to price increases (Buil et al., 2013; Hoeffler & Keller, 2003) and more willing to pay a price premium since they distinguish an exclusive value in the brand that no other service provider can offer (Seitz et al., 2010). Kalra and Goodstein (1998) further state that particular valuable elements of a brand may

impact the willingness to pay a higher price for a brand. Based on the above literature review, it is rational to presume that positive consumer-based brand equity will affect the willingness of travelers to pay a higher price for a hotel product. Therefore, we hypothesized that:

H8: There is a significant positive causal relationship between hotel brand equity and price premium.

In this study, brand choice refers to the selection of a particular brand (Raju & Asifulla, 2013) and online buying intention refers to the intentions to buy a particular product/service from a preferred brand (Lu et al., 2010). They are two of the most cited concepts of strong brand performance and are the one of the most rational consequences of consumer-based brand equity (Cobb-Walgren et al., 1995). Brand equity also has a positive influence on consumers' brand choices. Brands with higher brand equity may persuade their customers to choose their brands more frequently. Research shows that strong brands obtain superior evaluations and superior overall preference as well (Hoeffler & Keller, 2003). Likewise, consumers who perceive psychological distinctions and positive perceptions of the brand are highly influenced to decide in favor of the brand.

Cobb-Walgren et al. (1995), in their study exploring the consequences of brand equity, suggest that positive perceptions contribute to the significance and value that the brand adds to the customer (brand equity). This added-value (brand equity) then affects customer preferences, purchase intensions and brand choice. In another study in the lodging sector, Hsu et al. (2012) suggest that travelers who perceive the brand as valuable show a strong intention to select the same brand among several competitor brands presented at the same destination. Other scholars postulate the positive effect that exists between consumer-based brand equity and consumers' brand choices and buying intention. For example, Buil et al. (2013), Tolba and Hassan (2009)

report that brands with higher positive brand equity caused greater brand choices and online purchase intentions.

Aaker (1991) indicates that consumers who perceive a higher value in a brand are more likely to buy it. Additional studies support the influential power of brand equity on brand choice and intention to purchase (Mackay, 2001; EGhosh et al., 1995; Buil et al., 2013; Tolba & Hassan, 2009; Hsu et al., 2012). Based on the above literature review, it is reasonable to expect that positive consumer-based brand equity will affect brand choice and online buying intention.

Therefore, we hypothesized that:

H9: There is a significant positive causal relationship between hotel brand equity and brand choice.

H10: There is a significant positive causal relationship between hotel brand equity and buying intention.

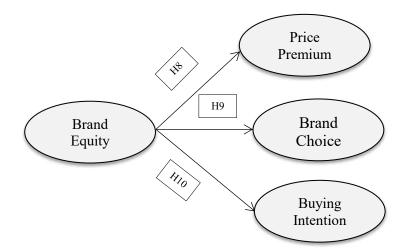


Figure 8. Impact of Brand Equity on Behavioral Intentions

#### 2.9. Summary

Based on the extensive review of the literature presented above, specific elements have to be considered when testing the theory-driven framework to examine the effects of Website interactivity as a branding tool in online hotel Websites. The hotel Website designers must focus on Website interactivity dimensions such as social interactivity (two-way communications) and system interactivity (user control). Website interactivity as a multiple dimension construct is a key component to build a strong hotel brand online. Building strong brands such as enhancing online brand equity allow hotel brands to influence consumer responses which constitute a vital structure to ensure financial hotel performance and market share. A resulting interactive experience with the branded hotel Website is an essential variable that influences behavioral intentions to pay a price premium when booking a hotel product, to choose the brand as a preferred brand, and to continue buying hotel products through the hotel Website. Website interactivity forms brand knowledge. Brand awareness and brand image, as dimensions of brand knowledge, might lead to higher hotel brand equity which has the capability to influence consumer responses. In the aforementioned section, hypotheses have been derived from the presented research questions and the in-depth examination of the variables to examine the problem statement statistically.

In this chapter, the author also explains the essential concepts of the present dissertation, the dimensions of Website interactivity, and has reviewed the literature on how these dimensions, social interactivity and system interactivity may be used as a branding tool in the hotel context. Additionally, the author has explained how brand knowledge influences the creation of a strong and positive online brand equity, which in turn influences behavioral intentions, such as the willingness to pay a price premium, to choose, and to buy from the brand. The author presents the hypotheses under empirical investigation and proposes a theory-driven model to explore the antecedents/ consequences (exogenous and endogenous constructs) and relationships in the context of hotel Websites. The following chapter covers the methodology

used to assess the hypotheses. Based on the extensive reviewed of the literature and the research hypotheses presented, the path diagram of the full model is presented below.

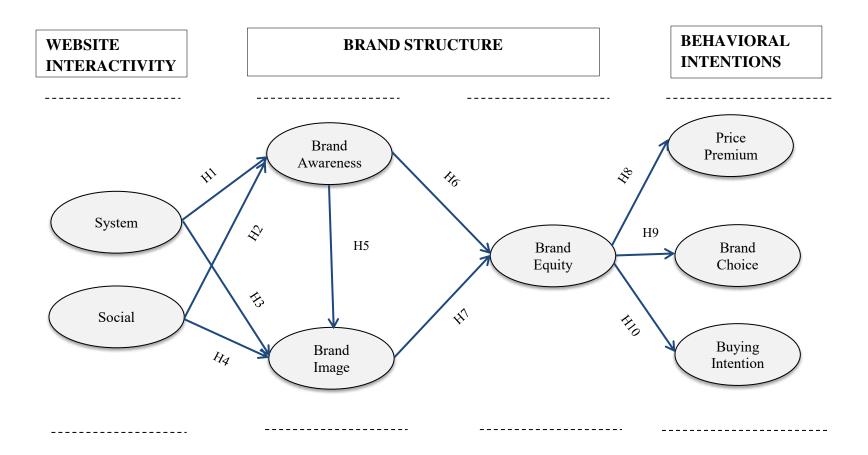


Figure 9. Complete Theory-Driven Model of Website Interactivity as a Branding Tool Note: System = User Control (System Interactivity); Social = Two-way communication (Social Interactivity).

# **CHAPTER THREE: METHODOLOGY**

## **3.1. Introduction**

This chapter focuses on the methodological procedure used in the present dissertation regarding the causal relationships between the dimensions of Website interactivity namely social interactivity and system interactivity, brand awareness, brand image, brand equity, brand choice, price premium, and buying intention for adult US travelers who have booked a hotel room in the last 12 months. As mentioned earlier, there is no research on the influential power of Website interactivity as a branding tool in the context of hotel Websites; therefore, this dissertation uses empirical data to examine the influence of the dimensions of Website interactivity as a branding tool for hotel brands. As such, structural equation modeling (SEM) is used to assess these causal relationships. This chapter introduces the methods, instrument and measures, and the technique for data analysis. A framework of this chapter is displayed below.

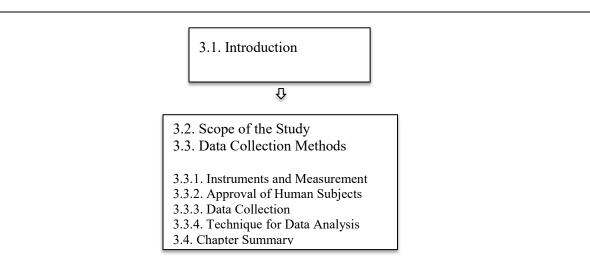


Figure 10. Chapter Three Structure

## **3.2.** Context of the Study

The target population of this dissertation was US adult hotel travelers who booked a hotel room in the last 12 months from a hotel branded Website. The sampling frame contain travelers, who have stayed overnight in a hotel category (e.g. luxury, full service, mid-scale, economic, boutique hotel, and resort). The appropriate conditions for the selection of the sampling frame consist of adult US travelers, 18-years or older who have booked a minimum of one-night in the last 12 months at their corresponding hotel branded Website. Participants have been chosen considering a purposive sampling method over a one-week timeline. Respondents have been invited to participate in the self-administered online survey.

For the pilot study, the researcher used a sample of US travelers to test the instrument for face validity issues, to determine grammatical or spelling errors, and to ensure respondents comprehend the instructions and item statements before the main study could be conducted. For the pilot and main study, the researcher contacted a marketing company, Mturk, to distribute the link for the online questionnaire. Through Mturk, the author collected data from a sample of selected US travelers. The sample size targeted were 450 participants for the pilot phase and 554 participants for the main study. A questionnaire was designed to collect travelers' demographic characteristics, Website interactivity, brand knowledge, brand equity, and behavioral intentions. The degree of agreement about the travelers' perception of Website interactivity, brand structure components, and behavioral intentions were achieved through a self-administered questionnaire. Correspondingly, measures of the travelers' demographic characteristics (e.g. gender, income, education, ethnicity, etc.) were determined at the end of the questionnaire.

The instruments selected to collect data for the dissertation include (a) Website Interactivity Scale (WIS), modified version of Jiang et al. (2010); (b) Brand Awareness Scale (BAS), (c) Brand Image Scale (BIS), modified version of Davis et al. (2008); (d) Brand Equity Scale (BES), modified version of Yoo et al. (2001); (e) Brand Choice Scale (BCS), modified version of Hsu et al. (2012); (f) Price Premium Scale (PPS), modified version of Netemeyer et al. (2004); and (g) Buying Intention Scale (BIS), modified version of Erdem et al. (2006). Each scale uses a 7-point Likert scale with the exception of the demographic characteristics section.

## **3.3. Data Collection Methods**

# **3.3.1.** Instruments and Measures

A self-administered online survey questionnaire has been designed from an extensive literature review to collect traveler demographic characteristics, Website interactivity (social and system), brand knowledge (brand awareness and brand image), brand equity, brand choice, price premium, and buying intention. The questionnaire (see Appendix A) includes three sections. (1) Perceptions of the model's constructs, (2) Travelers' staying experience, and (3) Travelers' personal data, all of which have been obtained through a series of questions relating to demographic characteristics. All measures have been adapted to the context of online hotel Websites and use a 7-point Likert scale with exclusion of demographic questions. The instruments selected to acquire data include: (a) Website Interactivity Scale (WIS), modified version of Jiang et al., 2010, (b) Brand Awareness Scale (BAS); (c) Brand Image Scale (BIS), modified version of Davis et al., (2008), (d) Brand Equity Scale (BES), modified version of Yoo et al. (2001), (e) Brand Choice Scale (BCS), modified version of Hsu et al. (2012), (f) Price Premium Scale (PPS), modified version of Netemeyer et al. (2004), (g) Buying Intention Scale (BIS), modified version of Erdem et al. (2006).

Data for both the pilot study and main study were collected using Amazon's Mechanical Turk (www.MTurk.com), an innovative, open online marketplace for contracting work performed by experts who qualify for specific tasks (Buhrmester et al., (2011). In the pilot phase,

respondent's completed questionnaires were used to verify for face validity and reliability issues (Hair et al., 2010). This has been done solely with to identify any limitations with the questionnaire, any grammatical or spelling errors, and to ensure that participants understood the directions and question-items. Upon collection of the pilot test results, minor appropriate revisions were made before distributing the final survey questionnaire.

## 3.3.2. Approval of Human Subjects Use

Prior to data gathering for the pilot and the main study, the Institutional Review Board (IRB) at the University of Central Florida reviewed and approved the research procedure. The IRB exemption letter for the current dissertation is enclosed as Appendix C. Despite the IRB exemption, the author respected the voluntary participation and discretion of the data throughout the data gathering process.

# 3.3.3. Data Collection

Once the author obtained IRB approval, the author used Amazon's Mechanical Turk (www.MTurk.com) to gather data for a more diverse sample for both the pilot test and the main test stage. MTurk offers a virtual labor market where research tasks are posted and selected by a diverse pool of workers (Goodman et al., 2013). MTurk is progressively used in psychological and business research because it delivers an extensive and diverse sample of possible participants at an affordable investment (Mason & Suri, 2012). Current research suggests that the quality of the data acquired from MTurk is as reliable as from other, more conventional sources (Chandler et al., 2013; Buhrmester et al., 2011). Mturk also permits behavioral researchers to detail the preferred characteristics of participants (Crump et al., 2013). In the present dissertation we have limited participants only to those US adults who had booked a hotel room from a hotel branded Website in the last 12 months. The solicitation that participants received through their Mturk account has included the purpose of the study, the request to participate, and a link to the online survey questionnaire. Exogenous and endogenous constructs in the proposed theory-driven model were assessed using multiple item measures. Upon agreement to participate, the degree of agreement in relation to the Website interactivity dimensions namely social interactivity and system interactivity, brand awareness, brand image, brand equity, brand choice, price premium, and purchase intentions were taken by respondents through a self-administered online questionnaire.

## **3.3.4.** Technique for Data Analysis

The data collected was coded into SPSS version 20 to verify for errors and guarantee that data points are not missing and also to detect outliers. Further procedures were taken to validate that the data does not violate any of the assumptions of statistical procedures (e.g., normality, homogeneity, linearity).

Since the constructs and their respective items in the survey questionnaire were not examined for the context of hotel Websites, the author next checked the reliability of the scales, internal consistency at which the items that form the scale link together. Internal consistency has been tested using the Cronbach's alpha coefficient and the scale composite reliability (SCR). Cronbach's alpha scale for internal consistency and the scale composite reliability (SCR) must exceed 0.7 (Gliem & Gliem, 2003). Items presenting values below 0.7 may be removed to correct the scale's reliability. To improve validity and reliability of the questions included in the Web-based survey, the questionnaire was administered to randomly selected US travelers. Pilot respondents were asked to reveal any wording that was not clear. The comments from the pilot test resulted in minor revisions to the instrument in phrasing, layout and simplicity of the items.

Data analysis was conducted in two phases: a confirmatory factor analysis (CFA) that was applied to measure the competence of the measurement model, and the evaluation of the structural model. Since multiple constructs were identified, the CFA established how well the measured variables represent the constructs (Hoyle, 2000). The following phase tested the proposed theory-driven model and analyzed the data through structural equation modeling (SEM).

#### **3.3.4.1.** Benefits of SEM

SEM considers several types of models to represent both latent and observed relationships among variables to specify a quantitative test for a hypothesized and proposed theoretical framework. Some benefits of using SEM for the present dissertation are measurement accuracy and synchronized analysis. Conventional data analysis, such as univariate analysis of variance and linear regression, pretends that measurement error does not occur, which is unreasonable when considering indirectly measured constructs (Byrne, 2001). In contrast, SEM methods assume the existence of imperfect measurement and examine measurement errors related with all variables (Byrne, 2013; Gefen et al., 2000). Additionally, SEM permits the investigator to examine a set of interconnected relationships simultaneously and systematically.

A comprehensive representation of the theory-driven framework is displayed and examined through a series of regression equations that represent the proposed research hypotheses relationships between multiple exogenous and endogenous constructs (Loehlin, 2013). Structural equation modeling is chosen over other statistical methods because it permits the modeling of relationships among several exogenous and endogenous constructs at the same time (Marsh et al., 2010).

This section also concentrates on the model fit indices to evaluate the measurement model. The goodness-of-fit indices assist the researcher to evaluate the measurement model. This dissertation uses three types of overall fit measures, including the chi-square goodness-of-fit test:

- Absolute fit indices (AFIs): X<sup>2</sup> test, goodness-fit-index (GFI), adjusted-GFI (AGFI), and root mean square error of approximation (RMSEA).
- Incremental fit indices (IFIs): normed fit index (NFI), non-NFI (NNFI), and comparative fit index (CFI).
- Parsimonious fit indices (PFIs): Adjusted Goodness Fit Index (AGFI), Parsimonious goodness-of-fit index (PGFI), and Parsimonious normed fit index (PNFI).

No consensus exists about what represents the most appropriate goodness of fit index, about what constitutes the best goodness of fit index; therefore, it is common to consider multiple indicators. The selection of indices to be reported is in relation to the sample size and the particular models examined (Hoyle & Panter, 1995).

## 3.4. Chapter Summary

The author of this dissertation provides a description of the research methodology used in this dissertation. The rationale of the survey and explanation of the instrument has been described to show how hotel travelers were asked for their hotel traveler experiences when visiting hotel branded Websites. An online survey method was employed using different hotel market segments. Data analysis comprises several statistical procedures involving reliability and validity analysis, confirmatory analysis, and SEM.

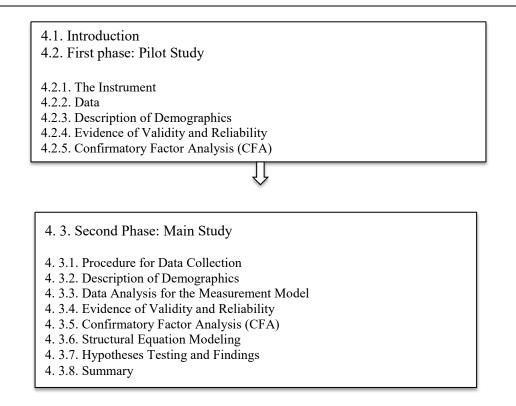
# **CHAPTER FOUR: RESULTS**

## 4.1. Introduction

Chapter IV presents the empirical examination of proposed hypotheses and results about

the causal relationships among Website interactivity, brand knowledge, brand equity, and

behavioral intentions in this dissertation. A framework of this chapter is displayed below.



