THE SEQUENCE OF ELECTRONIC SERVICE QUALITY ON CUSTOMER SATISFACTION: THEORITICAL STUDY

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ABSTRACT

This study investigates the impact of electronic service quality dimensions on customers' satisfaction. Finding indicates that customers are satisfied in three dimensions: information, ease of use and security/privacy while they answer with "Neutral" for the other dimensions: design, reliability and interactivity/personalization which in turns did affect the overall satisfaction. Furthermore, the recommendations of this research were as follows:

- Organization should give more attention to its e-service quality especially in the three dimensions which did not meet its customer's expectation which are: interactivity/personalization, design and reliability.
- However, as the users become more mature, they know exactly what they expect to be e-service quality factors. Therefore, It will be valuable to find out the solutions to reduce failures in firm electronic service quality and fill the gap between what is perceived by the customers view through in depth qualitative inquiry. The solution will include the integration of internal functional departments and external integrations of channel. Nowadays, called customer relationship management (CRM) and supply chain management have become the main factors.

1. INTRODUCTION

The growth of worldwide internet commerce has been mainly due to the demand of customers who technologically savvy and informed about products and services. Consequently, the competition has increased rampantly among Internet companies. In addition, there are applications that use search engines and offer price comparisons among top brands on the web; this has caused many companies to fight for top positions using competitive prices and highest quality of products. Thus, the non-price related aspects such as customer relations are becoming utterly important for internet companies.

As Internet shopping gradually moves from an innovation to a common way of shopping, the quality of the websites will play an important role in the differentiation of the sites. High quality sites will be capable to attract more browsers and customers than the competing sites of poor quality because the quality built a sustainable competitive advantage. According to Yoo & Donthu (2001) Internet shopping sites can be defined as the Web sites of retail outlets where customers can browse, evaluate, order, buy a product or a service. In summary, Internet shopping sites are online versions of the physical stores where all operations and its relevant activities take place online cyber space. Literature on the quality of traditional retail stores confirmed that consumers use quality of the store as an indication of the quality of products from stores (Dodds, Monroe & Grewal, 1991). Likewise, the high quality Web sites will attract more attention and visits from consumers by implying that its products are of high quality. In addition, when consumers are satisfied with a high quality Web site, they inspire active and positive word-of-mouth for the site. Little research has tried to develop a sound instrument to measure the perceived quality of an online shopping site. According to Yoo & Donthu (2001) the lack of action has been a barrier to monitor and improve site quality and to investigate the relationship between customer satisfaction

and behavioral intentions. The measurement web site quality is in its infancy stage and there is no adequately accepted and tested scale. (Zeithaml, et al., 2002a). Various measuring instruments have been developed with the objective of evaluating the quality of web sites (Aladwani & Palvia, 2002; Wolfinbarger & Gilly, 2002). Zeithaml, et al. (2002) propose an excellent review of most of these studies and summaries the main dimensions of web site quality as information availability and content (information quality), ease of use, privacy/security, graphic style and fulfillment.

The quality of web sites has become a key indicator of the good that a company can satisfy their customers. Another new challenge is the rapid increase of the expectations and the level of sophistication of the ecustomers. In recent years, research efforts have focused on understanding how the e-customers perceive the quality of electronic services and how these perceptions translates into customer satisfaction and behavioral intentions. Adding to the challenges of managing e-customers, it has become important to understand how individual customer differences in terms of information technology skills affect their online experience, behavior and attitudes (Udo, Bagchi, & Kirs, 2008).

The main objective of this study was to identify and explore the dimensions of service quality in an online context and discover how these dimensions helped the customer satisfaction through the investigation of: how firm perform in terms of the electronic service quality dimensions; which, if any, of the service quality dimensions are more significant in achieving service quality; lastly to investigate how electronic service quality can be improved.

