An Exploratory Research to Formulate the Web-Customer Satisfaction in terms of Digital Business Model

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ABSTRACT

Internet has provided a freeway to organizations from traditional business model to e-commerce to market, advertize, and commerce around the globe. The increasing Internet penetration rates have transformed the e-commerce business model to digital business model, also called eBusiness. It is found that web-customers and their behavioral patterns often differ from customers with traditional purchasing behavior. In the present Internet generation, organizations may need to go beyond website performance in order to build their overall customer satisfaction. In the hospitality and tourism industry, organizations need to create value and build relationships with its customers that go beyond e-commerce. Considering the recent developments in this digital business model, the objective of this study is to conduct an exploratory research that depicts the variables that may have significant influence on the web-customer satisfaction. This study aims to conduct an exploratory research through literature search for formulating the model for web-customer satisfaction.

Keywords: *web-customer satisfaction, exploratory study, digital business, website quality, e-business, consumer behavior*.

INTRODUCTION

In the last decade, the Internet users have increased exponentially from 360 million in 2000 to 1.96 billion users in June, 2010 (InternetWorldStats.com, 2010). The World Wide Web is a platform for many new businesses today such as Amazon, Ebay, Facebook, Zappos, Zip Car and many more. In hospitality and tourism industry, many Internet-based online travel and reservation businesses have emerged in the last decade and have changed the way organizations operate and manage business. The electronic commerce or "eCommerce" business model provided a freeway for organizations to buy and sell, market, collaborate and commerce to customers around the globe. The total U.S. retail e-commerce Business to Customer (B2C) sales in the year 2008 was $134 billion and in the first quarter of 2009 was $31 billion (Census.gov, 2009). These increasing Internet penetration rates and changing customer purchasing behavior have transformed the e-commerce business model to digital business, also called Electronic Business or simply "eBusiness".

Internet technology is emerging as a crucial means of e-business as it is imperative for creating a strategic advantage (O'Connor & Frew, 2002). Digital business is referred to as "the use of digital technologies to enable, improve, enhance, transform or invent a new business model for creating a superior customer value for current or future customers" (Sawhney & Zabin, 2001 p. 15). The e-business is beyond e-commerce as this model facilitates organizations to collaborate and integrate their "data processing systems" with other business partners to provide efficient and effective products and services to their customers. This e-business model goes beyond customer's expectations, firm's business model, and cost reduction (Hanson & Kalyanam, 2007). Consequently, e-commerce is a part of e-business as the organizations strategies and processes are focused by means of "electronic capabilities" among various organizations to provide services to its customers.

Many types of e-business models have emerged in the last decade such as dot-com model that was based on the Web-based shopping systems, also called as WBSS applications. Porter (2001) and Arlitt et al. (2001) have provided a framework to this model with a "multi-tier architecture" for WBSS. In this model, the data available in the servers are integrated in the backend for customers to respond to their requests through Internet. Digital business expands the e-commerce business model as it provides new opportunities for the web based digital services (Kim & Galliers, 2004). The digital business model may act as a versatile interface for organizations to communicate, interact, and build online relationships with other enterprises and customers (Ranganathan & Ganapathy, 2002 & Kim & Niehm, 2009). Based on these models, this study proposes that when referring to customers using digital services for their purchases and transactions, they should be referred as digital customers or web customers.

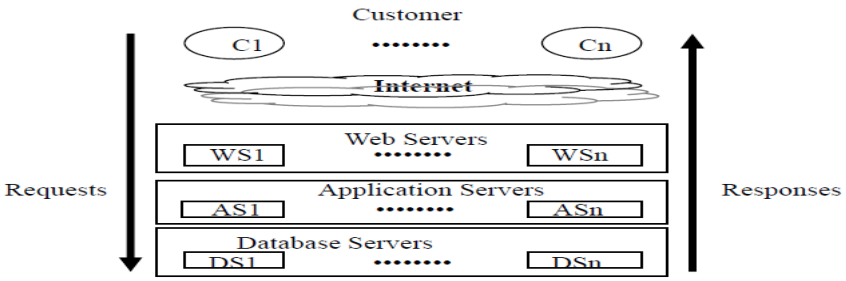

Figure 1
Multi-tier Architecture of Web-Based Shopping Systems (Arlitt et al., 2001)