# Figure 11. Chapter Four Structure

The author's methods for data analysis include descriptive statistics and structural equation modeling. The empirical findings of the reliability and validity of the overall measurement model are also depicted to evaluate the proposed framework for the causal influence among each latent variable. Two statistical programs, SPSS 20 and AMOS 20.0, have been utilized to perform the statistical analyses. The center of this dissertation has been based on the theory-driven framework that has been assessed by the following research hypotheses:

#### Table 3. Research Hypotheses

	Hypotheses
H1	There is a significant positive causal relationship between system interactivity and brand awareness.
H2	There is a significant positive causal relationship between system interactivity and brand image.
H3	There is a significant positive causal relationship between social interactivity and brand awareness.
H4	There is a significant positive causal relationship between social interactivity and brand image.
H5	There is a significant positive causal relationship between brand awareness and brand image.
H6	There is a significant positive causal relationship between brand awareness and brand equity.
H7	There is a significant positive causal relationship between brand image and brand equity.
H8	There is a significant positive causal relationship between brand equity and price premium.
H9	There is a significant positive causal relationship between brand equity and brand choice.
H10	There is a significant positive causal relationship between brand equity and buying intention

The chapter presents the findings from the pilot study (study phase one) descriptive statistics, confirmatory factor analysis – including construct validity and reliability. Later, the author presents the results from the main study (study phase two) descriptive statistics, confirmatory factor analysis and structural equation modeling (SEM).

The aim of this dissertation is to explore the impact of Website interactivity on brand components (brand knowledge and brand equity) and behavioral intentions (price premium, brand choice and purchase intentions). Since the present dissertation has been executed in two phases, this chapter has been organized to describe and present the findings of the pilot stage followed by the main stage. Two main tests —goodness-of-fit of the proposed SEM theorydriven framework and hypotheses testing—have been displayed in the main study stage. The author attempts to show that the findings might lead to practical and theoretical implications for researchers and hoteliers about Website design, hotel branding, and consumer behaviors in the US hotel industry.

## 4.2. First Phase: Pilot Study

Previous to gathering data for the main study, a pilot study has been performed to establish face validity by detecting whether there are any issues with the design of the online questionnaire, to verify if grammatical or spelling errors existed, and to ensure that participants understood the instructions and statements.

The online survey instrument has been pilot tested twice. First it was sent to 100 undergraduate students studying in different sectors (events, restaurants, hotels, vacation ownership, etc.) of the hospitality and tourism industry. Minor comments resulted relating to the readability and wording of the items. Each of the adapted constructs was adapted from theory and existent studies.

After considering the minor suggestions from the preliminary pilot study, the online questionnaire was disseminated to a diverse sample of US Travelers who booked a hotel room in the last 12 months using a hotel branded Website. At the end of the online questionnaire, respondents were asked to specify what might improve the questionnaire. The following sections describe the additional details of the findings and process of the pilot phase.

## **4.2.1.** The Instrument and the Measurement

A self-administered online questionnaire was designed from an extensive review of the marketing, e-commerce, hospitality, and branding literature. The instrument was pretested in this pilot phase with qualified participants using Amazon's Mechanical Turk (Mturk) platform. The questionnaire (see Appendix B) contains three sections, including a qualifier question that asked participants if they had booked a hotel room online in the last 12 months using a hotel branded Website. The qualifier question indicates the consent to participate and ensures that participants have booked a hotel room in the last 12 months using a hotel branded Website. If respondents did not have this experience, they skipped to the end of the survey because they did not qualify

for the study. If participants did book a hotel room in the last 12 months using a hotel branded Website, they proceeded to complete the next section.

The online questionnaire includes three sections: (1) Perceptions of the model's constructs, (2) Travelers' staying experience, and (3) Demographic characteristics. In the first section, Perceptions of the model's constructs, all measures have been adapted to the context of online hotel Websites. All measures used a 7-point Likert scale with the exclusion of demographic questions. The instruments selected to acquire data include: (a) Website Interactivity Scale (WIS), modified version of Jiang et al. (2010); (b) Brand Awareness Scale (BAS) and (c) Brand Image Scale (BIS), modified version of Davis et al. (2008); (d) Brand Equity Scale (BES), modified version of Yoo et al. (2001); (e) Brand Choice Scale (BCS), modified version of Hsu et al. (2012); (f) Price Premium Scale (PPS), modified version of Netemeyer et al. (2004); and (g) Buying Intention Scale (BIS), modified version of Erdem et al. (2006).

In the second section, Travelers' staying experience, respondents were asked to reveal their choices of hotel (e.g. Luxury, Upscale, Midscale, and Economy), what device they use when booking a hotel room, how many nights they stay on average, their technology adoption, if they belong to any hotel frequent guest programs, if they book the room by themselves, and so on. In the third section, respondents were asked to reveal personal data. This data has been acquired through a series of questions pertaining to consumer demographics (gender, age, marital status, education, and income).

# 4.2.2. Data

A sample of US travelers who booked a hotel room using a hotel branded Website in the last 12 months represents the sample of the pilot study. The above-mentioned online

questionnaire was disseminated to participants (MTurk participants) using MTurk platform to a systematic random sample size of four hundred fifty (N=450) US travelers on April 4, 2014. The investigator sent the request on that date and obtained four hundred forty two (n=442) responses by April 5<sup>th</sup>. Among the 442 responses, which equate to a response rate of about 98%, 20 of them were excluded because they did not pass the inspection check. This resulted in a total of 422 valid responses that have been used in the data analysis. For the comments received from participants, the survey instrument (items) and data collection procedures have been predominantly favorable with no recommendations for any significant change.

# **4.2.3.** Description of the Demographic Information: Pilot Stage

In the pilot stage, the target population of the present dissertation has been US travelers who have booked a hotel room in the last 12 months using a hotel branded Website. The pilot participants consisted of 62.3 % males and 37.7 % female, with an age range from 18 to 66. The largest age group of between 26 and 35 years old (45%) and the smallest age group was 66 years old or more (0.2%). The majority of participants were single (61.4%), while the second largest group was married (32.2%). Table 4 displays the frequency distribution of the respondents' gender, age, and marital status.

Demographic Variables	Frequency	Valid percentage
Gender (n=422)		
Male	263	62.3
Female	159	37.7
Age (n=422)		
25 or younger	145	34.4
26-35	190	45.0
36-45	55	13.0
46-55	23	5.5
56-65	8	1.9
66 or older	1	.2
Marital Status (n=422)		
Married	136	32.2
Separated	4	.9
Divorced	15	3.6
Widowed	2	.5
Single	259	61.4
Prefer not to answer	6	1.4

Table 4- Descriptive Statistics for Demographics by Gender, Age, and Marital status

Of all participants, around 89.1% completed some higher education. The largest educational group was "four-year bachelor degree" (41.9%), whereas the second largest educational group had "some college background" (28.2%). And "graduate school" and "associate degree" were slightly fewer than the second group, at 9% and 10% respectively (Table 5).

Table 5- Descriptive Statistics for Demographic Variables of the sample by Education

Demographic Variables	Frequency	Valid percentage
Education (n=422)		
High School	45	10.7
Associate degree (2 year)	42	10.0
Some college	119	28.2
Bachelor's Degree (4 year)	177	41.9
Master's Degree	33	7.8
Doctorate Degree	5	1.2
Other	1	.2

The largest groups for annual income were between \$25,000 and \$50,000 (27.4%) and \$50,001 and \$75,000 (24.2%) respectively, with 74.4% of participants' annual income being less than \$75,000 and 23.5% of that being more than \$75,000 (including \$75,000); 2.1% preferred not to answer (Table 6).

Demographic Variables	Frequency	Valid percentage
Annual Income (n=422)		
\$25,000 or less	79	18.7
\$25,001-\$50,000	133	31.5
\$50,001-\$75,000	102	24.2
\$75,001-\$100,000	56	13.3
\$100,001 - \$150,000	29	6.9
\$150,001- \$200,000	8	1.9
\$200,001 or more	6	1.4
Prefer not to answer	9	2.1

Table 6- Descriptive Statistics for Demographic Variables of the sample by Income

Of all participants, around 78.2% were Caucasian. The second largest ethnicity group was "Asian/Pacific" (10%), whereas the third largest ethnicity group was "African American" (5.9%). "Hispanic" and "other" ethnic categories were slightly fewer than the other groups, at 5.2% and .7% respectively (Table 7).

Table 7- Descriptive Statistics for Demographic Variables of the sample by Ethnicity

Demographic Variables	Frequency	Valid percentage
Ethnicity (n=422)		
Caucasian	330	78.2
Asian/Island Pacific	42	10.0
African American	25	5.9
Hispanic	22	5.2
Other	3	.7

Of all participants, around 49.3% used their PC to book a hotel room. The second largest device group was "Laptop" (44.3%), whereas the third largest device group used "Tablet and Smartphone" (6%) (Table 8).

Demographic Variables	Frequency	Valid percentage
Device (n=422)		
PC	208	49.3
Laptop	187	44.3
Tablet	10	2.4
Smartphone	15	3.6
Other	2	.5

Table 8- Descriptive Statistics for Demographic Variables of the sample by Device

Of all participants, around 44.5% stayed in a "Midscale" hotel category. The second largest hotel type group was "Upscale" (39.3%), whereas the third largest hotel type group stayed in an "Economy" hotel category (10.9%). Of all respondents, around 92.2% personally booked a hotel room using a hotel branded Website. Finally, of all participants, around 65.6% did not participate in a frequent guest program, whereas 34.4% do participate in a frequent guest program (Table 9).

Demographic Variables	Frequency	Valid percentage
Personal Reservation (n=422)		
Yes	389	92.2
No	33	7.8
Frequent Guest (n=422)		
Yes	145	34.4
No	277	65.6

Table 9- Descriptive Statistics for Demographic Variables of the sample by hotel type

## 4.2.4. Evidence of Validity and Reliability

In this preliminary section, inter-item reliability, composite reliability, average variance extracted (AVE), and convergent validity have been examined to verify validity and reliability.

## **4.2.4.1. Reliability Evidence for the Instrument**

Reliability might be estimated at two levels: Item reliability and construct (scale composite) reliability (Chau & Lai 2003; Hair et al., 1998). "Item reliability indicates the amount of variance in an item due to the underlying construct rather than to error and can be obtained by squaring the factor loading" (Chau 1997, p.324). Chin (1998) suggests that the Cronbach alpha values should be greater than 0.7 to exhibit item reliability. A composite (construct) reliability value of greater than 0.7 is also essential for a construct to be considered reliable.

In the present dissertation, item reliability (Cronbach alpha) and scale composite reliability were computed to assess item and construct reliability respectively of the measurement instrument containing eight constructs. All of the constructs must show reliability coefficients greater than the proposed level of 0.70 for both tests (Hair et al., 1998). From the results displayed in Table 10, all of the constructs in the measurement model show satisfactory reliability estimates (a value higher than 0.70).

Table 10 presents the results of these two estimates of reliability. All items are above the suggested cutoff value of 0.7 (ranging from 0.84 to 0.93) and are within the acceptable value of 0.7 as suggested by rigorous statistical research. The composite reliabilities for all the constructs are above the threshold value of 0.7 (ranging from 0.847 to 0.933). Item reliabilities and construct (scale composite) reliability jointly suggest high reliabilities for the eight constructs.

## 4.2.4.2. Convergent Validity Evidence

Convergent validity reveals the degree at which conceptually similar measures are considerably correlated. In this study, convergent validity has been examined considering three criteria. Item loadings should be at least significant at 0.05 level and the item loadings must be higher than the suggested 0.5 (Buil et al., 2013); composite scale reliability (CSR) must be at least 0.7; and average variance extracted (AVE) must be at least 0.5 (Chau & Lai, 2003). An average variance extracted value greater than 0.5 suggests that a particual construct does not present convergent validity issues. Table 10 displays that all item loadings show to be significant at the 0.001 level and the item loadings are higher than the suggested 0.5 (Buil et al., 2013; Cabrera-Nguyen, 2010). Composite reliability (CR) values are higher than 0.7, ranging from 0.846 to 0.933. The AVE values range from 0.581 to 0.823, surpassing the 0.5 threshold value. Another manner to indicate a construct's convergent validity is to compare CR (composite reliability values) with AVE values. Composite reliability (CR) values that are greater than AVE values suggest construct convergent validity (Garbarino & Johnson, 1999). The analysis suggests that there are not convergent validity issues.

Construct	Variables	Standardized	Composite	AVE	Item Reliability
		Loadings	Reliability		
User	UC1	0.81*	0.846	0.581	0.85
Control	UC2	0.69*			
	UC3	0.82*			
	UC4	0.72*			
Two-Way	TC1	0.85*	0.915	0.682	0.92
Communication	TC2	0.90*			
	TC3	0.82*			
	TC4	0.79*			
	TC5	0.76*			
Brand	AWA1	0.82*	0.886	0.723	0.88
Awareness	AWA2	0.94*			
	AWA3	0.79*			
Brand Image	IMG1	0.76*	0.891	0.626	0.88
C	IMG2	0.65*			
	IMG3	0.90*			
	IMG4	0.92*			
	IMG5	0.70*			
Brand Equity	EQT1	0.75*	0.918	0.738	0.91
1 2	EQT2	0.92*			
	EQT3	0.90*			
	EQT4	0.86*			
Brand Choice	CHO1	0.90*	0.916	0.785	0.91
	CHO2	0.84*			
	CHO3	0.92*			
Premium	PRC1	0.93*	0.853	0.664	0.84
Price	PRC2	0.83*			
	PRC3	0.66*			
Buying	BY1	0.91*	0.933	0.823	0.93
Intention	BY2	0.92*			
	BY3	0.89*			

AVE: Average variance extracted

\*\*\*p<0.01; \*\*p<0.05; \*p<0.001

# 4.2.4.3. Discriminant Validity Evidence

Discriminant validity represents the degree to which the measures of distinctive constructs are markedly dissimilar from each other. Wu (2013) states that "discriminant validity might be effectively assessed using the measure that the square root of AVE for each construct is larger than its correlations with other constructs."

	CR	AVE	MSV	ASV	1	2	3	4	5	6	7	8
1. UC	.846	.581	.355	.260	.762							
2.TC	.915	.682	.355	.260	.596	.826						
3.AWA	.886	.723	.537	.334	.414	.242	.850					
4.IMG	.891	.626	.537	.423	.570	.412	.733	.791				
5.EQT	.918	.738	.309	.220	.387	.389	.361	.556	.859			
6.PRC	.853	.664	.516	.289	.262	.364	.168	.404	.664	.815		
7.CHO	.916	.785	.516	.384	.355	.416	.329	.562	.800	.718	.886	
8.BY	.933	.823	.252	.157	.544	.258	.568	.613	.549	.250	.502	.907

Table 11- Discriminant validity

Note: UC, user control; TC, two-way communication; AWA, brand awarenes; IMG, brand image; EQT, brand equity; CHO, PRC, price premium; brand choice; BY, buying intention; CR, composite reliability; AVE, averance variance extracted. MSV, Maximum Shared Squared Variance; ASV, Average Shared Squared Variance (ASV). The square root of AVE is highlighted in bold.

Relating inter-construct correlations with the square root of AVE offers favorable support for discriminant validity (Nusair et al., 2011; Fornell & Larcker, 1981). Table 11 demonstrates that discriminant validity occurs between each pair of constructs. To demonstrate, user control (UC) reveals discriminant validity from other constructs. The square root of AVE for user control (UC) is 0.762 while the share variance between (UC) and other constructs ranged from 0.262 to 0.596 indicating no discriminant validity issues. Also, the square root of AVE for twoway communication (TC) is 0.826 while the share variance between two-way communication and other constructs ranged from 0.242 to 0.416. Another way to guarantee discriminat validity is by comparing the Maximum Shared Squared Variance (MSV) and the Average Shared Squared Variance (ASV) with the AVE. AVE values greater than the MSV and ASV suggest that there are not discriminant validity issues. Table 11 shows that AVE values are greater than the MSV and ASV values.

These tests have provided evidence to ensure the questionnaire is ready for the main study phase. The measures offered evidence of goodness of model fit, validity (convergent and discriminant) and reliability. Therefore the structural model will be assessed in the following sections.

## 4.2.5. Confirmatory Factor Analysis Results

Confirmatory Factor Analysis (CFA), which is performed to assess the measurement model for all latent variables presenting more than one observed item. CFA centers on how and the degree to which the observed variables are associated with their underlying observed variables and how both of them are caused by the latent constructs; therefore, the strengths of the regression paths coefficients from unobserved latent constructs to the observed factors, commonly referred to as factor loadings, are the most important (Sarstedt et al., 2011). Because the CFA model centers mainly on the association among constructs and their measured variables within the framework of SEM, it symbolizes what is known as the measurement model (MacKenzie et al., 2005).