2. Background of the Study

Online shopping is becoming increasingly common as a mode of purchase. At the beginning of e-commerce was thought that success was guaranteed simply with your presence online and offer low prices. Currently customer service has proved to be a key element for the achievement of good results on a Web page (Zeithaml, Parasuraman & Malhotra, 2002b). In this context, People's life has been changed in different communities due to the internet which led to significant and new concept "technologies and services". Most of successful companies understood that the low price and having a web site on the internet does not guarantee the success unless they provide high-quality e-service, which in turn becomes the main challenge for many organizations. The study of the service quality of websites is new while the traditional service quality has been studied extensively over the past two decades. Whereas, the traditional service quality is defined as "overall evaluation or an attitude to superiority of the service" Zeithaml et al.(2002) defined the electronic service quality as "the extent to which a website facilitates efficient and effective shopping, purchasing and delivery of products and services"

In response to the fast-paced information age, many airlines have worked hard to develop their own web sites to facilitate e-commerce transactions. In terms of online shopping versus offline purchase, online shoppers benefit from receiving information directly from the web site without having to look for a sales person (Zeithaml, Parasuraman & Malhorta, 2002a). Internet users make use of the web in order to minimize their costs of search, which have been identified as one of the main advantages of online shopping (Lynch & Ariely, 2000). A large amount of information available for free - if they are well organized and easily accessible - is mentioned frequently by consumers as an important reason for shopping on the Internet (Vanitha, Lepkowska & Rao, 1999). Wolfinbarger and Gilly (2001) state that the availability of information is one of the most important aspects of online purchase. Therefore, when an airline website has been designed, ample, accurate and relevant information must be available to customers to enable them to compare products so they can make a decision / choice. Customers may not make an informed decision if the site contains insufficient information.

Consumer expectations are not being met to perceptions of the quality of the online service on the Internet and the interaction human-to-human the technical and logical sides of an online transaction take on a heightened importance for the customer (Long & McMellon, 2004). This could lead to a decline in customer satisfaction, and could ultimately affect sales since there is no human interaction when an online transaction is carried out which makes it even more important that the organizations to ensure that your web site is efficient. For example, If the information is not available for the client, no comparison of other websites will be possible, which could result in that user leave the transaction / sale.

3. THE PROBLEM AND ITS SETTING

Literature on service marketing includes many investigations on the relationship satisfaction of quality of service, both online and in traditional contexts (Wolfinbarger & Gilly, 2003). Satisfaction is an expost assessment of customer service experience, and it is captured as a feeling positive, indifferent or negative. Oliver (1997) defines satisfaction as "the perception of pleasure fulfillment of a service" and loyalty as "deep commitment to the service provider". Customer satisfaction has to be seen in the same way as the quality of the service. The quality of service does not necessarily lead to customer satisfaction and the satisfaction of the customer is not necessarily a precursor of the quality of the service (Gardiner, 2004). Furthermore Gardiner (2004) adds that customer satisfaction is a measure of specific short-term transactions, while the quality of the service is a long-term total evaluation of a service. Hence the perception of service quality by a customer is formed over time through a number of relations during which was either satisfaction or dissatisfaction (Hoffman & Bateson, 2002). In the e-commerce context, there is a positive link between six electronic service quality's dimensions (information. ease of use. design/graphics, reliability, security/privacy, and interactivity/personalization) and customer satisfaction Wolfinbarger and Gilly (2003).

4. WHY SERVICE QUALITY IS IMPORTANT

Online shopping is becoming increasingly common as a mode of purchase. At the beginning of e-commerce was thought that success was guaranteed simply with your presence online and offer low prices. Currently customer service has proved to be a key element for the achievement of good results on a Web page (Zeithaml, Parasuraman & Malhotra, 2002b). In this context, People's life has been changed in different communities due to the internet which led to significant and new concept "technologies and services". Most of successful companies understood that the low price and having a web site on the internet does not guarantee the success unless they provide high-quality e-service, which in turn becomes the main challenge for many organizations. The study of the service quality of websites is new while the traditional service quality has been studied extensively over the past two decades. Whereas, the traditional service quality is defined as "overall evaluation or an attitude to superiority of the service". Zeithaml et al.(2002) defined the electronic service quality as "the extent to which a website facilitates efficient and effective shopping, purchasing and delivery of products and services". The distinction is vital as the interpersonal interaction in the traditional service quality is replaced with human-machine interaction. Therefore, applying the dimensions of service quality developed in traditional services area to e-services is inappropriate. Yoo and Donthu (2001) proposed five dimensions for electronic service quality: quality and quantity of information, ease of use, website design, reliability, security/privacy, interactivity and personality.