Unlike traditional customers, web customers have minimal switching costs. They are just a click away from moving from one business to other business (Zong & Ying, 2008). Consequently, website quality becomes a key factor for web customers to get connected, affiliated with services offered, and to make transactions from the website. Many researchers have proposed that, "website quality may significantly impact the success of the e-commerce" (Li, Daugherty, & Bioccam 2001) as the website performance plays a central role in the customer satisfaction (Bai, Law & Wen, 2008; Lin, 2007; Li, Kim & Niehm, 2009; McKinney, Yoon, & Zahedi, 2002).

Customers are looking for "superior value" in the products and services compared to other similar products and services in the e-business market. Additionally, such concept as "customer value" plays an important role in attracting web consumers. Previous research conducted in apparel e-retail and e-shopping indicate that customer value is positively related to customer satisfaction (Hsu, 2006; Lin, 2007; Kim & Niehm, 2009; Zhong & Ying, 2008). When businesses create "superior customer value" in all its products and services consistently, customers tend to build a relationship with these businesses. In a digital business, this relationship can be illustrated as the quality of the relationship between organizations and customers.

In e-business models, organizations focus on web customers in order to provide valuable services and products through e-business. When analyzing customer satisfaction of the web customers, it is vital that organizations to consider and measure the web-customer satisfaction rather than traditional customer satisfaction constructs. In hospitality and tourism industry, overall customer satisfaction is considered as an important factor when analyzing and investigating customer responses. Most researchers have explored these variables in various industries, but there is still a gap in the knowledge of customer satisfaction of this web customers and factors that influence web-customer satisfaction (WCS).

This study attempts to cover this gap by integrating various factors that influence the WCS. Subsequently, this study will explore and integrate a theoretical model that depicts the variables that may have significant influence on the concept of WCS. This study aims to conduct an exploratory research through literature search for formulating the web-customer satisfaction (WCS) in terms of digital business model. While this paper explores the integrated model of the interrelationships between these variables, an empirical research of this model will be performed in the future.

LITERATURE REVIEW

Website Quality (WQ)

Zhong and Ying (2008) stated that website quality (WQ) is the quality of website services provided by the web-system. Historically, WQ was mostly studied in the areas of information systems, technical dimensions, customer-oriented, and digital business marketing. Traditional service quality is conceptualized by the dimensions of SERQUAL model; "reliability, responsiveness, assurance, empathy and tangibles" are widely accepted and are used in understanding the service quality (Parasuraman, Zeithaml & Berry, 1988; Voss, 2000 & Sinnappan & Carlson, 2004). However website quality (WQ) goes beyond traditional service quality as it includes system architecture, design quality, information quality provided to the web-customers. Therefore, the traditional framework cannot be used to explain and predict the relationships of web-customers. Unlike service quality attributes, website attributes should to be studied in a holistic view using multiple dimensional factors of quality.

The foundational studies of Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) model initially provided insights for customer intentions and attitude to use a technology (Ajzen & Fishbein, 1980; Ajzen, 1985 & Ajzen, 1991). Technology Acceptance Model (TAM) developed by Davis (1980) based on the above models introduced customer acceptance of technology from an information technology perspective. The extended and modified models of TAM, such as TAM2 and UTAUT (unified theory of acceptance and use of technology) proposed additional variables explaining consumer acceptance of technology, but they fail to incorporate design and implementation into the model" (Li, 2009; Venkatesh & Davis, 2000; Venkatesh et al., 2003).