#### 4.2.5.1. Measurement Model Specification

In the present dissertation, the hypothesized measurement model indicates that each latent construct is reflected by three or more items. First, user control (UC) latent variable is reflected by the four indicators of UC1 through UC4. Second, two-way communication (TC) latent variable is reflected by the five indicators of TC1 through TC5. Third, brand awareness (AWA) latent variable is reflected by the three indicators of AWA1 through AWA3. Fourth, brand image (IMG) latent variable is reflected by the five indicators of IMG1 through IMG5. Fifth, consumer-based brand equity (EQT) latent variable is reflected by the four indicators of EQT1 through EQT4. Sixth, brand choice (CHO) latent variable is reflected by the three indicators of CHO1 through CHO3. Seventh, price premium (PRC) latent variable is reflected by the three indicators

of PRC1 through PRC4. Finally, buying intention (BY) latent variable is reflected by the three indicators of BY1 through BY4.

## 4.2.5.2. Measurement Model Identification

The valid approximation of model parameters demands that the model be recognized: there must be a proper number of observed variances and covariances to approximate all of the unknowns (Kelloway, 1998). Thus, the t-rule is appropriate for confirmatory factor analysis.

For the present measurement model with 30 observed variables, the number of variances and covariances is 30(30+1)/2 = 465. The model parameters to be estimated are 27 covariances of latent variables, 30 factor loadings, and 30 measurement error variances, for a total of 87 parameters. Therefore, the measurement model is overidentified and an examination of the model is conceivable (Park, 2003).

# 4.2.5.3. Assessment of Overall Model Fit: Pilot Phase

CFA has been run on the randomly selected data (n=422) using AMOS version 20.0 and has displayed that all 30 items load highly on their corresponding constructs. The following sections present overall goodness of model fit evidences for the measurement model.

#### 4.2.5.4. Overall Goodness of Model Fit

In the present dissertation, the measurement model has been estimated by conducting a confirmatory factor analysis (CFA). Khattree and Naik (1955) suggest that the multivariate normality assumption must be assessed and study results show that there was not infringement of multivariate normality. Because there is not infringement of the assumption of multivariate normality, the maximum likelihood method of estimation has been employed.

From the findings of the Absolute Fit Measures, the values for Goodness-of-fit Index (GFI), Chi-square/degrees of freedom ratio, and Root mean square error of approximation (RMSEA) are exhibited as follows: 1). GFI= .87; 2).  $X^2/df = 2.4$ ; 3). RMSEA= .058 (Table 12). Three of these indices have reached the limit of threshold.

From the findings of the incremental fit measures, the values for Normed Fit Index (NFI), Comparative Fit index (CFI), Incremental Fix Index (IFI), and Relative Fit Index (RFI) are conveyed as follows: 1). NFI=.916; 2). CFI = .949; 3). IFI = .949 and 5). RFI= .902 (Table 12). Based on the criteria of Goodness-of-fit, the values for NFI, CFI, IFI, and RFI are recommended to be in a range between 0 and 1. The values obtained have satisfied the threshold criteria.

Goodness-of-fit Statistics		Values	Desired range of values for a good fit	Reference
Absolute fit measures			-	
Chi-square test Degrees of Freedom Chi-square / degrees of freedom ratio Goodness-of-fit index Root mean square error of approximation	X <sup>2</sup> df X <sup>2</sup> /df GFI RMSEA	905 373 2.4 .87 .058	0 < 3 (Good) < 5 (Acceptable) >0.85 <0.08	Diamantopoulos & Sigua (2005) Bagby et al. (1998) Hu & Bentler (1998)
Incremental fit measures				
Relative Fit Index Normed fit index Comparative fit index Incremental Fix Index	RFI NFI CFI IFI	.902 .916 .949 .949	>.90 >.90 >.90 >.90	Byrne (2001)
Parsimonious fit measures				
Parsimonious normed fit index Parsimonious goodness-of- fit index	PNFI PGFI	.786 .695	>.50 >.50	Fu et al. (2013)

Table 12- Confirmatory Factor Analysis for the Overall Measurement Model

From the findings of the parsimonious fit measures, the values for Parsimony Normed Fit Index (PNFI) and Parsimony Goodness of Fit Index (PGFI) are conveyed as follows: 1). PNFI= .786 and 2). PGFI= .695 (Table 12). Based on the Goodness-of-fit criteria, the values for PNFI and PGFI must be greater than 0.5. In the present dissertation, PNFI and PGFI have fulfilled the lower receivable boundary.

#### 4.2.5.5. Summary of the pilot study

In the present dissertation, the results of measurement model in the pilot phase indicate a good model fit. With the finalization of the pilot phase, the author proceeded to complete the main study.

#### 4.3. Second Phase: Main Study

The next sections cover the procedure for data collection, description of the demographic information, confirmatory factor analysis; measurement model fit statistics, structural equation modeling, and testing hypotheses.

## **4.3.1.** Procedure for Data Collection

The online questionnaire was modified based on the minor comments and feedback received from the pilot phase of the dissertation. All the measurement items were included in the final questionnaires because they show high reliability scores. A self-administered online questionnaire was created using Qualtrics. Similar to the pilot stage, the author utilized Amazon's Mechanical Turk (www.MTurk.com) to collect data for the main test stage. The author has limited respondents only to those US travelers who booked a hotel room from a hotel branded Website in the last 12 months.

The solicitation that participants received through their Mturk account included the purpose of the study, the invitation to participate, and a link to the online survey questionnaire. Exogenous and endogenous constructs in the proposed theory-driven model were assessed using multiple theory-driven scales. The respondents agreed to participate in the Website interactivity dimensions namely social interactivity and system interactivity, brand awareness, brand image, brand equity, brand choice, price premium, and purchase intentions in a self-administered online questionnaire. The target population in the main phase was US travelers who have booked a hotel room in the last 12 months. Likewise, the sampling frame included travelers who booked a hotel room using a hotel branded Website. The appropriate conditions for the selection of the sampling frame included adult US travelers, 18-years or older, who booked a hotel room using a hotel branded Website.

The online questionnaire was sent to a 554 randomly selected US travelers sample who booked a hotel room in the last 12 months. Within twenty-four hours, 527 respondents qualified for the study. This signifies a response rate of 95%. Twenty seven respondents did not qualify for the survey. The first question of the online survey was for screening purposes, to ensure that only those respondents who booked a hotel room in the past year from a hotel branded Website would participate in the study. Out of these 527 respondents who qualified for the study, after inputting the data into SPSS, 31 respondents missed the attention check questions. Therefore, the final sample for data analysis was 496 participants. In the context of structural equation modeling, suggestions for sample size range from as low as 5 respondents for each observed variable to as high as more than 50 (Jaccard & Wan, 1996). Table 13 displays the descriptive statistics of measurement items.

Construct	Items	Mean	S.D.
User Control	UC1. I felt that I had a lot of control over my visiting	5.53	1.06
	experiences at the hotel Website UC2. While I was on the hotel Website, I could choose freely	5.36	1.08
	what I wanted to see. UC3. While surfing the hotel Website, I had control over what I can do on the site	5.57	1.06
	what I can do on the site. UC4. While surfing the hotel Website, my actions decided the kind of experiences I get.	5.58	1.01
Two-way	TC1. This hotel Website is effective in gathering visitor's	4.71	1.39
Communication	feedback.		
	TC2. This hotel Website makes me feel like it wants to listen to its visitors.	4.69	1.37
	TC3. This hotel Website encourages visitors to offer feedback.	4.67	1.43
	TC4. This hotel Website gives visitors the opportunity to talk back.	4.66	1.42
	TC5. This hotel Website facilitates two-way communication between the visitors and the site	4.36	1.48
Brand	AWA1. The name of this hotel is well-known in the hotel	5.93	1.25
Awareness	industry. AWA2. This hotel is recognized as a strong hotel brand.	5.81	1.24
	AWA3. In comparison to other hotels, this hotel is a leading	5 20	1.26
Brand Image	brand in the industry. IMG1. This hotel is known as a company that takes good	5.29 5.47	1.36 1.10
Dranu iniage	care of their trade guests.	5.47	1.10
	IMG2. We can predict how this hotel brand will perform.	5.44	1.13
	IMG3. In comparison to other hotel brands, this hotel brand	5.33	1.18
	is known to consistently deliver very high quality.	5.20	1 0 1
	IMG4. In comparison to other hotel brands, this hotel brand is highly respected.	5.30	1.21
	IMG5. This hotel's brand has a very rich history.	5.10	1.35
Brand Equity	EQT1. It makes sense to book hotel rooms/services from hotel X Website instead of any other brand, even if they are	4.86	1.24
	the same. EQT2. Even if another hotel brand has same features as X, I would prefer to huw X	4.93	1.38
	would prefer to buy X. EQT3. If there is another hotel brand as good as X, I prefer	4.86	1.35
	to buy X. EQT4. If another hotel brand is not different from X in any way, it seems smarter to purchase from hotel X.	4.90	1.32
Brand Choice	CHO1. Even if other competing brands are not different from	4.85	1.35
Drand Choite	X in any way, it seems smarter to choose an X hotel. CHO2. An X hotel is always a superior choice to its rival	4.54	1.33
	hotels. CHO3. It makes sense to choose X instead of any other hotel	4.75	1.42
	brand, even if they are the same.	т.13	1.37

Table 13- Descriptive Statistics of Measurement Items

Construct	Items	Mean	S.D.
Price Premium	PRC1. The price of hotel brand X would have to go up quite a bit before I would not consider buying it.	4.10	1.64
	PRC2. I am willing to pay a higher price for hotel X than for other hotel brands.	4.00	1.63
	PRC3. I am willing to pay a lot more for hotel X than for other hotel brands.	4.54	1.63
Buying	BY1. I would book a room in hotel brand X.	5.83	1.02
Intention	BY2. I would seriously consider booking a room in hotel brand X	5.82	1.03
	BY3. It is very likely that I would book a room in hotel brand X.	5.72	1.10

# 4.3.2. Description of the Demographic Information: Main Study

In the main study, the target population of the present dissertation was US travelers who booked a hotel room in the last 12 months using a hotel branded Website. The main study participants consisted of 54.8 % males and 45.2 % female, with an age range from 18 to 66. The largest age group was between 26 and 35 years old (41%) and the second largest age group was 25 or younger (25.2%). The majority of participants were single (49.2%), while the second largest group was married (39.5%). Table 14 displays the frequency distribution of the respondents' gender, age, and marital status.

Demographic Variables	Frequency	Valid percentage		
Gender (n=422)				
Male	272	54.8		
Female	224	45.2		
Age (n=422)				
25 or younger	125	25.2		
26-35	205	41.3		
36-45	98	19.8		
46-55	41	8.3		
56-65	23	4.6		
66 or older	4	.8		
Marital Status (n=422)				
Married	196	39.5		
Separated	7	1.4		
Divorced	33	6.7		
Widowed	5	1.0		
Single	244	49.2		
Prefer not to answer	11	2.2		

Table 14- Descriptive Statistics for Demographics by Gender, Age, and Marital status

Of all participants, around 83.6% completed some higher education. The largest educational group was "four-year bachelor degree" (39.1%), whereas the second largest educational group had "some college background" (28.4%); "graduate school" and "associate degree" were slightly fewer than the second group, at 16.1% and 7.3% respectively (Table 15).

Table 15- Descriptive Statistics for Demographic Variables of the sample by Education

Demographic Variables	Frequency	Valid percentage
Education (n=422)		
High School	45	9.1
Associate degree (2 year)	36	7.3
Some college	141	28.4
Bachelor's Degree (4 year)	194	39.1
Master's Degree	69	13.9
Doctorate Degree	11	2.2

The largest group for annual income was between \$25,000 and \$50,000 (27.4%), and \$50,001 and \$75,000 (20.4%) respectively, with 67% of participants' annual income being less

than \$75,000 and 30.8% of that being more than \$75,000 (including \$75,000), and 2.2% preferred not to answer (Table 16).

Demographic Variables	Frequency	Valid percentage
Annual Income (n=422)		
\$25,000 or less	95	19.2
\$25,001-\$50,000	136	27.4
\$50,001-\$75,000	101	20.4
\$75,001-\$100,000	76	15.3
\$100,001 - \$150,000	49	9.9
\$150,001- \$200,000	19	3.8
\$200,001 or more	9	1.8
Prefer not to answer	11	2.2

Table 16- Descriptive Statistics for Demographic Variables of the sample by Income

Of all participants, around 77% were Caucasian. The second largest ethnicity group was "Asian/Pacific" (8.1%), whereas the third largest ethnicity group was "African American" (7.3%). "Hispanic" and "other" ethnic categories were slightly fewer than the other groups, at 5.6% and 2% respectively (Table 17).

Table 17- Descriptive Statistics for Demographic Variables of the sample by Ethnicity

Demographic Variables	Frequency	Valid percentage
Ethnicity (n=422)		
Caucasian	330	78.2
Asian/Island Pacific	42	10.0
African American	25	5.9
Hispanic	22	5.2
Other	3	.7

Of all participants, around 52.6% used their Laptop to book a hotel room. The second largest device group was "PC" (39.5%), whereas the third largest device group used "Tablet and Smartphone" (7.6%) (Table 18).

Demographic Variables	Frequency	Valid percentage
Device (n=422)		
PC	196	39.5
Laptop	261	52.6
Tablet	17	3.4
Smartphone	21	4.2
Other	1	.2

Table 18- Descriptive Statistics for Demographic Variables of the sample by Device

Of all participants, around 44.2% stayed in a "Midscale" hotel category. The second largest hotel type group was "Upscale" (35.5%), whereas the third largest hotel type group stayed in an "Economy" hotel category (12.5%). Of all respondents around 92.7% personally booked a hotel room using a hotel branded Website. Finally, of all participants around 57.1% did not participate in a frequent guest program, whereas 42.9% participated in a frequent guest program (Table 19).

Demographic Variables	Frequency	Valid percentage
Personal Reservation (n=422)		
Yes	460	92.7
No	36	7.3
Frequent Guest (n=422)		
Yes	213	42.9
No	283	57.1

Table 19- Descriptive Statistics for Demographic Variables of the sample by hotel type

#### 4.3.3. Data Analysis for the Main Study

To examine the impact of Website interactivity on brand components which in turn influence behavioral intentions, data have been investigated based on Anderson and Gerbing's (1988) two-step method —confirmatory factor analysis (CFA) and structural equation modeling (SEM). Analysis of Moments Structures 20.0 (AMOS) was employed to investigate the theorydriven model proposed in the present dissertation. The structural equation modeling (SEM) was utilized to assess how well the proposed theory-driven model explained the gathered data (Hair et al., 2010).

First, CFA was used to test the measurement model (Hair et al., 1998). In this step, the author tested the reliability of the scale, the convergent and discriminant validity of the measurement model. The second step tested the research hypotheses and structural model. Relying on the model's goodness-of-fit test, the author has considered several fit indices for instance  $(X^2)/df \le 3$  (Hayduck, 1987), Goodness-of-fit Index (GFI)  $\ge .85$  (Bagby et al. 1998), normed fit index (NFI)  $\ge .9$  (Hair et al., 2010), Parsimony Goodness of Fit Index (PGFI)  $\ge .5$  (Scott, 1994), and root mean square error of approximation (RMSEA)  $\le .08$  (Hu & Bentler, 1998).

#### 4.3.4. Evidence of Validity and Reliability

Inter-item reliability, composite reliability (CR), average variance extracted (AVE), and convergent validity were tested to ensure that there were no reliability and validity issues. Scale composite reliability consists of the reliability of an aggregated scale and AVE refers to the variance in the items explained by the common factor (Farrell, 2010). Table 20 shows the threshold for reliability and validity. In the present dissertation convergent validity has been examined through composite reliability (CR) and average variance extracted (AVE). Inter-item reliability (Cronbach's Alpha) has also been reported for each variable. Observing inter-item reliability, Cronbach's alpha values range from 0.83 to 0.94 (Table 21), establishing an acceptable internal consistency for all constructs incorporated in the proposed theory-driven model. Composite reliabilities of Website interactivity dimensions (user control and two-way communication), brand knowledge components (brand awareness and brand image), consumer-

based brand equity, brand choice, price premium, and buying intention range from 0.825 to

0.940, reflecting acceptable ranges (Table 21) (Hair et al., 1988).

Criteria for Reliability	Minimum Value		
Scale Composite Reliability	> 0.7		
Cronbach' Alpha	> 0.7		
Criteria for Convergent Validity			
Scale Composite Reliability (SCR)	> AVE		
Average Variance Extracted (AVE)	> 0.5		
Criteria for Discriminant Validity			
Inter-construct correlations	< Square root of AVE		
Maximum Shared Squared Variance (MSV)	< AVE		
Average Shared Squared Variance (ASV)	< AVE		

Source: Table developed for this dissertation

Construct validity has been investigated with convergent validity and discriminant validity (Fornell & Larcker, 1981). Convergent validity shows the extent to which conceptually comparable measures are significantly correlated. Table 21 shows that the values for CR are greater than 0.7 and the values for AVE range from 0.543 to 0.838, surpassing the 0.50 threshold value.