4.1 MEASURING SERVICE QUALITY

Parasuraman et al. (1985, 1988) offered the first model to measure the quality of service and they said the quality of service can be measured through functional quality dimensions which consist of five elements (tangibility, reliability, responsiveness, assurance, empathy). This model identified gaps in the quality of service provided in the organizations, which include five gaps starting from the expectations of service until it is delivered to the customer. The first gap is the service provider does not know the customer's expectations about service. The service provider did not realize the standard of service from the point of view of the customer is the second gap. Third gap relating to the service specifications and service delivery. Fourth gap is related to delivery of Service. Expected service by the customer and perceived service is the fifth gap. In addition a perceived service quality and satisfaction model was developed by Spreng and Mackoy (1996). This model is appropriate to find the concept of service quality and customer satisfaction. Also, this model is the reform of service quality and customer satisfaction which is measured through ten tips that will help in measuring the quality of service and customer satisfaction in organizations. Philip and Hazlett (1997) developed PCP attribute model. There are three important attribute of this model named (1) the service environment peripheral attribute (2) core attribute (3) crucial attribute. An important characteristics of this model is it's suitability to measure in any field of service. Another necessary characteristic of PCP attribute identifies the weak area of the service and where the service providers need to improve.

However, Sweeney et al. (1997) established retail service quality and perceived value model for measuring service quality and related factors in retail business. They proposed two models related with value perception of the customers. In model one functional service quality and technical service quality play a significance influence on value perception of the customers besides price and quality of the products. On the other hand model two reflects functional quality perception stimuli the technical quality perception and customer's interest to buy the products.

One important model developed by Oh (1999) is called customer value and customer satisfaction model. This model emphasizes the behavior of the consumers after taking any service. In this model it has shown that perceived service quality is influenced by perceived price and perceptions. On the other hand, perceived customers value and customer satisfaction are influenced by the perceived service quality. If the customers get better perceived value relatively cost/price and they are satisfied with the service then it effects on their repurchase intention.

5. CUSTOMER SATISFACTION:

There are many definitions of the term customer satisfaction in existing literature. According to Hansemark and Albisson (2004) satisfaction is the overall customer stance towards a service provider or emotional reaction to the difference between what the customer expects and what has been presented to him/her, regarding the fulfillment of need or desire. Oliver (1981) debates that satisfaction is a Summary psychological state in which the feeling surrounding disconfirmed-expectation is along with consumer's prior feelings about the consumption experience. In these days customer satisfaction has become more important than before due to its effect on customer retention.

Customer satisfaction is also defined as a customer's overall evaluation of the performance of an offering service (Johnson and Fornell 1991). In a service context, overall satisfaction is overall evaluations of service quality. Many researchers have paid much attention to the close relationship between the quality of service and customer satisfaction. Oliver (1993) view service quality as one of the antecedents of customer satisfaction and propose a link from service quality to customer satisfaction. The concept of customer satisfaction consists of

several elements from different sources (McColl & Schneider, 2006). Knowing the motivations, expectation and desires of the customer is essential in order to provide better service. The importance of identifying the key concepts and elements of satisfaction will provide a template by which information will be gathered about what is and what is not working. This includes both hard measures that are more tangible and can be observed (number of complaints, average wait time, etc) and the soft measures which are less tangible appearances (politeness, helpfulness, etc) (Hayes, 1998).