Moon and Kim (2001) extend TAM by adding "playfulness" as one of the determinants for the acceptance of website, but it failed to explain how it can impact the customer satisfaction. One of the most sophisticated and comprehensive models grounded in TAM and TRA is WebQual. This model contains 12 different dimensions: informational fit-to-task, tailored communications, trust, response time, ease of understanding, intuitive operations, visual appeal, innovativeness, flow or emotional appeal, consistent image, online-completeness, and relative advantage" (Loiacono, et al., 2002). This constructs only provided constructs for web designing and it's coding rather than customizing for indivudual performance.

Delone and McLean (1992, 2003) proposed six dimensions of website effectiveness, such as "information quality, system quality, service quality, system usage, user satisfaction, and net benefit". But only few of the constructs are considered to be more related to website quality. Later an inclusive model called E-Qual was introduced to explore the user perceptions of website quality that suggested three factors to study, "usability, information quality and service interaction quality" (Barnes & Vidgen, 2002). McKinney et al, (2002) proposed a model called Expectation-Disconfirmation Effects on web-customer satisfaction (EDEWS), examining the positive relationships between the information quality, system quality and web-customer satisfaction. Information quality was stated as the "perceptions of the customer in regards to the quality of the information" and system quality as "perception of the customer in regards to the performance of information retrieval and delivery (McKinney et al, 2002; Hsu, 2006)."

The concept of e-service quality is defined by Zeithaml et al. (2002) as the efficient and effective way of websites providing product shopping, ordering and delivery. DeLone and McLean (2003) proposed responsiveness, empathy, and trust as the dimensions of service quality that then were widely accepted in the website quality literature (Lin, 2007; Li, 2009; Zhong & Ying, 2008). Zhong and Ying (2008) studied the relationship among website quality, offline quality and customer satisfaction in e-retailing. While all the six dimensions of EDEWS, WebQual and EQual models are still debated in website quality literature, the model proposed in this study incorporates the three most commonly used dimensions; web-information quality, web-system quality and web-service quality (Li, 2009; Rai, Lang, & Welker, 2002).

Web-Customer Value (WCV)

One of the main objectives in the Internet sales and purchasing is to provide "superior customer value" using digital technologies such as websites. The value perceived by the web customer includes a "get" component from the perspective of customer benefits and "give" component from the perspective of business costs in acquiring a customer (Kim & Neihm, 2009; Parasuraman & Grewal, 2000; Zeithaml, 1988). Web customers usually compare the costs of products or services in the stores and also on the Internet. Zeithaml (1988) also proposed that perceived value is subjective as it changes from person to person and generally "people are more satisfied in what they get exceeds what they give". Usually web-customers are more satisfied whenever they get a "cost based value" for the products or services on the web compare to the traditional shopping (Hsu, 2006).

Persuraman & Grewal (2000) suggested four types of perceived value such as acquisition value, transaction value, in-use value, and redemption value. WCV is more than the perceived value as customers tend to compare the quality of the products and usually buys the best product that comes with quality. In terms of Internet commerce, as stated by Keeney (1999), the net value of benefits and product cost, search cost, ordering and receiving is called the value proposition. Web customers tend to search for the best quality deal for the value they are willing to pay. When these customers are hooked up with the best quality or the same quality but for lower price compared to the other sites, would find value for this product or service. Therefore, web-product quality is one of the variables that may have positive influence on the web-customer value.

The direct marketing of products and services has reduced the communication between marketers and individual customers (Weber & Roehl, 1999). When customers buy products on web, they expect their products to reach them on time. Marketers have provided various shipping options to customers in delivering their products on time. This overall web-customer value (WCV) is analyzed based on the total performance outcomes of these web products and services that are provided to the web customer. These web-performance outcomes have a direct impact on the overall WCV (Hsu, 2006). So this overall web-customer value (WCV) may be measured by these three commonly accepted variables web-product quality, web-cost based value and web-performance outcomes.