The comparison of CR and AVE values suggest that there are no convergent validy issues

(Chau & Lai, 2003). The results show that CR values are greater than values for AVE.

Additionally, in Table 21, the standardized factor loadings are significant at the 0.001 level, and

the item loadings are higher than the suggested 0.5 (Buil et al., 2013; Cabrera-Nguyen, 2010),

ensuing an acceptable convergent validity for each construct.

User Control UC UC UC UC Two-Way TC Communication TC TC Brand AWA Awareness AWA Awareness AWA Brand Image IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHC	22   0.63     23   0.83     24   0.68     21   0.86     22   0.89     23   0.86     24   0.76     25   0.75     A1   0.86	* 0.825 * * * * 0.914 * *	<b>y</b> 0.543 0.682	0.83
Two-Way TC Communication TC Communication TC TC Brand AWA Awareness AWA Awareness AWA Brand Image IMC IMC Brand Equity EQT EQT EQT EQT EQT EQT EQT	22   0.63     23   0.83     24   0.68     21   0.86     22   0.89     23   0.86     24   0.76     25   0.75     A1   0.86	* * * 0.914 * *		
UC: UC: UC: UC: UC: UC: UC: UC: UC: TC: TC: TC: TC: TC: TC: TC: TC: TC: T	23   0.83     24   0.68     21   0.86     22   0.89     33   0.86     24   0.76     25   0.75     A1   0.86	* * 0.914 * * *	0.682	0.92
Two-Way TC Communication TC TC TC Brand AWA Awareness AWA Awareness AWA Brand Image IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHC	24 0.68   21 0.86   22 0.89   23 0.86   24 0.76   25 0.75   A1 0.86	* 0.914 * * * *	0.682	0.92
Two-WayTCCommunicationTCTCTCTCTCTCTCBrandAWAAwarenessAWABrand ImageIMGIMGIMGIMGIMGBrand EquityEQTEQTEQTBrand ChoiceCHG	1   0.86     2   0.89     3   0.86     4   0.76     5   0.75     A1   0.86	* 0.914 * * *	0.682	0.92
Communication TC2 TC3 TC4 TC3 Brand AWA Awareness AWA Awareness AWA Brand Image IMC3 IMC3 IMC3 IMC4 Brand Equity EQT EQT4 EQT4 EQT4 EQT4 EQT4 EQT4 EQT4	2     0.89       3     0.86       4     0.76       5     0.75       A1     0.86	* * *	0.682	0.92
TC: TC: TC: Brand AWA Awareness AWA AWA Brand Image IMG IMG IMG Brand Equity EQT EQT EQT EQT EQT EQT EQT	3 0.86   4 0.76   5 0.75   A1 0.86	* *		
TC4 TC3 Brand AWA Awareness AWA AWA Brand Image IMC6 IMC6 IMC6 IMC6 IMC6 EQT EQT EQT EQT EQT EQT EQT	40.7650.75A10.86	*		
TC: Brand AWA Awareness AWA AWA Brand Image IMG IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHG	25 0.75 A1 0.86	*		
Brand AWA Awareness AWA AWA Brand Image IMG IMG IMG Brand Equity EQT EQT EQT EQT EQT EQT EQT	A1 0.86			
Awareness AWA AWA Brand Image IMG IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHG				
AWA Brand Image IMG IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHG		* 0.906	0.763	0.88
Brand Image IMG IMG IMG Brand Equity EQT EQT EQT Brand Choice CHG	A2 0.95	*		
IMC IMC IMC IMC Brand Equity EQT EQT EQT EQT Brand Choice CHC	A3 0.80	*		
IMG IMG Brand Equity EQT EQT EQT EQT Brand Choice CHC	G1 0.77	* 0.905	0.660	0.89
IMC IMC Brand Equity EQT EQT EQT Brand Choice CHC	G2 0.68	*		
IMG Brand Equity EQT EQT EQT EQT Brand Choice CHC	G3 0.90	*		
Brand Equity EQT EQT EQT EQT Brand Choice CHC	G4 0.93	*		
EQT EQT EQT Brand Choice CHC	G5 0.76	*		
EQ1 EQ1 Brand Choice CHC	Г1 0.81	* 0.920	0.743	0.93
EQT Brand Choice CHC	Г2 0.89	*		
Brand Choice CHO	ГЗ 0.87	*		
	Г4 0.88	*		
CHC	O1 0.91	* 0.917	0.787	0.92
	0.82	*		
CHC	0.92	*		
Price premium PRC	0.93	* 0.851	0.661	0.84
PRC	0.85	*		
PRC		*		
Buying BY	0.63	* 0.939	0.838	0.94
Intention BY		*		
BY	0.92			

Table 21- Measurement Results

AVE: Average variance extracted

\*\*\*p<0.01; \*\*p<0.05; \*p<0.001

Discriminant validity reflects the extent at which the variables of different constructs are noticeably distinct from each other. Farrell (2010) suggests that discriminant validity may be investigated considering the average variance extracted (AVE).

	CR	AVE	MSV	ASV	1	2	3	4	5	6	7	8
1. UC	.825	.543	.343	.203	.737							
2.TC	.914	.682	.257	.141	.234	.826						
3.AWA	.906	.763	.527	.171	.334	.234	.874					
4.IMG	.905	.660	.527	.288	.507	.395	.726	.812				
5.EQT	.920	.743	.640	.318	.461	.400	.342	.541	.862			
6.PRC	.851	.661	.476	.216	.255	.378	.253	.432	.678	.813		
7.CHO	.917	.787	.640	.312	.418	.399	.368	.556	.800	.690	.887	
8.BY	.939	.838	.347	.233	.586	.234	.434	.535	.589	.342	.540	.915

Table 22- Discriminant Validity

Note: UC, user control; TC, two-way communication; AWA, brand awarenes; IMG, brand image; EQT, brand equity; CHO, PRC, price premium; brand choice; BY, buying intention; CR, composite reliability; AVE, averance variance extracted. MSV, Maximum Shared Squared Variance; ASV, Average Shared Squared Variance (ASV). The square root of AVE is highlighted in bold.

Comparing factor correlations with the square root of AVE offers favorable support for discriminant validity (Nusair et al., 2011; Fornell & Larcker, 1981). Table 22 shows that high discriminant validity occurs between each pair of constructs. To demonstrate, user control (UC) reveals discriminant validity from other constructs. The square root of AVE for user control (UC) is 0.737 while the share variance between (UC) and other constructs range from 0.234 to 0.586 suggesting no discriminant validity issues. Also, the square root of AVE for brand awareness (AWA) is 0.874 while the share variance between awareness and other constructs range from 0.253 to 0.726. By comparing the Maximum Shared Squared Variance (MSV) and the Average Shared Squared Variance (ASV) with the AVE, it is observed that AVE values are greater than the MSV and ASV. This suggests that there are not discriminant validity issues.

According to the results displayed in Table 21 and Table 22 regarding the results of the measurement model, both convergent and discriminant validities have been met. These results clearly support convergent and discriminant validity of the measurement model. The composite reliability values are greater than the values for AVE and the values for AVE are greater than the threshold of 0.5, meeting convergent validity. Similarly, all values for the square root of AVE

are larger than the corresponding inter-construct correlation estimates (Fornell & Larcker, 1981). Therefore, a theoretically adequate model has been attained in the present study.

## 4.3.5. Confirmatory Factor Analysis (CFA)

CFA has been used to confirm the factor structure of a set of observed items to the underlying constructs (Fornell & Larcker, 1981; Hair et al., 1998). From the findings of the Absolute Fit Measures, the values for Goodness-of-fit Index (GFI), Chi-square/degrees of freedom ratio, and Root mean square error of approximation (RMSEA) are exhibited as follows: 1). GFI= .894 2).  $X^2/df = 2.3$ ; 3). RMSEA= .052 (Table 22). Three of these indices have reached the limit of threshold.

From the findings of the incremental fit measures, the values for Normed Fit Index (NFI), Comparative Fit index (CFI), Incremental Fix Index (IFI), and Relative Fit Index (RFI) are conveyed as follows: 1). NFI=.933; 2). CFI = .960; 3). IFI = .961 and 4). RFI= .921 (Table 23). Based on the criteria of Goodness-of-fit, the values for NFI, CFI, IFI, and RFI are recommended to be in a range between 0 and 1. The values obtained have satisfied the threshold criteria.

From the findings of the parsimonious fit measures, the values for Parsimony Normed Fit Index (PNFI) and Parsimony Goodness of Fit Index (PGFI) are conveyed as follows: 1). PNFI= .794 and 2). PGFI= .712 (Table 22). Based on the Goodness-of-fit criteria, the values for PNFI and PGFI must be greater than 0.5. In the present dissertation, PNFI and PGFI have satisfied the lower receivable boundary.

Goodness-of-fit Statistics		Values	Desired range of values for a good fit	Reference
Absolute fit measures				
Chi-square test Degrees of Freedom Chi-square / degrees of freedom ratio Goodness-of-fit index Root mean square error of approximation	X <sup>2</sup> df X <sup>2</sup> /df GFI RMSEA	862.5 370 2.3 .894 .052	0 < 3 (Good) < 5 (Acceptable) >0.85 <0.08	Diamantopoulos & Sigua (2005) Bagby et al. (1998) Hu & Bentler (1998)
Incremental fit measures				
Relative Fit Index Normed fit index Comparative fit index Incremental Fix Index	RFI NFI CFI IFI	.921 .933 .960 .961	>.90 >.90 >.90 >.90	Byrne (2001)
Parsimonious fit measures				
Parsimonious normed fit index	PNFI	.794	>.50	Fu et al. (2013)
Parsimonious goodness-of- fit index	PGFI	.712	>.50	

Table 23-CFA Analysis for the Overall Measurement Model- Main Study

# **4.3.6.** Structural Equation Modeling

SEM includes developing measurement models to define latent variables and subsequently determining relationships or structural equations among those latent variables (Byrne, 2013, p. 260). The author of the present dissertation has built the structural model based on the measurement model obtained in the CFA analysis. Eight latent constructs (User Control, Two-way Communication, Brand Awareness, Brand Image, Brand Equity, Brand Choice, Price premium, and Buying Intention) and 30 observed variables have been used to test the model. In SEM, the significance of the path coefficient in the structural model postulates support for hypothesized relationships among the constructs (Kline, 2011, p. 118). Parallel to the CFA phase, since the normality assumption has been met, the maximum likelihood estimate method using AMOS 20 has been used to investigate the theory-based model of Website Interactivity as a branding tool in the hotel context. SEM, therefore, has examined the causal relationships of the aforementioned constructs incorporated in the theory-driven model.

From the findings of the Absolute Fit Measures, the values for Goodness-of-fit Index (GFI), Chi-square/degrees of freedom ratio, and Root mean square error of approximation (RMSEA) are exhibited as follows: 1). GFI= .88 2).  $X^2/df = 2.6$ ; 3). RMSEA= .058 (Table 24). Three of these indices have reached the limit of threshold.

From the findings of the incremental fit measures, the values for Normed Fit Index (NFI), Comparative Fit index (CFI), Incremental Fix Index (IFI), and Relative Fit Index (RFI) are conveyed as follows: 1). NFI=.921; 2). CFI = .948; 3). IFI = .949 and 4). RFI= .910 (Table 24). Based on the criteria of Goodness-of-fit, the values for NFI, CFI, IFI, and RFI are recommended to be in a range between 0 and 1. The values obtained have satisfied the threshold criteria.

From the findings of the parsimonious fit measures, the values for Parsimony Normed Fit Index (PNFI) and Parsimony Goodness of Fit Index (PGFI) are conveyed as follows: 1). PNFI= .811 and 2). PGFI= .721 (Table 24). Based on the Goodness-of-fit criteria, the values for PNFI and PGFI must be greater than 0.5. In the present dissertation, PNFI and PGFI have satisfied the lower receivable boundary.

Goodness-of-fit Statistics		Values	Desired range of values for a good fit	Reference
Absolute fit measures				
Chi-square test Degrees of Freedom Chi-square / degrees of freedom ratio Goodness-of-fit index Root mean square error of approximation	X <sup>2</sup> df X <sup>2</sup> /df GFI RMSEA	1024.9 383 2.6 .88 .058	0 < 3 (Good) < 5 (Acceptable) >0.85 <0.08	Diamantopoulos & Sigua (2005) Bagby et al. (1998) Hu & Bentler (1998)
Incremental fit measures				
Relative Fit Index Normed fit index Comparative fit index Incremental Fix Index	RFI NFI CFI IFI	.910 .921 .948 .949	>.90 >.90 >.90 >.90	Byrne (2001)
Parsimonious fit measures				
Parsimonious normed fit index	PNFI	.811	>.50	Fu et al. (2013)
Parsimonious goodness-of- fit index	PGFI	.721	>.50	

Table 24- SEM Analysis for the Structural Model- Main Study

As displayed in Table 24, the results of the goodness-of-fit statistics indicate that the structural equation model fit is acceptable.

# 4.3.7. Hypotheses Testing and Findings

All of the results presented in the previous section indicate an acceptable structural model fit. The coefficients of determination (variance explained) were 68 percent for brand image, 12 percent for brand awareness, 37 percent for brand equity, 94 percent for brand choice, 48 percent for price premium, and 34 percent for buying intention. This dissertation has attempted to investigate the interactivity-brand structure relationship in an online hotel context for US travelers. A summary of dissertation findings, including path coefficients and explained variances, is displayed in Table 25. Based on the dissertation results, eight out of ten proposed

hypotheses have been supported.

Parameter estimates structural paths			Standardized path	n p-values	Hypotheses testing		
			Coefficients				
H1: Control	→(+)	Awareness	0.29	0.001 ***	Supported		
H2: Control	<b>→</b> (+)	Image	0.26	0.001 ***	Supported		
H3: Two-way	<b>→</b> (+)	Awareness		ns	No-Supported		
H4: Two-way	<b>→</b> (+)	Image	0.16	0.001 ***	Supported		
H5: Awareness	<b>→</b> (+)	Image	0.63	0.001 ***	Supported		
H6: Awareness	<b>→</b> (+)	Equity		ns	No-Supported		
H7: Image	<b>→</b> (+)	Equity	0.73	0.001 ***	Supported		
H8: Equity	<b>→</b> (+)	Premium	0.69	0.001 ***	Supported		
H9: Equity	<b>→</b> (+)	Choice	0.9	0.001 ***	Supported		
H10: Equity	<b>→</b> (+)	Intention	0.58	0.001 ***	Supported		
*n<0.01 $**n<0.05$ $***n<0.001$ $n=non-significant$							

Table 25- Results of the structural model (n=422).

\*p<0.01; \*\*p<0.05; \*\*\*p<0.001, ns= non-significant

Dissertation results related to hypotheses testing show that:

#### Hypothesis 1: User Control on Brand Awareness

The first hypothesis predicted that there is a significant positive causal relationship between user control of a hotel Website (system interactivity) and hotel brand awareness. The findings relate to H1 (path coefficient = 0.29, p < 0.001) which states that user control is positively associated with brand awareness are consistent with what the literature suggests. For instance, Keng and Lin (2006) suggest that when online users interact and perceive to have an ability to control the communication process, they recall and recognize a brand. This means that without perceiving control in the communication process, online users do not form a strong positive brand awareness of the hotel branded Website.

## Hypothesis 2: User Control on Brand Image

The second hypothesis predicted that there is a significant positive causal relationship between user control of a hotel Website (system interactivity) and hotel brand image. Results from the current study suggest that user control has a significant positive impact on brand image (path coefficient = 0.26, p < 0.001). The findings regarding the relationship between the user control and brand image were consistent with previous studies (Dholakia et al., 2001). This outcome has demonstrated that those individuals who feel they possess more control are more likely to form positive perceptions and to behave more supportively.

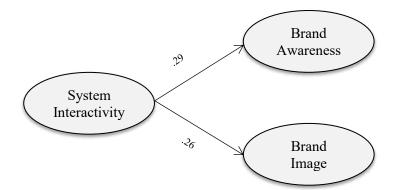


Figure 12. Structural Results of System Interactivity on Brand Knowledge

## Hypothesis 3: Two-Way Communications on Brand Awareness

The third hypothesis predicted there is a significant positive causal relationship between two-way communications of a hotel Website (social interactivity) and hotel brand awareness. In the present dissertation the findings regarding the relationship between the user two-way communication and brand awareness were not consistent with what previous studies suggest (non-significant). Interestingly, the findings were not consistent with several researchers who indicate that two-way communication as a component of Website interactivity has a direct and positive impact on brand awareness ((Madhavaram et al., 2005; Keng & Lin, 2006). This dissertation fails to support that interactive social features permit brands to generate brand awareness.

# Hypothesis 4: Two-Way Communications on Brand Image

The fourth hypothesis predicted that there is a significant positive causal relationship between two-way communication of a hotel Website (social interactivity) and hotel brand image. Results from the current dissertation suggest that two-way communication has a significant positive impact on brand image (path coefficient = 0.16, p<0.001). This result is consistent with Voorveld et al. (2013) who suggest that Website interactivity does not only influence a more favorable brand attitude but also strongly influences the creation of a brand image that is in harmony with the image displayed on the brand's Website.