6. RELATIONSHIP BETWEEN SERVICES QUALITY AND CUSTOMER SATISFACTION:

The researchers studied the relationship between customer satisfaction and service quality. Some studies have shown that providing better quality service will lead to customer satisfaction. Parasuraman et al. (1988) specifically suggests that the quality of service provided is a forerunner for customer satisfaction. In contrast, there is a debate in the inevitability of that customer satisfaction forerunner for judging the quality of service. How exactly does a particular service quality dimension affect customer satisfaction? Johnston (1995) found that the causes of satisfaction and dissatisfaction are not necessarily the same. Some attributes of service quality are not critical for satisfaction but will lead to dissatisfaction if they are not performed in the required manner. Based on Herzberg et al. (1995) research on work motivation, Johnston classified the dimensions in three groups. (1) Satisfiers: factors which will lead to satisfaction if they are provided properly but it will not cause dissatisfaction if they are absent. (2) Dissatisfiers: are those factors in which failure to deliver will lead to customer dissatisfaction but will not necessarily result in satisfaction if they are delivered. (3) Dual factors which had an impact on both satisfaction and dissatisfaction. In the same context, Johnston (1995) argues that attentiveness, responsiveness, care, and friendliness are the main source of satisfaction, while reliability, responsiveness, availability, and functionality are the main source of dissatisfaction. Several studies concerning the quality of services in physical meetings concluded that some factors are responsible for customer perceptions of quality, which are likely to result in customer satisfaction and which, in turn, may lead to behavioral intentions to purchase. Some authors (Zhang & Prybutok, 2005) found in their studies that behavioral intentions can predict behavior, meaning that behavioral intention structures are relevant to customer service.

7. BEHAVIORAL INTENTION

The quality of web sites has become a key indicator of the good that a company can satisfy their customers. Another new challenge is the rapid increase in expectations and the level of sophistication of e-customers. Over the past years, research efforts focused on the understanding of how e-customers perceive the quality of electronic services and how these perceptions translates into customer satisfaction and behavioral intentions. Adding to the challenges of managing e-customers, it became important to understand how the differences of each client in terms of computer skills affect their online experience, behavior and attitudes (Udo, Bagchi, & Kirs, 2008). Since satisfied customers are more likely to stay with a company for a long time, the quality of service has an effect on customer satisfaction and profitability of the company (Anderson, Fornell, & Lehmann, 1994).

After a considerable period assumes that consumers make rational decisions largely in purchasing behavior, marketing specialists are increasingly consider the influence of emotions produced by marketing stimuli, (Laros & Steenkamp, 2004). Emotions are responses to specific causal stimuli that are usually more intense and long lasting, which are usually more intense and long-lasting, especially if emotional fingerprints are stored and recovered (Cohen & Areni, 1991). The distinction between the feelings and emotions is important, because

feelings are also answers to casual specific stimuli, although less intense and fleeting more if compared to the emotions (Agarwal & Malhotra, 2005).

8. E-SERVICE QUALITY

The first formal definition of the quality of the website's service was provided by Zeithaml, Parasuraman, and Malhotra (2001). Zeithaml et al.(2001) defined e-SQ as the degree in which a web site facilitates efficient and effective shopping, purchasing and delivery of products and services. Online shopping can satisfy the need of consumers of several more effective and more efficient in comparison with conventional shopping (Grewal, Lyer, and Levy, 2004; Monsuwe et al. 2004). Online customers therefore expect equal or greater levels of quality of service than traditional customers (Lee and Lin, 2005). Therefore, many academic researchers in online shopping recently placed emphasis on the quality of e-services to attract potential customers and retaining existing customers (June et al., 2004). Consequently, a fundamental understanding of the factors affecting the satisfaction of online customers is of great importance to electronic commerce (McKinney et al., 2002).

The term e-service quality refers to overall customer evaluations and verdicts about the quality of service delivery by a particular company in the virtual marketplace (Santos 2003). A sort of scales has been proposed specifically for e-services, but most of them have been designed based on the SERVQUAL model. SITEQUAL was developed by Yoo and Donthu (2001) to measure e-service quality which consists of: ease of use, aesthetic design, processing speed and security. Wolfinbarger and Gilly (2003) allocated five criteria to measure the e-service quality: (a) Website design, (b) Fulfillment, (c) reliability, (d) Security/Privacy, (e) Customer service. In this context, Santo (2003) debate e-service quality dimension as combination of, incubative dimensions which include: ease of use, linkage, structure and layout, web-appearance, and active dimensions which consist of: reliability, support, efficiency, communication, security, and incentive. Bressolles (2006) developed a measurement scale NETQUAL, which include seven dimensions: Information, Ease of use, Reliability/Fulfillment, Site design, Security/Privacy and Interactivity/ Personalization.