Web-Relationship Quality (WRQ)

In e-business, organizations need to have a strong relationship with current and as well as prospective customers by providing them digital services that add more value than the competitors. Ellram (1995) suggest that long-standing relationships provide long-lasting competitive advantage to businesses as these relationships are intangible and cannot be imitated by competitors. Relationship quality (RQ) is considered as the overall degree of quality of these relationships between customers and businesses and the manner these businesses meet the expectations and needs of the customer consistently (Crosby et al, 1990; Hennig-Thurau & Klee, 1997).

The concept of relationship quality is widely studied in the areas of marketing, consumer behavior and customer loyalty. It is suggested that based on digital services provided in the past, customers tend to have higher or lower relationship quality for the future business with the organization (Kim & Cha, 2002; Wong & Sohal, 2002). Zhong and Ying (2008) propose that there is a significant relationship between the website quality (WQ) and web-customer satisfaction (WCS). It is also suggested that relationship quality and customer service are related to each other in retail services (Qin et al., 2009).

Relationship quality (RQ) is studied in various fields of business industries. Nevertheless, it is not explored in the area of web-customer satisfaction. It is widely accepted that customers who are not satisfied with the products or services would not plan to have good relationship with that organizations (Storbacka & Gronroos, 1994). In building customer relationship and its quality, customer satisfaction plays a vital role. In the past, researchers have found that customers that are highly satisfied have higher quality relationships with those organizations in buying the products and services (Dorsch et al., 1998). So in understanding the relationship quality if the web customers we need to explore their "commitment, trust and satisfaction" in using these company websites.

Web customers develop a relationship with websites if they have a "commitment", "trust" and "satisfaction" in the organization that they are browsing. To analyze the overall web-relationship quality, the influence of the web customer's commitment, trust and satisfaction needs to be investigated in this study.

Web-Customer Satisfaction

Website Quality and Web-Customer Satisfaction

Surprisingly, there is no consensus about the definition of customer satisfaction. For example, Abraham & Taylor (1999) define customer satisfaction as the sum of total satisfactions of the customer with the individual elements or attributes of all the products and services that make up the experience. Oliver (1999) defined satisfaction as "pleasurable fulfillment of the customer. In the context of digital business, Szymanski & Hise (2000) define e-satisfaction from the e-commerce perspective, as the measure of satisfaction with the online or web shopping. Kotler (1997) proposed that satisfaction results from experiences in different purchasing stages such as need arousal, information search, alternatives evaluation, purchase decision and post-purchase behavior.

Spreng et al. (1996) define e-commerce customer satisfaction as affective condition that represents the emotional reaction and total experience after browsing through the entire website. McKinney et al. (2002) propose that measuring web-customer satisfaction for information quality and system quality provides insight about customer overall satisfaction of the website. Pitt et al., (1995) include service quality as one of the variables for the success of e-commerce. Liu & Arnett, (2000) proposed service quality and few other key design factors for digital services websites.

After analyzing other inconsistent constructs of website quality, Li (2009) included three constructs in his Task-Technology Fit (TTF) model evaluating the website quality and its relationship with satisfaction of the web-customer. This theoretical study integrates these three majorly accepted constructs, web-information quality, web-system quality, web-service quality for website quality to find their relationship with web-customer satisfaction (WCS).

Web-Customer Value and Web-Customer Satisfaction:

Several studies have already found significant relationship between customer value and customer satisfaction in the e-shopping (Hsu, 2006). The most recognized components of customer value are proposed by Oliver (1999) and his model included quality, cost-based value and performance outcomes to customer value. By integrating models developed by the Torkzadeh & Dhillon (2002), Kenney (1991), and Hsu (2006), the new model proposed in this study will enhance the existing theory by recommending constructs based on web-customer value (WCV).

Quality from a web-customer perspective can be measured based on quality of products on the web, value of the product, served purpose of the web-product, and best web-product for the money paid online. Based on Oliver (1999) and Hsu (2006), cost based value in terms of WCV to its relationship with web-customer satisfaction may be analyzed based on the money saved by doing online shopping, i.e. time savings, travel costs savings, etc.