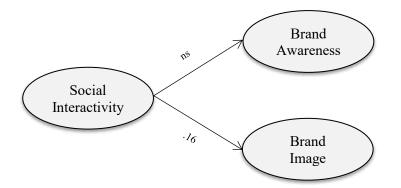


Figure 13. Structural Results of Social Interactivity on Brand Knowledge

# Hypothesis 5: Brand Awareness on Brand Image

The fifth hypothesis predicted that there is a significant positive causal relationship between hotel brand awareness and hotel brand image. Findings from the current dissertation show that brand awareness has a significant positive impact on brand image (path coefficient = 0.63, p < 0.001). This finding is consistent with Yasin et al. (2007). When travelers recognize and recall a hotel brand, they tend to form a strong positive perception in their minds because recognizable hotels are repeatedly preferred to those hotels that are less recognizable.

# Hypothesis 6: Brand Awareness on Brand Equity

The sixth hypothesis predicted that there is a significant positive causal relationship between hotel brand awareness and hotel brand equity. Results from the current dissertation indicate that brand awareness does not have a significant impact on brand equity (nonsignificant). The findings regarding the relationship between the brand awareness and consumerbased brand equity are not consistent with previous studies (Huang & Sarigöllü, 2012; Kim & Kim, 2004; Yoo & Donthu, 2001). This outcome does not demonstrate that when travelers recall and recognize the hotel brand under different circumstances, they would respond more (less) positively to the hotel service, product details, hotel attributes, price or marketing than they would respond to the identical hotel offerings that are not easily recognizable and recalled.

# Hypothesis 7: Brand Image on Brand Equity

The seventh hypothesis predicted that there is a significant positive causal relationship between hotel brand image and hotel brand equity. Findings from the present dissertation show that brand image has a significant positive impact on consumer based equity (path coefficient = 0.73, p<0.001). These findings are consistent with what previous research suggests (Chen, 2010; Faircloth et al., 2001; Capella & Alford, 2001). This outcome demonstrates that high equity hotel brands would tend to present more positive brand associations (brand image) than low equity hotel brands. Hotel brands with positive, distinct and strong brand image would occupy valuable perceptual positions in travelers' mind that are difficult to duplicate and expensive to compete against, consequently creating a dominant hotel competitive advantage.

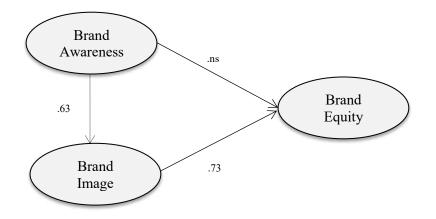


Figure 14. Structural Results of Brand Knowledge and Brand Equity

# Hypothesis 8: Brand Equity on Price Premium

The eighth hypothesis predicted that there is a significant positive causal relationship between hotel brand equity and price premium. Findings from the present dissertation show that brand equity has a significant positive impact on the willingness to pay a price premium (path coefficient = 0.69, p < 0.001). The findings of the present dissertation regarding the relationship between consumer-based brand equity and price premium are consistent with what previous research have suggested (Buil et al., 2013; Netemeyer et al., 2004; Hoeffler & Keller, 2003; Alba et al.,1990). From the results obtained for the H8 it can be concluded that the intention to pay a specific room rate or other hotel offering is a function of the overall perceived value and excellence of the hotel brand. Travelers are more willing to pay a price premium since they perceive an exclusive value in the hotel brand that no other hotel can offer.

#### Hypothesis 9: Brand Equity on Brand Choice

The ninth hypothesis predicted that there is a significant positive causal relationship between hotel brand equity and brand choice. Findings from the present dissertation show that brand equity has a significant positive impact on brand choice (path coefficient = 0.9, p < 0.001). The findings regarding the relationship between consumer-based brand equity and brand choice are consistent with previous research (Lu et al., 2010; Hoeffler & Keller, 2003). This outcome demonstrates that travelers who perceive psychological distinctions and positive perceptions of the brand are highly influenced to choose the hotel brand among several competitors hotel brands presented in the Internet. Therefore when travelers perceive the hotel brand as valuable they will show a strong intention to choose the same hotel brand.

# Hypothesis 10: Brand Equity on Buying Intention

The tenth hypothesis predicted that there is a significant positive causal relationship between hotel brand equity and buying intention. Findings from the present dissertation show that brand equity has a significant positive impact on buying intention (path coefficient = 0.58, p<0.001). The findings regarding the relationship between consumer-based brand equity and buying intention are consistent with previous research (Buil et al. 2013; Tolba & Hassan, 2009). This outcome suggests that added-value (brand equity) affects travelers preferences and purchase intensions. Travelers who perceive the brand as valuable show a strong intention to buy the same hotel brand among several competitor hotel brands presented in the Internet. Therefore hotel brands with higher positive hotel brand equity caused greater online purchase intensions.

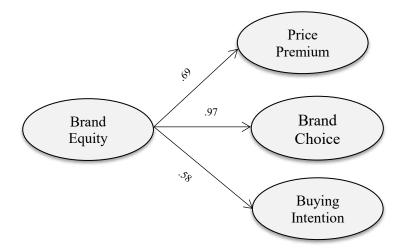


Figure 15. Structural Results of Brand Equity on Behavioral Intentions

Finally, Table 26 summarizes the decomposition of the effects of the constructs in the proposed theory-driven model of Website interactivity structure on the brand and behavioral intentions structures.

Dependent	Predictor						
	CONTROL	TWO-WAY	AWA	IMAGE	EQUITY		
	System	Social					
	interactivity	interactivity					
Direct Effects							
AWA	0.29	ns					
IMAGE	0.26	0.16	0.63				
EQUITY			Ns	0.73			
PREMIUM					0.69		
CHOICE					0.9		
INTENTION					0.58		
Indirect Effects							
AWA		0.14					
IMAGE	0.26	0.22					
EQUITY	0.38	0.28	0.46				
PREMIUM	0.26	0.19	0.32	0.50			
CHOICE	0.37	0.27	0.45	0.70			
INTENTION	0.22	0.16	0.27	0.42			
<b>Total Effects</b>							
AWA	0.29	0.14					
IMAGE	0.52	0.38	0.63				
EQUITY	0.38	0.28	0.46	0.73			
PREMIUM	0.26	0.19	0.32	0.50	0.69		
CHOICE	0.37	0.27	0.45	0.70	0.9		
INTENTION	0.22	0.16	0.27	0.42	0.58		

Table 26. Direct, indirect and total effects – estimates

## 4.4. Summary

This chapter presents the results of this dissertation and includes the discussion of the preliminary study (first phase) including the instrument and measurement, data collection, description of the demographics, evidence of validity and reliability, and a CFA analysis. Additionally, this chapter includes a discussion of the main study (second phase) including procedure for data collection, description of the demographics, data analysis techniques,

Note: CONTROL= User Control; TWO-WAY = Two-way communication; AWA = Brand awareness; IMAGE = Brand image; EQUITY = Brand equity; PREMIUM = Price premium; CHOICE = Brand choice; INTENTION = Buying intention

evidence of validity and reliability, CFA, SEM and hypotheses testing. The hypotheses testing shows support for eight out of ten proposed hypotheses.

The first set of hypotheses that predicted that user control (system interactivity) influences brand knowledge components (brand awareness and brand image) were supported. The respondents have demonstrated that perceiving control in the communication process influences recognition and recall of the hotel brand under different circumstances, providing a more favorable hotel brand image. The second set of hypotheses that predicted that two-way communication (social interactivity) influences brand knowledge components (brand awareness and brand image) were partially supported. Contrary to expectations, the data did not support hypothesis 3 that suggests that two-way communication impacts brand awareness. The results have not uncovered that being part in a reciprocal communication influences travelers to recognize and recall the hotel brand under distinct circumstances. However, the participants have determined that being part of a reciprocal communication does influence them to perceive the hotel brand as more positive (brand image).

As proposed in hypothesis 5 and 7, there were significant direct effects of brand awareness on brand image and brand image on equity. Contrary to expectations, the data did not support Hypothesis 6 as the direct impact of brand awareness on brand equity and is not significant. The last set of hypotheses that predicted consumer-based brand equity impacts price premium, brand choice, and buying intention were supported. These findings highlight the significance of the components of Website interactivity as a powerful tool to build hotel brands online and to influence behavioral intentions. In the next chapter, the author discusses dissertation results and provides emergent conclusions and implications for practice and theory.

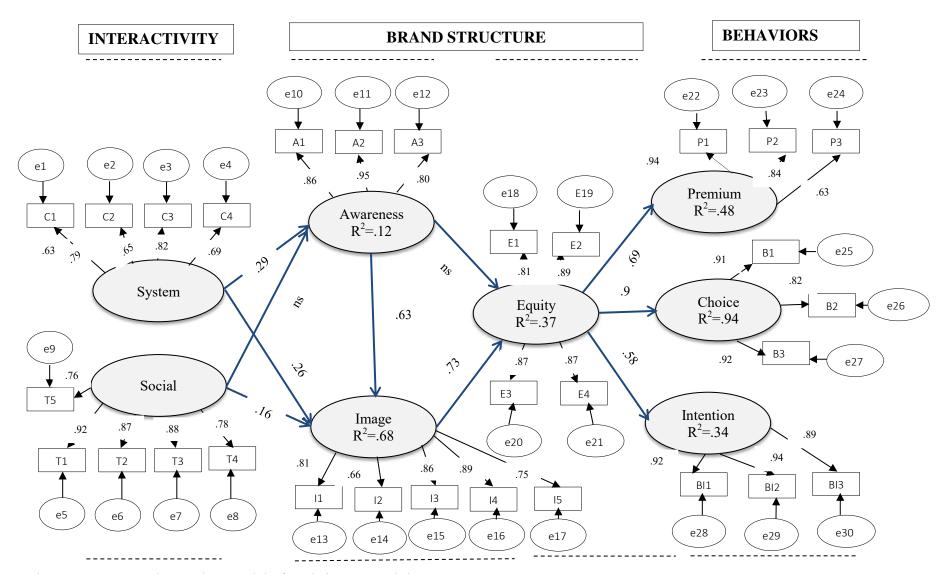


Figure 16. Structural Equation Model of Website Interactivity Note: System = User Control (System Interactivity); Social = Two-way communication (Social Interactivity).

# CHAPTER FIVE: SUMMARY, DISCUSSIONS, IMPLICATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

The major goal of this dissertation is to investigate the influential role of the dimensions of Website interactivity (social and system interactivity) as branding tools in the context of hotel Websites. The aim is to understand how Website interactivity might be better exploited and managed to the highest achievable extent in order to build hotel brands successfully online. A theoretical model is proposed from an extensive literature review. Based on this dissertation, hypotheses are developed and examined in establish the effect of Website interactivity on a branding structure which in turn affects a behavioral structure including price premium, brand choice, and buying intention. This chapter presents a summary of the study, conclusions, discussions, practical and theoretical implications, and lastly suggestions for future research. A framework of this chapter is displayed below.

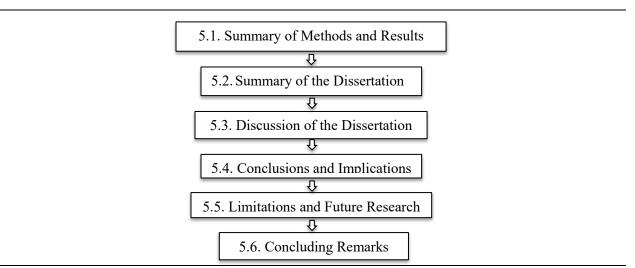


Figure 17. Chapter Five Structure

#### 5.1. Summary of Methods and Results

In the present dissertation, a self-administered questionnaire is elaborated and circulated to the sampling frame through a filed intercept methodology to collect data regarding participant travelers' hotel booking experiences. The questionnaire is elaborated and pre-tested for use to obtain information about Website interactivity dimensions (system and social interactivity) of hotel branded Websites, brand knowledge components (brand awareness and brand image), consumer-based brand equity, behavioral intentions (price premium, brand choice, and buying intention), and individual demographic characteristics including gender, annual income, age, marital status, education, and hotel experiences. Amazon's Mechanical Turk (www.MTurk.com) is used to collect data for a more diverse sample for the pilot and main test stages. Participants were limited only to those US travelers who have booked a hotel room from a hotel branded Website in the last 12 months.

For the main study, the online questionnaire was sent to a sample of 554 randomly selected US travelers who booked a hotel room in the last 12 months. Within 24 hours, 527 respondents qualified for this dissertation. This signifies a response rate of 95%. Twenty seven of the respondents did not qualify for the survey. The first question of the online survey was for screening purposes, to ensure that only those respondents who booked a hotel room in the past year from a hotel branded Website participated in the study. Five hundred twenty seven participants did qualify for the study due to their experience booking a hotel room in the last 12 months using a hotel branded Website. After inputting the data into SPSS, 31 participants missed responding to the attention check questions. Thus, the final sample usable for data analysis ended up being 496 participants. These 496 participants were considered for CFA and SEM analysis purposes.

#### **5.2. Summary of the Results**

In the last ten years, there has been an intense technological development sustained by the extensive growth of the Internet. The growth of the Internet has changed the manner in which businesses operate and travelers obtain product and services. Hoteliers and hotel brand managers have been questioning whether the existent marketing approaches to position their brands, with the goal to operate in a conventional and online setting, may be enhanced. Like in any business across different sectors, the Internet has been accepted as a dominant platform that has modified the manner hotel brands conduct business and the way travelers and hotel brands interact (Öğüt, & Onur Taş, 2012). Hoteliers have been allocating resources to adapt and succeed in this new business setting. They have been working actively to use their hotel branded Websites to evade intermediaries, and to manage efficiently their properties, and to optimize profits. Hoteliers are moving towards communicating directly with their consumers, providing them with the capacity to control the communication and decision making process from searching information to communicating and booking an entire trip online (Sambhanthan & Good, 2013).

The Internet has become one of the most efficient and best manageable sources of interactivity (Walraven et al., 2009). It is an exciting medium for multiple reasons; for instance it provides an interactive platform where worldwide users can interact without too much effort (Nikitina et al., 2012). It has become an interactive medium that offers more influence over the communication process and the information acquisition development (Adam et al. 2011). In the travel and tourism industry, the Internet allows travelers to be a functional contributor in the marketing practice. One important attribute that differentiates the latest marketing channel from traditional media is interactivity (Wang et al., 2013; Liu, 2012; Jih et al., 2011; Kiss & Esch, 2006). This attribute has caused Websites to be recognized as a fundamental instrument for

hotels to communicate with travelers. As Jeong et al., 2003 (p. 162) state "Given the growing importance of the Internet as a distribution medium in the lodging industry, developing and maintaining an effective Web site will be critical to the success of the business".

Regardless of the importance of Website interactivity, very little research has been done in the hospitality and tourism literature that empirically examines the influential role of interactivity on hotel brand building. Although significant empirical investigation to e-commerce Websites is found in numerous studies, and the well accepted conviction that Website interactivity is a pivotal component of the Internet, to this date very few researchers in the hospitality and tourism industry have devoted efforts to investigate the effective power of the dimensions of Website interactivity (social and system interactivity) on brand elements such as brand knowledge (brand awareness and brand image) and brand equity, and on consumer behavioral intentions including price premium, brand choice, and buying intentions.

Research indicates that certainly one major obstacle challenging businesses in general including hotels is not to consider a Web design that includes the structure of the Website, navigation schemes, the layout, the conceptual design with branding, and most importantly interactivity features such as user-to-user and user-to-system interactivity (Wang, 2011). The realization of any particular company is based in large part on the excellence of the design of its Website (Hofbauer et al., 2010). To overcome this, Auger (2005) states that Website interactivity for Internet-based e-commerce arises mainly from its capacity to have favorable short-term and long-term impact on consumer perception and behavior (Schlosser, 2000).

Kim et al. (2010) state that a Website design in relation to its interactivity is correlated with overall performance. Additionally, Lilleker and Malagón (2010) suggest Website designers

to completely incorporate interactivity when building Websites for commercial businesses. Interactivity of an e-commerce site offers simplified communications, personalization of given information, image control, and entertainment for consumers (Mathwick, 2002). This permits consumers to manage their individual encounters and communication (Lowry et al., 2006).

As stated in current and past research, Website interactivity has been conceptualized, explored, and studied in relation to meaningful advertising and marketing constructs, yet very limited investigations have focused on Website interactivity in the hotel context. In reality, not a single study of Website interactivity as a branding tool in the hotel context was found. This dissertation represents the first attempt to understand the influential power of Website interactivity as a branding tool. Regardless of its recognized value, limited knowledge exists about the impact of the dimensions of Website interactivity (system interactivity and social interactivity) on brand structure including the components of brand knowledge (brand awareness and brand image) and consumer-based brand equity, and on the most representative components of behavioral intentions (price premium, brand choice, and buying intention).