8.1 MEASURING E-SERVICE QUALITY:

Many researchers have their own methods. Parasuraman et al. (2005) believe that the quality of e-service, to a certain extent, refers to the effectiveness and efficiency of browsing online, purchase online, and the supply of goods and services. Yoo and Donthu (2001) SITEQUAL believes that electronic service quality includes four dimensions such as accessibility, speed memorizer, artistic design and interaction response rate. Loiacono et al. (2002) develop the WEBQUAL to scale the service quality. They point out that e-service quality includes 12 dimensions, the information adaptability, trust, design, visual requirement, flow, business process, interaction, response time, intuition, creativity, overall communication, and replaceability. Wolfinbarger and Gilly (2003) EtailQ categorizes the quality of e- service in four dimensions as site design, performance or reliability, privacy or security and customer service. Yaobin and Tao (2005) also offer goodwill besides serviceability, accessibility, and security, specifying that the goodwill is a very important factor in the online purchase.

8.1.1 INFORMATION

Poor quality of information can make disaster in the organizations leading to customer dissatisfaction, the increase in costs, reduced levels in the effectiveness of decision making, the ability to plan, implement and execute organizational policies (Redman, 1998). According to Redman (1998) the operational, tactical and strategic performance of organizations is directly related to the quality of their information. Poor quality of

information can lead to customers are charged for products or services that they have not purchased or products are shipped to the wrong address. The poor quality of information perhaps the greatest obstacle to the development of sound business strategies (Redman, 1998).

According to Fisher & Kingma (2001) the information dimension is considered to be a multidimensional concept .Wang and Strong (1996) offers four dimensions that are essential to customers when you are looking for information. They offered a framework that included the following: 1) the information must be reachable, 2) the information must be interpretable, 3) the information must be related, and 4) the information must be correct. These four dimensions were labeled as intrinsic information quality, contextual information quality, representational information quality, and accessibility information quality. Intrinsic information concerns the accuracy, credibility and reputation of the information provided. Contextual information quality "highlights the requirement that information quality must be considered within the context of the task at hand; that is, information (data) must be relevant, timely, complete, and appropriate in terms of amount so as to add value" (Wang & Strong, 1996). The representational information quality dimension consists of both the format of the information and the meaning of the data. The information quality attributes for this dimension, including intelligibility, ease of understanding, the consistency of representation, and short representation. The last dimension of the typology and quality of accessibility information is related to how accessible information is to find or discover on a Web site, given its security features. In addition, there is no sales staff to answer shopper's questions, and as a result is especially important for online retailers to have the necessary information in the web page (Kim & Stoel, 2004). Lynch and Ariely (2000) found that the ability to find the necessary information on web site specially on, price and quality, positively influenced satisfaction with the experience of shopping online, the product purchased, and the intention of sponsorship. Lee & Kozar (2006) proposed that the higher is the quality of the information, the most online customers who select this website for online shopping. The matter of whether the quality of information conveyed in the 55 web sites meets the needs and expectations of users is crucial. Based on information from past research, the quality can be measured with the relevant information, currency and understandability. Relevant information includes the depth and relevant scope, and the completeness of the information. Currency includes the updating of the information. Understandability includes ease of understanding and clarity of the information. The significant effects of the relevant information, the currency and understandability in increasing information quality have been exhibited in previous studies (McKinney, Yoon & Zahedi, 2002). Other common criteria for evaluating information content includes: accuracy, timeliness, concise and completeness (Madu & Madu, 2002).

While Francis and White (2002) found that adequate information or product description enhances a customer's intention, Novak et al (2000) argues that information quality contributes to delivering a compelling experience. The quality of information that is delivered is a key factor affecting a website's success; hence website information quality must be related, up-to-date and easy to understand to significantly influence online customers' attitude, satisfaction (Feindt, Jeffcoate & Chappell, 2002).

Schubert & Selz (1999) claimed that information is an important dimension of the quality of online service, and information on the shopping process was highlighted as another aspect critical to create an effective e-commerce Web site. This is especially true for online clothing retailers, because online shoppers can not try the garment to check the adjustment, texture or color so that they rely heavily on the information available to them on the site to help them in their decision to purchase. Therefore, unless the necessary information for an online purchase is available, online shoppers will leave the site and visit a competitor's Web site (Song & Zinkhan, 2003).