Web-performance outcomes have been studied based on several factors, such as "easy return process" for valuable services online, quality of product in online shopping and purchasing, and web-customer regret after conducting online purchasing (Oliver, 1999; Hsu, 2006). Based on Kotler's (1997), web-customer value (WCV) may be considered as purchase decision and post purchase behavior of the web-customer. The web-cost based value, web-product quality and web-performance outcomes may have a direct impact on the overall WCV.

Web-Relationship Quality and Web-Customer Satisfaction:

In the last two decades, many researchers and practitioners proposed various dimensions, antecedents, and outcomes while exploring the concept of Relationship Quality. Qin et al. (2009) suggested trust, commitment, and satisfaction as three mostly used or accepted dimensions. Trust is defined as customer's willingness to rely and have confidence over the future business performance (Kwan & Suh, 2005; Moorman et al., 1992). Trust is necessary to build high quality relationships and a higher level of trust is possible when the organizations are proactive in providing positive outcomes persistently (Ganesan, 1994; Morgan & Hunt, 1994).

Commitment plays a key role in figuring out the strength of marketing relationship and to predict the mutual understanding between customer and business (Berry & Parasuraman, 1991; Dwyer et al., 1987). This study also adopts Qin et al. (2009) study in the commitment

definition, ". . . an enduring desire to maintain a valued relationship." Qin et al., (2009) proposed that satisfaction in terms of relationship quality should be measured as an "experienced outcome" rather than as an evaluative process. This integrated model assumes that this "valued relationship" in web customers may be shaped based on web-customer satisfaction (WCS). This study proposes that the overall web-relationship quality (WRQ) influences the WCS positively.

Conceptual Model

From a web-customer perspective, the overall satisfaction of the web-customer may depend on website quality (WQ), where the key constructs of WQ from the literature are identified as web-information quality, web-system quality and web-service quality. Based on the previous literature review this integrated model suggests that there may be positive relationship between WQ and web-customer satisfaction (WCS). Based on the customer value review, the integrated model can be modified based on the key factors that determine the web-customer value (WCV). These key constructs are identified as web-product quality, web-cost based value, web-performance outcomes.