The limited existing research is in general marketing and provides an incomplete understanding of the significance, capacity, and impact of the interactivity of hotel branded Websites. As today, hoteliers and hospitality scholars have not advanced substantially in utilizing Website interactivity in terms of its competence to foster traveler-Website interaction, to help influence hotel brand awareness, to form the desired hotel brand image, to augment brand equity, to influence brand choice, to persuade the willingness to pay a price premium, and to induce buying intention. And, most critically, to create a strong hotel brand and to generate a fascinating experience online.

While constructing and preserving sustainability with the existent literature of interactivity in marketing, e-commerce, advertising, and other related disciplines, a theory-driven framework is proposed to investigate empirically the effects of system interactivity (user control) and social interactivity (two-way communications) on hotel brands. The proposed theory-driven model describes first relationships between Website interactivity and the components of brand knowledge, second relationships between brand knowledge and consumer-based brand equity, and third relationships between brand equity and behavioral intentions including price premium, brand choice, and buying intention.

The empirical findings indicate that the brand building theory-driven model assists to explicate the value of the two dimensions of Website interactivity (social and system interactivity) as branding tools in the context of hotel Websites. From the analysis, the results reinforce the expectations that travelers who perceive control in the communication process, a reciprocal communication among users, and the recognition of the hotel brand easily under different circumstances can have positive and strong perceptions of the hotel brand. Additionally, strong elements of brand knowledge yield a stronger consumer-based brand equity which in turn will influence brand choice, persuade the willingness to pay a price premium, and induce the intention to buy.

#### **5.3.** Discussion of Study Results

Website interactivity (system interactivity and social interactivity) is used to examine the impact on brand awareness and brand image as components of brand knowledge. Also, the center of the dissertation is to examine empirically the cause-effect relationship between Website interactivity, brand knowledge, consumer-based brand equity, and behavioral intentions.

This dissertation establishes that there is a significant cause and effect relationship between Website interactivity and the components of brand knowledge. The findings suggest that user control has a direct positive relationship with brand awareness and brand image, and that two-way communication has a direct positive relationship with brand image. The findings in this dissertation are aligned with Voorveld et al. (2013), Neelotpaul (2011) and Jih et al. (2011) who suggest that Website interactivity is an essential contributing element of brands including brand knowledge components namely brand awareness and brand image. Based on their suggestions, they call for urgent empirical investigations to comprehend the role of Website interactivity as a branding tool.

The results in this dissertation suggest that travelers are influenced by their interactivity perceptions of control of the communication and their involvement in a two-way communication. Traveler perceptions about user control are based on the fact that travelers are granted the competence to select content, obtain information, and direct the interaction of consumers' judgments. This finding is consistent with Fortin and Dholakia (2005), Campbell and Wright (2008), Madhavaram et al. (2005) and Fiore and Jin (2003) who suggest that those who perceive they guide the interaction and are involved in a two-way communication would tend to recall, recognize, and perceive the brand positively.

The results also suggest that brand awareness has a direct positive relationship with brand image. The results suggest that when travelers are highly aware of the brand, it means the hotel brand is familiar and respectable. Additionally, the results indicate that brand image has a direct positive relationship with consumer-based brand equity. The results show that brand awareness does not have a direct positive relationship with brand equity. However, the results indicate that brand awareness has an indirect positive relationship with brand equity via brand image. These

results indicate that when travelers recognize and recall the hotel brand under different circumstances, this results in a higher hotel brand image. This positive image will affect positively consumer-based brand equity because a positive image is an indication of excellence and commitment and help the consumer to consider the hotel brand as valuable. Hotel brands with superior brand awareness would tend to be considered in travelers' consideration sets and consequently positively perceived and valued, in relation to unfamiliar hotel brands. In a similar manner, the results indicate that brand image has a direct positive relationship with consumerbased brand equity. It is reasonable to assume that positive, distinct, and strong hotel brand image permits hotel brands to strategically be differentiated and positioned in the mind of travelers, in this manner motivating the possibility to enhance higher hotel brand equity.

The last findings of the present dissertation suggest that consumer-based brand equity directly influence behavioral intentions among travelers. These results suggest that brand equity did influence the willingness to pay a price premium, to choose the same hotel brand, and to influence the intention to buy hotel products/services. These findings are consistent with what the extensive literature suggests (Buil et al., 2013; Raju & Asifulla, 2013; Hsu et al., 2012). In other terms, the data suggest that positive consumer-based brand equity may affect the willingness of travelers to pay a higher price for a hotel product. Additionally, the data suggest that hotel brands with higher positive brand equity causes greater brand choices and online purchase intentions.

Additionally, this dissertation demonstrates that our results are aligned with our proposed definitions. To sum up briefly, from our results it seems adequate to state that first social interactivity in a hotel context takes place when travelers perceive they are able to communicate reciprocally with the hotel branded Website. Second, system interactivity in a hotel context takes

place when travelers perceive they have control of the communication process and the sequence of the interaction with the hotel branded Website. Third, hotel brand awareness takes place when the name of the hotel is well known and when travelers recall and recognize the hotel brand under dissimilar circumstances. Fourth, hotel brand image takes place when travelers perceive the hotel brand as positive, travelers can predict how the hotel brand will perform, can perceive the hotel brand as rich and as well respected. Fifth, the incremental value that a hotel brand provides make travelers perceive that it make sense to buy products/services from that hotel and it is smarter to buy from that specific hotel instead of another alternative. Sixth, hotel brand choice takes place when travelers select specific hotel brands. They feel it is a better choice to prefer that specific hotel brand instead of alternatives. Seventh, hotel price premium takes place when travelers are willing to pay higher prices for hotel product and services even when the hotel price is increased. Eighth, buying intention in a hotel context takes place when travelers are willing to continue booking rooms from their preferred hotel Website.

# 5.3.1. Discussion of the Direct and Indirect Effects of Relationships

The present dissertation provides support for the theory-driven model and for the hypotheses concerning the relationships among the constructs. The dimensions of Website interactivity, system interactivity represented by user control and social interactivity represented by two-way communication, positively impacts the components of brand knowledge (brand awareness and brand image). The only exception to this conclusion is the relationship between two-way communication and brand awareness. The findings fail to support H3. In general, the influence of interactivity on brand knowledge implies that when travelers perceive Website interactivity when visiting the hotel branded Website, they will recognize and recall the hotel brand.

This is because system interactivity (user control) positively relates to brand recall, brand recognition, and positive brand perceptions. Consequently, if travelers perceive that a hotel branded Website is interactive, they are likely to recall, recognize, and develop positive hotel brand associations, and consequently have more knowledge about the hotel brand (product and services).

This dissertation demonstrates that Website interactivity both directly and indirectly influences brand image with the exception of the impact of two-way communication on brand awareness. These outcomes fail to support those travelers who perceive they communicate reciprocally with the brand and other users tend to recall and recognize the hotel brand. But it is possible to imply that travelers who perceive they communicate reciprocally with the brand and other users tend build positive, strong, and distinct perceptions of the hotel brand. Additionally, although the dimensions of Website interactivity do not directly impact consumer-based brand equity (no direct path has been theoretically proposed), Website interactivity indirectly impacts brand equity via brand awareness and brand image. Thus, travelers who perceive the hotel brand and reciprocal communication when visiting the hotel branded Website tend to perceive the hotel brand, they tend to develop strong and positive perceptions of the hotel brand, which in turn influence travelers to perceive the hotel brand as valuable.

In addition, the total effects of system interactivity (user control) on behavioral intentions (price premium, brand choice, and buying intention) were 0.26, 0.37, and 0.22, respectively. In the same manner, the total effects of social interactivity (two-way communication) on behavioral intentions (price premium, brand choice, and buying intention) were 0.19, 0.27, and 0.16,

respectively. These results suggest that system interactivity (user control) and social interactivity (two-way communication) could guide brand choice, motivate the willingness to pay a price premium, impact buying intention, and most decisively, function as a unique tool for hotel brand building and as an influential instrument to elicit travelers' behavior.

# **5.4.** Conclusions and Implications

The study's main goal in the design, development, and execution phase is to address the uncertainty among hoteliers and scholars about the influential role of Website interactivity as a branding tool in the hotel sector. The findings support the impact of the dimensions of Website Interactivity (system interactivity and social interactivity) on the development of brand awareness, brand image, brand equity, and behavioral intentions. The only exception is that the data do not support the relationship between two-way communication and brand awareness. In general, the results obtained between Website interactivity and brand knowledge relationships let us imply that travelers who perceive control in the communication process and two-way communication among them when using the hotel branded Website will be more knowledgeable about the brand. The perceptions of interactivity help to recognize and recall the hotel brand and also to establish a strong positive perception of the hotel brand. The results help us to state that: (1) When travelers perceive control in the communication process, they tend to recognize and recall the hotel brand under different circumstances, for travelers being able to choose the content, sequence of communication, and timing represent an unique opportunity to perceive the hotel brand positively. (2) In the same manner, the two dimensions of Website interactivity play a key role in brand image given its capacity to product research, knowledge and positive perceptions about the hotel brand. This dissertation demonstrates that those travelers who feel they possess control and can communicate reciprocally are more likely to form positive

perceptions and to behave more supportively towards the hotel brand. (3) When travelers possess brand knowledge, they tend to consider the hotel brand as valuable. (4) When travelers perceive the hotel brand as valuable, they are more willing to pay a price premium, to choose a specific hotel brand over competitors, and to have the intention to buy online.

The implications of the present dissertation are valuable for hoteliers, brand managers, and scholars concentrated in designing, managing, and assessing hotel branded Websites. The following sections discuss theoretical and practical implications.

## **5.4.1. Implications for Research**

The results of this dissertation offer scholars with vital perceptions on how the dimensions of Website interactivity contribute to the building of hotel brands and influence behavioral intentions in the online context. When hotel branded Websites do not present interactivity characteristics such as the opportunity for travelers to control the communication and the opportunity for reciprocal communications, this might cause the obstruction to build fundamental elements of online branding. As this dissertation shows Website interactivity is a capable and powerful method of building online hotel brands.

The process of building brands is a vital element for the success of companies, including hotels. The process to propose strategies for developing brands online is not a simple task. With the recognition of the fast development of electronic commerce, the present dissertation has investigated the function of Website interactivity in building brands and influencing behavioral intentions in the context of hotel Websites. Proposing a brand-building framework for an online hotel context, the framework was developed based on the extensive literature review and was empirically tested. The results indicate that two dimensions of Website interactivity (user control and two-way communication) trigger the development of brand knowledge; and brand

knowledge mediates the impacts of Website interactivity dimensions on brand equity and behavioral intentions.

The results of the dissertation add to the comprehension of online brand building in the current hotel sector. At the research level, the dissertation has proposed and tested a brand-building framework for the context of hotel Websites built based on the review of marketing, branding, e-commerce, and hospitality literature. These results strengthen the relationships among Website interactivity, brand knowledge, brand equity and behavioral intentions and demonstrate that the central process of hotel brand construction continues similar in the online setting. Additionally, the results show the substantial role of Website interactivity as a precursor for the online hotel brand-building process. This is an innovative contribution to the literature, thus emphasizing the potential power of Website interactivity as a branding tool.

The findings suggest that interactivity, which has been indicated to build brands in the traditional setting, is also appropriate to the online setting and hoteliers and Web developers might use it in an online form. User control and two-way communications in specific have been observed to be positively related with brand image.

Interestingly, two-way communication (social interactivity) did not show to have a significant impact on brand awareness. The author proposes that the fact that a hotel Website can gather visitor's feedback, can encourage visitors to offer feedback, and can give visitors the opportunity to talk back, is not enough to recall and recognize the hotel brand under different circumstances. This finding is vital as it indicates that the reciprocal communication that occurs when travelers visit the hotel branded Website has little influence (either positive or negative) on the formation of brand awareness. A possible explanation for these results is that though two-way communication features including chat rooms, bulletin boards, online shopping, and

feedback mechanisms set the environment to communicate with consumers. Travelers are not dependent upon such features to form brand awareness as they neither influence their perceptions to recall nor recognize the hotel brand.

These findings suggest that it is not the effectiveness of these two-way communication features that allow travelers to recall and recognize the brand under different circumstances but rather the travelers other intangible communication elements. This is not to imply that two-way communication features are not important to influence travelers' perceptions, but rather to suggest that hoteliers understand the lack of influence of two-way communication features on the formation of brand awareness. Another explanation could be that two-way communication (social interactivity) might not be as critical as user control to influence brand awareness, which was observed to be a significant antecedent in influencing positive perceptions in travelers' minds. An additional explanation for the non-significance of the social interactivity-brand awareness relationship could be due to the specific sample used in the study. Perhaps the sample in a hotel context presents certain singularities that make the relationship between two-way communication (social interactivity) and brand awareness non-significant. Finally, the author suggests that the proposed relationship might be significant in a general context than in a specific context such as the hotel context.

As expected, two-way communication, which was associated with the reciprocal communication among the user, the branded Website, and other users, was significantly related to brand image. These results may indicate that when the hotel branded Website is effective gathering visitor's feedback, makes travelers feel like it wants to listen to them. Encouraging visitors to offer feedback and giving visitors the opportunity to talk back might affect travelers' positive brand perceptions. With the fast growth of companies moving inventory and services to

an online setting, reciprocal communication features become an essential opportunity for hotel brands to influence travelers' positive hotel brand perceptions (brand image).

One of the most motivating results of this dissertation is that user control (system interactivity) and two-way communication are valuable precursors for the hotel brand image building process online. User control (system interactivity) and two-way communication, the main dimensions of Website interactivity in online communication (Jiang et al., 2010), are positively associated with brand image. Voorveld et al. (2013) indicate that online users engage in reciprocal communication and user control for searching and acquiring information. Consequently, incorporating reciprocal real-time communication features such as real-time chats, bulletin boards, search engines, simulations with virtual reality, and user control features such as navigational tools, search options, and sitemaps, are important and useful for internet users. Whereas, in a traditional interaction travelers interact in a communication with hotel sales associates in a face to face manner; in a virtual setting real-time Website interactivity allow user control and reciprocal communication features to take control over the function of hotel sales and service associates and facilitates to build positive, strong and different hotel brand perceptions.

In particular, the findings suggest that user control can impact both brand knowledge components (brand awareness and brand image) simultaneously. Additionally, both dimensions of Website interactivity are significant antecedents of brand image, though user control is observed to play a stronger impact than two-way communication on brand image. These results emphasize a vital issue to hospitality investigators: more effort must be allocated on incorporating user control features on hotel Websites in order to build a strong brand image. For example, when travelers perceive they have control over their visiting experiences at the hotel Website, they could choose freely what they want to see, they have control over what they can

do on the site, and they decide the kind of experiences they get. This might strongly influence their hotel brand perceptions.

The results also show the mediating role of brand knowledge components (brand awareness and brand image) in enhancing brand equity and behavioral intentions that is the ultimate ambition of hoteliers and brand managers. As previously mentioned, Website interactivity impacts the proposed brand structure which in turns influence the behavioral intention structure. First, brand awareness has a positive impact on brand image. Second, brand image significantly and positively influence brand equity. Contrary to initial predictions there is no direct significant impact of brand awareness on brand equity. The present dissertation studies the association between brand awareness and brand equity measured as the value that travelers perceive the hotel brand represents. The results have not confirmed a significant positive and direct association between brand awareness and brand equity. Although this finding is consistent with research (Gil et al., 2007; Atilgan et al., 2005), previous works have found a positive association between brand awareness and brand equity (Kim & Kum, 2004), with the exception of Gil et al. (2007) and Atilgan et al. (2005)' work. Gil et al. (2007) and Atilgan et al.'s (2005) findings have suggested that brand awareness is not an enough argument to determine brand equity. However, the findings in this dissertation show that there is a significant indirect effect of brand awareness on brand equity via brand image. Both brand awareness and brand image influence brand equity.

Additionally, brand equity has a positive effect on price premium, brand choice, and buying intention. These results support the positive influence of brand equity on consumers' behavioral intentions and responses (Buil et al., 2013). The literature supports that brand equity positively impacts behaviors and responses. The present dissertation empirically reveals that the

price premium that consumers are willing to pay, the brand they are willing to choose, and the buying intentions they are going to show depend absolutely on the hotel brand equity.

Similarly, because few researchers have devoted efforts to comprehend the role of Website interactivity as a branding tool, and because limited research has been located in relation to the impact of Website interactivity on branding in the hotel context, little is understood about the impact of Website interactivity on brands and behavioral intentions. In reality, none empirical research has been found regarding the role of Website interactivity as a branding tool in the hotel context. This is the first attempt in the hospitality and tourism industry that devotes efforts to understand this vital role of interactivity as a branding tool. The few investigators who have examined the role of interactivity in other disciplines, most of them have called for research and have explored this role conceptually.

This dissertation expands the literature on Website interactivity and branding in numerous manners. As previously mentioned, this dissertation is the first piece of work that empirically attempts to show that Website interactivity is a critical antecedent of the dimensions of brand knowledge and brand equity. Previous research on Website interactivity primarily suggests and only mentions in the literature on such critical role (Neelotpaul, 2010). Thus, a significant theoretical implication is originated with the completion of the present dissertation. The results show that Website interactivity in hotel branded Websites impacts travelers' brand knowledge and consumer-based brand equity which in turn influence travelers' behavioral intentions.