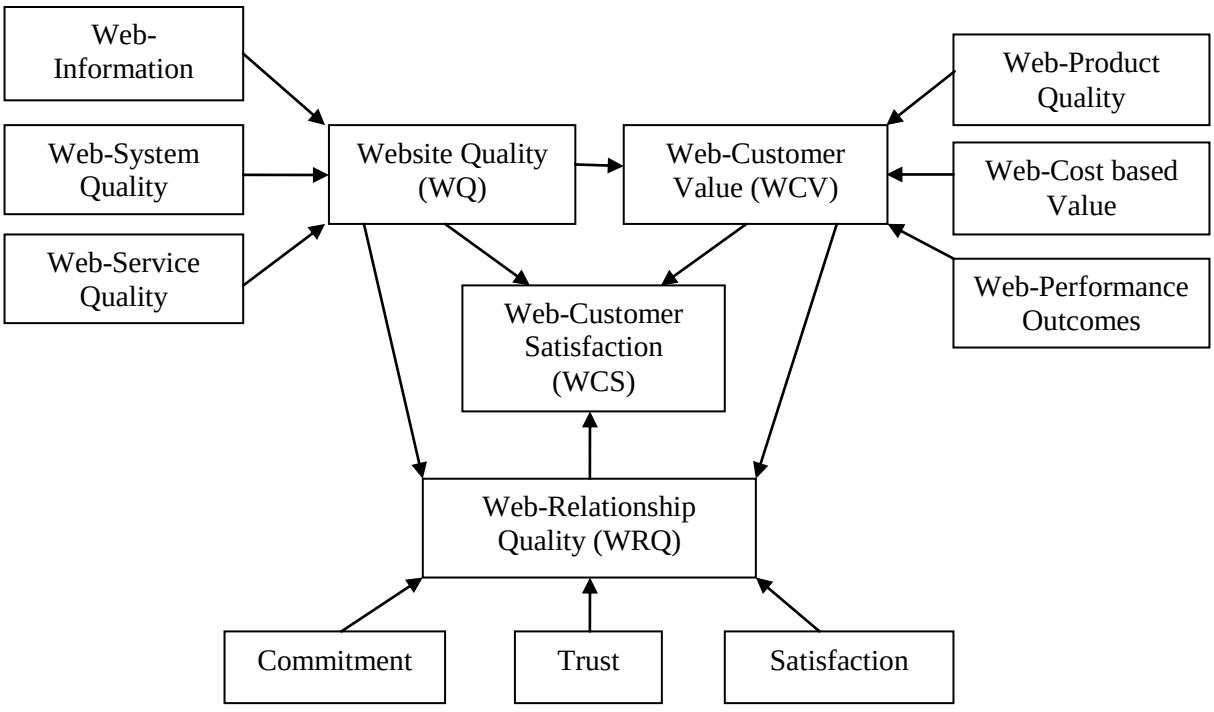

Figure 2
Conceptual Model for Web-Customer Satisfaction

Based on the literature review, the integrated model suggests that there may be a positive relationship between WCV and WCS (Figure 2). Relationship quality is a new construct added in the model that fills the gap in understanding the overall web-customer satisfaction in digital business. Relationship quality of the web-customer is referred to as web-relationship quality (WRQ).

The key constructs and mostly accepted factors that constitute web-relationship quality are identified in this as trust, commitment and satisfaction. According to the integrated model, web-customer satisfaction (WCS) may also have positive relationship with the website quality (WQ), web-customer value (WCV) and web-relationship quality (WRQ). This study also proposes that website quality (WQ) may have positive relationship with both web-customer value (WCV) and web-relationship quality (WRQ). Also web-customer value (WCV) may also have positive relationship with WRQ.

Discussions and Future Research

Incredible increase in global Internet users in the last decade has changed traditional business to e-commerce business model and from this model to digital business model or eBusiness. Digital business is more than just e-commerce, where organizations use digital technologies to create a unique customer value and to build relationships by transforming, enhancing and inventing new business process or model in an organization. The use of digital technology mediums, such as websites is increasing the potential business and changed the extent these digital business strategies that are used in current businesses today.

This fact has laid the foundation for this study to fill the gaps in the website quality, web-customer value and web-relationship quality and to propose an integrated theoretical model to find its relationship with web-customer satisfaction. By studying these dimensions through this exploratory research, an empirical study will be carried out in the future to contribute to the literature in digital business and web-customer satisfaction by analyzing the variables website quality (WQ), web-customer value (WCV), and web-relationship quality (WRQ).

The proposed model implies that there may be a positive relationship between WQ, WCV, WRQ and WCS. So this theoretical model can be further tested and studied in order to predict the relationships among the constructs. This study fills the gap in the literature and facilitates other researchers to build a new model for the future study in predicting and explaining the theory of web-customer satisfaction. After testing this complete model, this study will conduct a web-survey to explain and predict the relationships between these variables in the hotel industry. Once the complete model is tested, a structural equation modeling will be used in the future to determine the significant relationships between variables in this theoretical model.

REFERENCES

Abraham, P., & Taylor, E. (1999). Customer satisfaction and its measurements in hospitality enterprises. *International Journal of Contemporary Hospitality Management*, MCB University Press.

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Prentice-Hall Inc., Eaglewood Cliffs, NJ.

Ajzen, I. (1985). *From Intentions to Actions: A Theory of Planned Bahavior*, in J. Kuhl, J, Backmann (Eds), Action Control: From Cognition to Behavior, Springer, New York, 11-39.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 2, 179-211.

Arlitt, M., Krishnamurthy, D., & Rolla, J. (2001), Characterizing the scalability of a large web-based shopping system, *Transaction on Internet Technology*, Vol. 1, pp.44-69.