Also significantly, the present dissertation is the first to show that brand structure components including brand knowledge and consumer-based brand equity mediate the effects of Website interactivity on price premium, brand choice, and buying intentions of hotel products

and services. This mediating role is mentioned in the marketing and branding literature, but considering the distinctive interactive opportunities of the Internet, it is uncertain whether this mediating effect could also be founded in the context of hotel branded Websites.

The conclusion that Website interactivity has a significant influential role as a branding tool for hotels and that brand structure components including brand knowledge dimensions and consumer-based brand equity mediates the Website interactivity-behavioral intentions relationship adds to a more methodical theory on how Website interactivity works as a branding tool in the hotel context and how Website interactivity works in virtual persuasion of the most mentioned behavioral intentions.

In addition, this dissertation makes additional fundamental theoretical contributions to the existing literature. Although past and current research suggest the significance of brands in the hotel context, no previous research has investigated travelers' behavioral intentions as a consequence of brand structure including brand knowledge and brand equity. The present dissertation is also the first approach to examine the influential role of brands on behavioral intentions (price premium, brand choice, buying intention). According to the theory of reasoned action (TRA), utilizes as a basis for predicting behavioral intentions and behaviors, proposes that behavioral intentions are antecedents to certain actions and behaviors of consumers (Liu, Marchewka, Lu, & Yu, 2004). In other words, a traveler's knowledge and positive perception of a hotel brand as valuable might affect his/her actions when he/she considers that specific behavior is associated to a particular result. Gounaris et al. (2010) suggest that these key consumer responses have the capability to provide sustainable competitive advantages to businesses. By suggesting and testing the effect of a brand structure on behavioral intentions, this dissertation expands the existing branding and marketing literature in the hotel context.

It is also critical to mention that even when the present dissertation investigates the influential power of the two dimensions of Website interactivity (social and system interactivity) as branding tools in the context of hotel Websites, the hypotheses might be applicable and generalizable to other disciplines (marketing, advertising, strategy, branding) and other e-commerce contexts to some degree. Previous works in the fields of information technology, branding, psychology, and marketing have intensively call for research to apply the construct of Website interactivity and to investigate its capacity to build brands and influence customers' behavioral intentions. As Neelotpaul (2011, p. 15) notes "... Interactivity results in a dialogue between the Website and the consumers across the globe and over a period of time create a strong relationship and a satisfying branding experience on the users' part". However, at what extent e-commerce Websites could be benefited from Website interactivity has not been empirically explored. Voorveld et al. (2013) state "hardly any studies have investigated whether interactivity is capable of building brands".

Therefore, this dissertation proposes and tests a theory-based model with precursors of user control as system interactivity and two-way communication as social interactivity in hotel ecommerce by establishing a link between interactivity and the formation of hotel brands and the influence on premium price, brand choice, and buying intention. It investigates the key antecedents and consequences of a brand structure (brand knowledge and brand equity) in a ecommerce context by empirically assessing the proposed theory-based model.

Results show the significance of two distinct dimensions of Website interactivity, namely, system and social interactivity. System interactivity has been found to positively impact the components of brand knowledge (brand awareness and brand image), and social interactivity has been found to positively impact only brand image. Brand knowledge refers to the perceptive

representation of the brand (Esch et al., 2006). It is understood regarding the individual meaning about a brand stored in the minds of consumers (Peter & Olson, 2001). The key antecedents and consequences of a brand structure (brand knowledge and brand equity) can assist scholars comprehend how interactivity may augment the knowledge of brands and may result in strong relationships with consumers. Therefore, this dissertation makes a contribution to the current body of knowledge by investigating the impact of the dimensions of Website interactivity as a branding tool. It is worth mentioning that in the model, the dimensions of Website interactivity had significant influence on the brand and behavioral structure. This is a particularly critical contribution, considering that existent and past research have called for urgent research to understand more these relationships. Therefore, this dissertation advances our comprehension of how Website interactivity can help companies in successful online branding.

As Voorveld et al. (2013) note, the tendencies in technology are increasing and they result in an innovative virtual application and offer the opportunity to stimulating new research avenues for marketing, branding, information technology and consumer behaviors. It is fundamental to state that as a central aspect in technology-mediated communication, Website interactivity is identified as a critical component to create strong brands. Website interactivity embraces the opportunity of travelers to interact with the hotel brand. Such interactivity tends to increase the knowledge of hotel brands and results in strong relationships with travelers. Website interactivity generates awareness, creates a positive perception of the hotel brand, and enhances brand equity. The proposed model in this dissertation highlights the magnitude of not only the influence of Website interactivity on brand awareness and brand image but also on brand equity. It has been established that system interactivity influences knowledge (brand

awareness and brand image) and that social interactivity influences brand image. These two dimensions of Website interactivity indirectly leads to brand equity through knowledge.

## **5.4.2. Implications for Practice**

In the hospitality industry, hotel brand managers frequently declare that Website interactivity may be used to build and maintain relationships with hotel travelers, but scarcely any researcher in the hospitality and tourism industry has attempted to validate empirically this declaration. The present dissertation has attempted to demonstrate that Website interactivity is a critical component to build brands in the lodging sector. Additionally, the dissertation provides support that interactive hotel Websites are essential for hoteliers for building and maintaining relationships with their hotel travelers online. Thus, this dissertation attempts to validate that Website interactivity must be the focus in hotel marketing and branding strategies. Hoteliers who intend to build a long-term relationship via the hotel branded Website may attempt to provide Website interactivity features including user control (system interactivity) and two-way communication (social interactivity).

To efficiently build hotel brands online, hoteliers might acknowledge the potential power of Website interactivity dimensions and utilize them to influence travelers' positive perception and brand awareness of the hotel brand. Thus, hoteliers and Web developers might increase efforts to incorporate two-way communication features (chat rooms, bulletin boards, online shopping, and feedback mechanisms) and also to incorporate user control features (navigational tools, search options, and sitemaps) to influence the awareness of the hotel brand and strength of the hotel brand perceptions (brand image). This is particularly essential for hoteliers who provide an experience (booking a hotel room) rather than a physical product (buying a car or a house),

because decisions regarding an intangible experience normally entails much more detailed information and more interaction during the decision making process.

It is demonstrated that user control, two-way communications, brand image, brand awareness, and brand equity are of special interest for both researchers and hoteliers. From a research point of view, the present dissertation offers an innovative theory-driven model that incorporate critical constructs, which have previously been examined disjointedly and without attempting to provide knowledge to the early phases of branding in the online context (Voorveld et al., 2013). Translating these results from a managerial point of view, hoteliers must consider incorporating and managing each construct prudently and may want to direct the main components of the model in an amalgamated manner.

Hoteliers dealing with intangible experiences such as booking a hotel room must center their efforts on incorporating features of user control (system interactivity) into their hotel branded Websites with the purpose of developing positive brand perceptions and hotel brand awareness. As previously mentioned, user control is triggered by the presence of navigational tools, search options, and sitemaps via website navigation features. Fundamentally, the hotel branded Website should provide travelers with more information, content and navigational tools. In this manner, travelers could perceive a sense of control in occasions when they are able to control between "just text" and "text and visuals", select the language, or use a search engine to locate their desired information.

As for reciprocal communication features (chat rooms, bulletin boards, online shopping and possibilities and feedback mechanisms (Voorveld et al., 2013; Song & Zinkhan, 2008), the dissertation findings suggest that the incorporation of social interactivity does not affect travelers

to recognize and recall the hotel brand under different circumstances. On the other hand the incorporation of reciprocal communication features (chat rooms, bulletin boards, online shopping and possibilities and feedback mechanisms) could develop a positive and strong hotel brand image. This is because travelers feel more comfortable and enjoy providing feedback with their devices than in a physical interaction. Allowing travelers to communicate reciprocally may impact them to perceive the hotel branded Website as more reachable, which may also be important for building positive perceptions in travelers' mind.

Hoteliers must comprehend the power of influence between user control and two-way communication. Hoteliers must consider deploying interactive features that can be more essential for its branding goals. For instance, a hotel branded Website featuring different types of rooms (e.g., single, double, suites, etc.) may experience more benefits from a platform of well-structure navigation features over live chat features. This is because under this scenario user control represent a more adequate feature to locate different hotel products and services in the hotel branded site. Similarly, live chat could offer additional benefits for hotel branded Websites that offer highly personalized functional rooms (for consumers with special needs), since more communication with the travelers expedites and improves the process of hotel product/service personalization.

It is essential for hoteliers and Web developers to comprehend that user control and twoway communication features must be incorporated in hotel branded Websites with the direct goal of strengthening brand image, brand awareness, and brand equity. Establishing the goal of developing a positive brand image and forming hotel brand awareness may permit hoteliers to be perceived by travelers as valuable. This equity has the power to influence behavioral intentions in the form of premium price, brand choice, and buying intention. Additionally, hoteliers must be

aware that the positive effect of brand image on brand equity is of a larger extent compared to that of brand awareness on brand equity. This suggest hoteliers and Web developers may put efforts on incorporating user control and two-way communication features that can build a solid hotel brand knowledge which may enhance brand equity that in turn influences behavioral intentions.

As stated in preceding paragraphs, hoteliers and brand managers must attempt to measure how travelers perceive interactivity on their hotel branded Websites, because purely incorporating interactive characteristics and attributes to a Website do not inevitably results in superior interactivity perceptions (Voorveld et al., 2013). Principally, these interactivity perceptions are critical for influencing positive perceptions and value-added perceptions to a hotel branded Website. As numerous researchers mention, Website interactivity perceptions lead to develop brand awareness, a more favorable brand image, and a stronger perception of addedvalue (equity), and lastly to influence behavioral intentions.

This dissertation's empirical results and implications for practice intensify brand managers and hoteliers' comprehension of Website interactivity dimensions in the design of hotel branded Websites. In addition, hotel Website designers are constantly challenging themselves to design Websites that can help to build brands online and provide an interesting online experience. Particularly, limited research examines the impact of social interactivity and system interactivity on a hotel brand structure that includes two brand knowledge components (brand awareness and brand image) and consumer-based brand equity.

This dissertation has just started to provide practical knowledge for hoteliers, brand managers, and Website designers regarding the significance of incorporating user control

features such as the presence of navigational tools, search options, and sitemaps and two-way communication features such as the presence of chat rooms, bulletin boards, online shopping, and feedback mechanisms. These features have the capability to influence the positive and strong perceptions of travelers, the familiarity and the recognition of the hotel brand under different circumstances.

The empirical findings also reveal the importance of the relationships among Website interactivity, brand awareness, brand image, brand equity, and behavioral intentions. Hoteliers should incorporate Website interactivity features (chat rooms, bulletin boards, online shopping, feedback mechanisms, navigational tools, search options, and sitemaps) in the design of their Websites. They must encourage reciprocal communications and offer consumers the opportunity to control the communication process. The results of this dissertation show that user control and two-way communication are critical to build brands in online contexts. Website designers must also understand that incorporating Website interactivity elements might help to influence travelers to perceive the hotel brand as valuable. The mental equity known as consumer-based brand equity may influence behavioral intentions. The supreme goal of branding is to generate a different perception among consumers. This perception develops greater demand and guarantees a strong financial performance. In the lodging sector, brand equity refers to the value that travelers and hoteliers associate with a hotel brand, and the effects of this association on travelers' behaviors and consequent financial performance of the hotel brand.

The conventional methods for brand building in bricks-and-mortar commerce are somewhat similar and different to the brand building method in the online hotel context. The difference is in the opportunity to interact with consumers. Over the Internet consumers interact in a mechanize setting contrary to a human mediated traditional face to face setting (Gallos et al.,

2012). Accordingly, Website interactivity is an essential Web instrument that has modified it into a dynamic medium and offers the opportunity to have reciprocal communication (Hart et al., 2013). In the hotel context, Website interactivity implicates involving travelers openly, creating a personalized relationship with them.

Hotel brand managers are encouraged to think of consumers as active communicators in a play and not just passive observers. Practitioners are advised to learn from victorious sources such M&M, Amazon, Sunsilk, Land's End, Pepsi, and others for ideas related to interactive Website design (Neelotpaul, 2010). Interactive Websites are an effective way to communicate hotel brands online. For travelers an interactive hotel branded Website is a booking tool, a brochure, a sales person, and is thought to provide interactive experiences. Hotel Website interactive features form brand awareness, influence a positive hotel brand image, and enhance brand equity; therefore, pleasing travelers with Website interactivity features is essential in an online hotel context as it results in an effective way to build relationships with travelers.

Travelers might visit a hotel branded Website with a particular reason in mind (booking a room for exact dates), but they might be appealed by an interactive Website feature to control the information and the communication process (navigational tools, search options, and sitemaps). This might influence travelers to recognize the hotel brand and to remember the hotel brand after that interactive experience when visiting the hotel branded Website. This suggests that hoteliers might obtain the benefits of creating brand awareness just by influencing the perception of interactivity hold in consumers' mind. For instance, Interactive Sites, a Website developer dedicated to providing unrivaled Web design and online revenue generating products and services to hotels worldwide, understand that a good Website design must present interactive features for business and consumers (Interactive Sites, 2014). With the sole purpose to enhance a

strong online brand, practitioners must consider incorporating social interactivity and system interactivity features in their hotel branded Websites while they are suggested to incorporate hotel Websites with chat rooms, bulletin boards, online shopping, feedback mechanisms, navigational tools, search options, and sitemaps to build brand knowledge, to enhance brand equity, and to influence behavioral intentions.

Another important practical implication is to respond to an important question that states whether brand awareness and brand image are critical antecedents to influence behavioral intentions or not. The critical implication for practitioners to comprehend why brands are important to influence behaviors is because these key consumer responses have the ability to provide sustainable competitive advantages to hotel brands and to the overall firm performance in a form of consumer satisfaction, market share, profitability, and market growth. The impact of a hotel brand structure as proposed in this dissertation (brand knowledge and brand equity) on price premium, brand choice, and buying intention, might provide greater financial performance and effectiveness to hotel brands, given the hotel's competence to demand higher prices and attain greater sales as a result of the higher prices, higher hotel brand choice, and buying intention.

Additionally, the proposed theory-driven framework enriches online brand equity literature focusing to close some of the shortcomings in relation to other consumer-based brand equity works. For instance, this dissertation uses a sample of travelers who have booked a hotel room in the last 12 months from a hotel branded Website and includes two brand knowledge components (brand awareness and bran image) (Esch et al., 2006). The dissertation also closes the gap of transparency regarding the specific brand components that influence online brand equity since past studies do not indicate whether brand awareness and brand image are

precursors of brand equity in the online environment. Moreover, the dissertation integrates associations between brand knowledge components as precursors of brand equity and considers the consequences of brand equity on behavioral intentions including price premium, brand choice, and buying intention.

The present dissertation also contributes to the comprehension of online brand equity building process in the context of hotel Websites, which is essential. Because of the increasing number of hotel brands operating in domestic and international markets, and because there is limited research that investigates the online brand building process and brand equity in the context of hotel Websites (Hsu et al., 2012). Findings offer empirical support of the advantages that online brand equity might offer to hotel brands. Hotel brand equity is a direct and substantial antecedent of a positive traveler behavioral intention. As such, the enhancement of online hotel brand equity is an essential benefit for hotel brands to advance their market growth and market positioning (Alonso-Almeida & Bremser, 2013). Enhancing online brand equity must produce more value for hotel organizations since a more positive traveler behavioral intention might be influenced from strong and positive online brand equity.

The findings also offer hoteliers with valuable understanding into hotel brand building endeavor in the online context. Results show that brand knowledge components and brand equity constructs inter-relate. This is consistent with the literature in traditional frameworks of individual responses and behaviors and branding theories that support a pyramid of brand structure. As Neelotpaul (2010) and Voorveld et al. (2013) state, using Website interactivity to build brands and to influence behavioral intentions is an essential task. Hoteliers must first incorporate Website interactivity features in their hotel branded Websites, second influence brand awareness as a means of creating brand image and building positive online brand equity.

Any effective interactive feature, including user control and two-way communication must be incorporate to influence the extent of recall, recognition, and positive perceptions of the hotel brand. Particular consideration must also be paid to one dimension of Website interactivity: user control. This dimension is considered to be a central component of brand development in numerous studies (Voorveld et al., 2013; Christodoulides et al., 2006; Page et al., 2002) and has the strongest impact on brand components. Finally, brand image has the greatest influence to consumer-based brand equity. This implies that hoteliers must develop a strong and positive hotel brand image as one of their central concerns.

In a similar manner, the results suggest that consumer-based brand equity does not only present an analytical value instrument for hotel brands but it also influences price premium, guide brand choice, and impact buying intention. Consequently, hoteliers may supplement financial metrics with price premium, brand choice, and buying intention to estimate hotel performance. Finally, hotel brand managers are advised to allocate resources on their branded hotel Websites to augment and develop an interactive users' experience via user control and reciprocal communication features that can influence their perception of Website interactivity. This perception will influence them to have a better brand knowledge, to perceive the hotel brand as valuable, to be willing to pay a price premium, to choose the hotel brand over competitors with similar offerings, and to have higher intention to buy.

#### 5.5. Limitations and Future Research

Even though the present dissertation presents significant theoretical and practical implications, some limitations must be addressed. The collected data used in the dissertation was gathered in the United States. As described in chapter 4 section 2 in the ethnicity section (Table 18), 78.2 % of participants have been Caucasian/white. Consequently, the extent to which the

implications of this dissertation are cross-culturally generalizable may be restrained. With the goal of guarantee external validity, future studies must be attempted to study the proposed theory-driven framework considering different populations in diverse cultures. Future research may want to test the theory-driven model proposed in this dissertation with more diverse samples in terms of race, ethnicity, culture, income, academic institutions, and booking reservation channels (hotel branded websites, Online Travel Agency "OTA" Websites, and Online Social Networking Websites).

Another limitation that can be improved with future research is that in this dissertation the main goal has been to propose and empirically test a theory-based model of Website interactivity as a branding tool in an online hotel context. The empirical findings provide the basis for additional research, for instance, future research may consider the applicability of this model to other e-commerce contexts, for example online retailing. Future research must also contemplate how different hotel brands such as Hilton, Marriott, and Hyatt affect similarly or differently behavioral outcomes.

Future research might contemplate the direct impact of Website interactivity on brand equity and behavioral intentions. This might be explored by other researches in the hotel context and in other contexts. In this way the power of Website interactivity might be better understood. Additionally, future research is suggested to investigate the generalizability of the proposed Website interactivity model by replicating the same research. It is also suggested that since the results have showed that Website interactivity impact brand awareness and brand image directly and indirectly, future studies can examined whether perceived Website interactivity is a consequence of how consumers perceive a hotel Website or hotel brands. The mediating and moderating effect present an interesting contribution to the literature to comprehend more the

role of website interactivity in the branding development process. It is also suggested that since the results show that brand structure containing brand knowledge and brand equity does impact behavioral intentions (price premium, brand choice, and buying intention), future research might explore models with distinct dependent variables such as word of mouth, brand attachment, brand loyalty, and trust, just to name a few.

In the present dissertation, two of the most common accepted dimensions of Website interactivity were included in the model as antecedents of brand building in the hotel context. Therefore, it is recommended to assess the influence of other dimensions of Website interactivity proposed by other researchers and mentioned in the literature review section of this dissertation. Moreover, some other dimensions (speed, time, mapping, and range) might influence the formation of brands. Finally, future research may consider manipulating the dimensions of Website interactivity using actual interactivity rather than perceive interactivity.

Though there is some research on some of the constructs under examination, this dissertation is one of the first to take a widespread glance of Website interactivity by incorporating social interactivity and system interactivity dimensions as a branding tool. This dissertation will probably encounter some limitations which may theoretically impact the results. It is acknowledged that the utilization of a specific industry sector (i.e., hotels), and population sample restrains the generalizability of the results and conclusions to other sectors and disciplines. A final limitation is that this dissertation centers its efforts to understand the impact of Website interactivity as a branding tool in hotel branded Websites.

Further research studies may want to center their efforts to understand the potential power of interactivity as a branding tool through the use of mobile apps and mobile Websites.

#### 5.6. Concluding Remarks

The principal objective of this dissertation is to determine whether Website interactivity has the capability to build brands as several researchers have suggested (Palla et al., 2014; Voorveld et al., 2013; Neelotpaul, 2010). The dissertation results indicate that Website interactivity influences directly brand awareness and brand image and indirectly brand equity through brand knowledge. Thus, the knowledge obtained from conducting this dissertation offers vital information to both scholars and practitioners.

System interactivity represented by user control do influence the formation of a brand structure (brand knowledge and brand equity) in the hotel context and social interactivity represented by two-way communication influence the formation of a brand image and brand equity in the hotel context. In turn, brand elements influence behavioral intentions (price premium, brand choice, buying intention). Therefore, hoteliers and brand managers should recognize the significance of incorporating Website interactivity features (i.e. chat rooms, bulletin boards, online shopping, feedback mechanisms, navigational tools, search options, and sitemaps).

Given this information, Website designers and hoteliers have the opportunity to incorporate Website interactivity attributes to their advantage. The outcomes of incorporating these interactive features in their hotel branded Websites will provide the essential competitive advantage desired in order to be successful building hotel brands in the extremely competitive online context.

The theory-driven model proposed in this dissertation was empirically robust. Only two predicted hypotheses have not been supported. The relationships among the constructs suggest that Website interactivity influence brand knowledge. Brand knowledge influences brand equity

which in turns influence behavioral intentions. The model was proposed to examine that twoway communication (social interactivity) and user control (system interactivity) might impact brand knowledge components (brand awareness and brand image) in the context of hotel Websites, which in turn impact brand equity and behavioral intentions (premium price, brand choice, and buying intentions). The results suggest that user control exerts the strongest impact on brand awareness and brand image. The results are similar to what the author expected. User control directly influences brand knowledge components. On the other hand, the results suggest that two-way communication plays a vital role in developing brand image but not in forming brand awareness. This finding is not consistent with the proposed hypothesis that predicts that two-way communication is positively associated with brand awareness. This finding is not in alignment with Madhavaram et al. (2005) who hypothesize that interactivity is an important indicator of brand awareness.

Results show that brand awareness influences brand image directly and brand equity indirectly via brand image. These results are consistent with Loureiro (2013) who suggest that consumers who recognize the brand tend to perceive quality and form positive perceptions which in turn enhance brand equity. Finally, enhanced brand equity positively impact behavioral intentions such as premium price, brand choice, and buying intentions. It is not complex to comprehend that if travelers perceive the hotel brand as valuable, they will be more likely to pay a price premium, to choose the hotel brand over other hotel alternatives, and to have intentions to buy.

# APPENDIX A: SURVEY

Website Interactivity as a Branding for Hotels



Albert Barreda, a Doctoral candidate in the Rosen College of Hospitality Management at the University of Central Florida is currently working on his dissertation that examines the power of Website Interactivity as a branding tool in the context of hotel Websites.

We highly appreciate if you take a few minutes to complete the survey form. You will take approximately 10 minutes of your time to complete the online survey. The study results will be kept strictly confidential. You should be at least 18 years old to participate. The Institutional Review Board (IRB) procedure administered at the University of Central Florida has been obeyed.

The participation on this study is voluntary. We have the conviction that you will enjoy completing it. The advantages and knowledge obtained through the current study will contribute to the lodging and hospitality industry, students, educators, consumers, hoteliers, brand managers, and information system (IS) practitioners.

We really value your time to fill out this survey. If you have any questions, please contact Albert Barreda at abarredal@knights.ucf.edu or call 407-766-8980.

My Regards

Albert Barreda, PhD candidate, University of Central Florida

### Section I

Have you ever booked an online hotel room reservation through the hotel's own Website (Hilton.com, Marriot.com) in the last 12 months?

O Yes

O No

If No Is Selected, Then Skip to End of Survey

On average how many nights a year do you stay in a hotel?

**O** 1-5

- **O** 6-10
- **O** 11-15
- **O** 16-20
- **O** 20-25
- **O** 26-30
- **O** 31-35
- **O** 36-40
- **O** 41-45
- **O** 46-50
- **O** 51-55
- **O** 56-60
- Over 60 nights

Of that amount, how many nights have you stayed (Please input numbers)

- For business \_\_\_\_\_\_
- □ For pleasure \_\_\_\_\_
- Other

On average, how much do you pay (in US \$) per night for a hotel room excluding tax? (Please input numbers)

- Generation For business
- General For pleasure
- Other

Do you belong to any hotel frequent guest programs?

- O Yes
- O No

Please indicate your degree of technology adoption

**O** 1 I am usually one of the last people who tries new technology

- **O** 2
- **O** 3
- **O** 4
- **O** 5
- **O** 6
- **O** 7 I am usually one of the first one tries new technologies

What was the type of the last hotel you stayed?

- **O** Luxury (i.e. Four Seasons, Ritz Carlton)
- **O** Upscale (i.e. Hyatt, Marriott)
- O Midscale (i.e. Courtyard, Holiday Inn Express, Comfort Inn, La Quinta, Day's Inn)
- O Economy (i.e. Ramada, Super 8, Motel 6, Econo Lodge)
- Please suggest your preferred hotel brands

Did you personally book the online hotel room reservation?

O Yes

O No

Which type of device you use to book your hotel room?

- **O** Smartphone (e.g., iPhone, Blackberry, Samsung Galaxy etc.)
- O My PC
- **O** My Laptop
- **O** Tablet (e.g., iPad, Samsung Galaxy Tablet etc.)
- **O** Both smartphone and tablet
- O Other (please specify):

### Section II

Please indicate your agreement with the following statements thinking about your last hotel Website visit.

## X: refers to your hotel brand of preference

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
It makes sense to book hotel rooms/services from X hotel Website instead of any other brand, even if they are the same	О	о	0	О	0	О	O
Even if another hotel brand has same features as X, I would prefer to buy X	О	0	0	О	0	О	О
If there is another hotel brand as good as X, I prefer to buy X	О	o	0	о	о	О	О
If another hotel brand is not different from X in any way, it seems smarter to purchase from hotel X	О	О	O	О	O	О	O
Even if other competing brands are not different from X in any way, it seems smarter to choose an X hotel	О	0	0	О	0	О	О
An X hotel is always a superior choice to its rival hotels	О	0	0	О	О	О	о
It makes sense to choose X instead of any other hotel brand, even if they are the same	О	О	0	О	О	О	О
The price of hotel	О	О	0	О	О	О	О

brand X would have to go up quite a bit before I would not consider buying it							
I am willing to pay a higher price for hotel X than for other hotel brands	0	0	0	0	0	0	O
I am willing to pay a lot more for hotel X than for other hotel brands	О	О	o	o	0	о	O
I would buy hotel brand X	O	O	O	O	0	O	O
I would seriously consider buying hotel brand X	О	О	О	0	•	О	O
It is very likely that I would buy hotel brand X	О	О	О	o	О	О	0

Please indicate your agreement with the following statements thinking about your last hotel Website visit.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
This hotel is known as a company that takes good care of their trade guests	0	0	0	0	0	О	о
We can predict how this hotel brand will perform	0	0	o	0	О	О	O
In comparison to other hotel brands, this hotel brand is known to consistently deliver very high quality	0	0	0	0	0	О	О
In comparison to other hotel brands, this hotel brand is highly respected	0	о	0	О	О	О	о
This hotel's brand has a very rich history	•	0	0	О	О	Э	о

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I felt that I had a lot of control over my visiting experiences at the hotel Website	О	о	0	о	О	О	О
While I was on the hotel Website, I could choose freely what I wanted to see	О	o	o	O	О	О	О
While surfing the hotel Website, I had control over what I can do on the site	О	0	o	0	О	О	О
While surfing the hotel Website, my actions decided the kind of experiences I get	О	о	0	о	О	О	O
This hotel Website is effective in gathering visitor's feedback	О	0	o	0	0	О	О
This hotel Website makes me feel like it wants to listen to its visitors	О	0	0	0	О	О	О
This hotel Website encourages visitors to offer feedback	О	0	0	0	О	О	О
This hotel Website gives visitors the opportunity to talk back	O	0	O	o	О	O	O

Please your agreement with the following statements thinking about your last hotel Website visit.

The name of this hotel is well- known in the hotel industry	o	0	О	О	О	О	О
This hotel is recognized as a strong hotel brand	•	0	О	О	О	Э	С
In comparison to other hotels, this hotel is a leading brand in the industry	0	0	0	О	0	О	О

### Section III

Demographics: Please select only ONE answer or fill in the blank.

Are you:

- O Male
- O Female

What is your age?

- **O** 18-25
- **O** 26-35
- **O** 36-45
- **O** 46-55
- **O** 56-65
- **O** 66 or older

Please indicate your marital status

- **O** Married
- O Separated
- **O** Divorced
- **O** Widowed
- O Single
- **O** Prefer not to answer

Please indicate your ethnicity

- **O** Caucasian
- **O** Asian/Island Pacific
- **O** African American
- **O** Native American
- **O** Hispanic
- **O** Other

What is your level of education?

- **O** High School
- **O** Associate degree (2 year)
- **O** Some college
- **O** Bachelor's Degree (4 year)
- **O** Master's Degree
- **O** Doctorate Degree
- **O** Other:

What is your approximate personal annual income?

- **O** \$25,000 or less
- **O** \$25,001- \$50,000
- **O** \$50,001-\$75,000
- **O** \$75,001-\$100,000
- **O** \$100,001 \$150,000
- **O** Prefer not to answer
- **O** \$150,001- \$200,000
- **O** \$200,001-\$250,000
- **O** \$250,001 or more

Please indicate your occupation.

- **O** Management, professional, and related occupations
- **O** Service occupations
- **O** Sales and office occupations
- **O** Farming, fishing, and forestry
- **O** Construction, extraction, and maintenance occupations
- **O** Production, transportation, and material moving occupations
- **O** Government occupations
- **O** Technology Occupations
- O Student
- **O** Retired
- **O** Unemployed
- **O** Other

Any comments/questions:

# APPENDIX B: INSTRUMENT

### **Measurement / Instrument**

Website Interactivity Scale (WIS)	UC1. I felt that I had a lot of control over my visiting
	experiences at the hotel Website
Jiang et al. (2010)	UC2. While I was on the hotel Website, I could choose
	freely what I wanted to see.
User Control	UC3. While surfing the hotel Website, I had control over
(System Interactivity)	what I can do on the site.
	UC4. While surfing the hotel Website, my actions decided
	the kind of experiences I get.
Website Interactivity Scale (WIS)	TC1. This hotel Website is effective in gathering visitor's
	feedback.
Jiang et al. (2010)	TC2. This hotel Website makes me feel like it wants to
	listen to its visitors.
Two-way Communication	TC3. This hotel Website encourages visitors to offer
(Social Interactivity)	feedback.
	TC4. This hotel Website gives visitors the opportunity to
	talk back.
	TC5. This hotel Website facilitates two-way communication
Drand American Scale (DAS)	between the visitors and the site AWA1. The name of this hotel is well-known in the hotel
Brand Awareness Scale (BAS)	
Device at $a1$ (2008)	industry. $\Delta W \Delta 2$ This hotel is many mixed as a strong hotel humd
Davis et al. (2008)	AWA2. This hotel is recognized as a strong hotel brand. AWA2. In comparison to other hotels, this hotel is a loading
	AWA3. In comparison to other hotels, this hotel is a leading brand in the industry.
Brand Image Scale (BIS)	IMG1. This hotel is known as a company that takes good
Brand Image Searc (BIS)	care of their trade guests.
Davis et al. (2008)	IMG2. We can predict how this hotel brand will perform.
Duvis et ul. (2000)	IMG3. In comparison to other hotel brands, this hotel brand
	is known to consistently deliver very high quality.
	IMG4. In comparison to other hotel brands, this hotel brand
	is highly respected.
	IMG5. This hotel's brand has a very rich history.
Brand Equity Scale (BES)	EQT1. It makes sense to book hotel rooms/services from
	hotel X Website instead of any other brand, even if they are
Yoo et al. (2001)	the same.
	EQT2. Even if another hotel brand has same features as X, I
	would prefer to buy X.
	EQT3. If there is another hotel brand as good as X, I prefer
	to buy X.
	EQT4. If another hotel brand is not different from X in any
	way, it seems smarter to purchase from hotel X.

Brand Choice Scale (BCS)	CHO1. Even if other competing brands are not different
	from X in any way, it seems smarter to choose an X hotel.
Hsu et al. (2012)	CHO2. An X hotel is always a superior choice to its rival
	hotels.
	CHO3. It makes sense to choose X instead of any other
	hotel brand, even if they are the same.
Price Premium Scale (PPS)	PRC1. The price of hotel brand X would have to go up quite
	a bit before I would not consider buying it.
Netemeyer et al. (2004)	PRC2. I am willing to pay a higher price for hotel X than for
	other hotel brands.
	PRC3. I am willing to pay a lot more for hotel X than for
	other hotel brands.
Buying Intention Scale (BIS)	BY1. I would book a room in hotel brand X.
	BY2. I would seriously consider booking a room in hotel
Erdem et al. (2006)	brand X.
	BY3. It is very likely that I would book a room in hotel
	brand X.

## APPENDIX C: UCF IRB APPROVAL LETTER



University of Central Florida Institutional Review Board Office of Research & Commercialization 12201 Research Parkway, Suite 301 Orlando, Florida 32826-3246 Telephone: 407-823-2901 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

### Approval of Exempt Human Research

From: UCF Institutional Review Board #1 FWA00000351, IRB00001138

To: Albert A. Barreda Davila

Date: March 20, 2014

Dear Researcher:

On 3/20/2014, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review:	Exempt Determination
Project Title:	WEBSITE INTERACTIVITY AS A BRANDING TOOL FOR
200232102608	HOTEL WEBSITES
Investigator;	Albert A Barreda Davila
IRB Number:	SBE-14-10180
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the eccempt status of the human research, please contact the IRB: When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/20/2014 12:10:31 PM EST

Jame munitori

**IRB** Coordinator

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