Barnes, S., & Vidgen, R. (2002). An interactive approach to the assessment of e-commerce quality, *Journal of Electronic Commerce Research*, 3(3), 114-127.

Berry, L. L., & Parasuraman, A. (1991). *Marketing Service*, Free Press, New York, NY.

Crosby, L. A., Evans, K. R. & Cowles, D. (1990). Relationship quality in services selling: an interpersonal influence perspective, *Journal of Marketing*, Vol. 54, pp. 68-81.

Davis, F. D. (1980). Perceived usefulness, perceived ease of use and user acceptance of Information technology, *MIS Quarterly*, 13, 3, 319-339.

DeLone, W. H., & McLean, E. R. (1992). Information systems success: the quest for the dependent variable", *Information Systems Research*, 1992, 3,1, 60-95.

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: a ten year update", *Journal of Management Information Systems*, 19(4), 9-30.

Dorsch, M. J., Swanson, S. R., & Kelley, S.W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers, *Journal of the Academy of Marketing Science*, Vol. 26 No. 2, pp. 128-42.

Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships, *Journal of Marketing*, Vol. 51 No. 2, pp. 11-27.

Ellram, L. M. (1995). A managerial guideline for the development and implementation of purchasing partnerships, *International Journal of Purchasing and Material Management*, Vol. 31, pp. 10-16.

Ganesan, S. (1994). Determinants of long-term orientation in buyer–seller relationships, *Journal of Marketing*, 58, 1–19.

Goodhue, D, L. & Thompson, R. L. (1995). Task Technology for and individual performance, *MIS Quarterly*, 19, 2, 213-236.

Goodhue, D. L. (1998). Development and measurement validity of a task technology for instrument for user evaluations of information systems, *Decision Sciences*, 29, 105-138.

Hanson, W., & Kalyanam., K. (2007). *Internet marketing and e-commerce*, Thompson and South Western Press, New York, NY.

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: a critical reassessment and model development, *Psychology and Marketing*, Vol. 14 No. 8, pp. 737-64.

Hsu, H. (2006). An empirical study of website quality, customer value, and customer satisfaction based on e-shop. *The Business Review*, Cambridge, Vol 5, 1: 190-193.

Internet World Statistics (2010). *World internet usage and population statistics*, Retrieved on September 9st, 2010 from http://www.internetworldstats.com/stats.htm

Keeney, R. L. (1999). The value of internet commerce to the customer. *Management Science*, 45(4), 533-542.

Kim, C., & Galliers, R. D. (2004). Deriving a diffusion framework and research agenda for web-based shopping systems, *Journal of Electronic Commerce Research*, Vol.5, 3,199-215.

Kim, H., & Niehm, L. S. (2009). The impact of website quality on information quality, value, and loyalty intentions in apparel retailing, *Journal of Interactive Marketing*, 23, 221-233.

Kim, W. G., & Cha, Y. (2002). Antecedents and consequences of relationship quality in hotel industry, *International Journal of Hospitality Management*, Vol. 21, pp. 321-38.

Kotler, P. (1997). *Marketing Management: analysis, planning, implementation, and control*, Englewood Cliffs, Prentice Hall, New Jersey, NJ.

Li, J. (2009). Theoretical model of consumer acceptance: in the view of website quality, *IEEE*, retrieved on September 2nd 2009 from IEEE Xplore.

Liu, C. & Arnett, K. P. (2000). Exploring the factors associated with website success in the context of electronic commerce, *Information and Management*, 38, 23-33.

Loiacono, E. T., Watson, R. T. & Goodhuse, D. L. (2002). WebQual: a measure of website quality. *American Marketing Association Conference Proceedings*: 432-438.

McKinney, V., Yoon, K., & Zahedi, F. M. (2002). The measurement of web-customer satisfaction: an expectation and disconfirmation approach, *Information Systems Research*, 13, 3, 296-315.

Moon, J. W., & Kim, Y. G, (2001). Extending the TAM for a world-wide web context", *Information and Management*, 38, 217-236.

Moorman, C., Zaltman, G. & Deshpande´, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organizations, *Journal of Marketing Research*, Vol. 29, pp. 314-28.

Oliver, R. (1999). Whence consumer loyalty?, *Journal of Marketing*, Vol. 55, 2, 29-37.

O'Connor, P. (1999). *Electronic information distribution in the tourism and hospitality*, Oxford University Press, Oxford.

O'Conner, P., & Frew, A. J. (2002). The future of hotel electronic distribution: Expert and industry perspectives. *Cornell Hotel and Restaurant Administration Quarterly*, Vol 43, 3, pg: 33-45.

Parasuraman, A., & Grewak, D. (2000). The impact of technology on the quality-value-loyalty chain: a research agenda, *Journal of Academy of Marketing Science*, 28, 1, 168-174.

Pitt, L. F., Watson, R. T., & Kavan, C. B. (1995). Service quality: a measure of information systems effectiveness, *MIS Quarterly*, 19(2), 173-187.

Porter, M. E. (2001). Strategy and the internet, *Harvard Business Review*, pp. 63-76,

Qin, S., Zhao, L., & Yi, X. (2009). Impacts of customer service on relationship quality: an empirical study in China, *Managing Service Quality*, Vol 19, 4, 391-409.

Rai, A., Lang, S. S., & Welker, R. B. (2002). Assessing the validity of IS success modesls" an empirical test and theoretical analyses, *Information Systems Research*, 12, 1, 50-69.

Ranganathan, C., & Ganapathy, S. (2002). Key dimentions of business-to-consumer web sites, *Information and Management*, 39, 457-465.

Sawhney, M., & Zabin., J. (2001). *The Seven Steps to Nirvana*. New York: McGraw-Hill.

Sinnappan, S., & Carlson, J. (2004). *An examination of website quality dimensions in Australian e-retailing: a confirmatory factor analysis approach*. Das. H & Gulati, V. P. (Eds.) Springer, 410-418.

Spreng, R. A., Mackenzie, S. B., & Olshavsky R. W. (1996). A reexamination of the determinants of consumer satisfaction, *Journal of Marketing*, 60(3), 15-32.

Storbacka, K.S., & Gronroos, C. (1994). Managing customer relationships for profit: the dynamics of relationship quality, *International Journal of Service Industry Management*, Vol. 5 No. 5, pp. 21-38.

Szymanski, D. M., & Hise, R. T. (2000). E-statisfaction: an initial examination, *Journal of Retailing*, 76(3), 309-322.

Torkzadeh, G. G., & Dhillon, G. G. (2002). Measuring factors that influence the success of internet commerce, *Information System Research*, 13, 2, 187-204.

U.S. Census Bureau (2010). *U.S. Department of Commerce - E-commerce Sales*. Retrieved on August 15th, 2010 from http://www.census.gov/mrts/www/data/html/09Q1.html

Venkatesh, V., Morris, M. F., Davis, G, B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified way. *MIS Quarterly*, Vol. 27, 3, 425-478.

Weber, K., & Roehl, W. S. (1999). Profiling people searching for and purchasing travel products on the World Wide Web. *Journal of Travel Research*, 37(3), 291–298.

Wilcox, P. A., & Gurau, C. (2003) Business modeling with UML: The implementation of CRM systems for online retailing, *Journal of Retailing and Consumer Service*, 10, 181-91.

Zeithaml, V. A. (1988). Customer perceptions of price, quality, and value: A means-end model and synthesis of evidence, *Journal of Marketing*, 52, 3, 2-22.

Zeithaml, V.A. (2002). Service quality delivery through websites: a critical review of extant knowledge, *Journal of the Academic of Marketing Science*, 30, 362-375.

Zhong, L. W., & Ying, J. A. (2008). The impact of website and offline quality on relationship quality: an empirical study on e-retailing, *IEEE*, Retrieved on September 2nd, 2009 from IEEE Xplore.