8.1.2 EASE OF USE

Ease of use is defined as the degree to which a person believes that the use of an information system would be free of effort (Al-Momani & Noor, 2009), as well as how it is easy for customers to make external research in cyberspace and internal navigation within the site. This dimension contains three aspects. Firstly, navigation deals with the way in which users can easily search for information in a Web site. It is considered to be the essence of the multidimensional construction of e-travel service quality (Kaynama & Black, 2000). Without interaction with the staff, online customers need to locate the information and products by themselves. If they repeatedly get lost or confused during the search process, they are expected to quit. It is suggested that navigation plays a principal role in delivering satisfactory services. The second aspect, access, refers to the user's ability to have access to resources; including information related to travel and the characteristics of the service, on airlines websites, and related to the ease of connection and the speed of downloads (Cox & Dale, 2001). It is likely that online users are going to leave and click on other sites, because it took too long for them to access a Web site or download information from the site. Therefore, access to the site is an important element related to the performance of the service. The third part of this dimension is the transactional functions, which allow customers to feel that the site is intuitive, simple and easy to use to perform a transaction (Kim & Lee, 2004). Several elements, including easy control, easy payment, and easy cancellations indicate the degree to which customers think that use of the site would involve little or no effort (Armstrong & Hagel, 1996). According to Desmet & Hekkert (2007) a web site must not only have a good and attractive design, but must also provide not only the beauty and attractiveness, but also high levels of usability, because it affects the emotional States of the user. Thus, a well-designed website should ensure a high level of usability (Cristobal, 2006). A nice-looking design can induce feelings of pleasure during the use of a website (Flavian & Gurrea, 2008). Therefore, an adequate degree of user-friendliness, linked to a comfortable atmosphere, could create a positive bias in the consumption. A good level of perceived usability could lead to higher levels of satisfaction, trust and loyalty toward a specific Web site (Chen, Wigand, & Nilan, 1999). Two central issues for usability are information organization and site navigation. Navigation describes a user's ability to find information efficiently with few barriers. If users are unable to quickly understand the nature or the structure of a site, they can become frustrated and leave. Users are likely to return to a site that they perceive to include a well-designed navigation system (Krug, 2000). Similarly, users must be able to quickly determine the nature of the information presented on a site, how the information is organized and how they can find the information they are looking for. Central to website navigation is the need to allow users to know where they are, where they can go, how they can get there, and where they have been (Nielsen, 2000). When t clickable images are instructive, they act as navigational cues that communicate all of these messages in usability.

According to Boonghee & Donthu (2002) how easy the site is to use is an indicator of a site's overall quality. Usability issues revolve around the ease of a system can be learned (Mills, et al., 1986). Usability is measured by the speed at which a user can complete the specific task on a site, the number of errors to a user makes when browsing to a site, and overall satisfaction to the user expresses with the site.

8.1.3 DESIGN

Website design is very important for online stores (Than & Grandon, 2002). The influence of the Web design on the e-service performance has been widely studied. Design refers to the presentation of content and information, such as the layout simple, clear and consistent, the proper use of the framework, the provision of a site map of Web sites that allows users to skip sections that are of no interest, listed menu Claire's and the logo of the company presented on each page (which is said to also enhance branding), proper use of color, graphics,

images and animations, together with the appropriate size of the web page. The design or the appearance of a site is usually the first determinant observed by the user. Creation of the website must ensure a high level of usability, which is a high degree of ease of use of the different elements. In addition to text, the information is also provided by the proper use of graphics. According to Wolfinbarger & Gilly (2001) users do not want to see graphic that they did not need, but they appreciate the ability to download larger images and different angles of photos they would like to see.

In the context of a wear retail website, Eroglu, Machleit and Davis (2003) found that aspects of the graphical style affected satisfaction with site and they came to the conclusion that an aesthetically pleasing web design can attract customers if it generates pleasant feelings that are associated with the online experience. Previous research has found that poor graphic design elements and presentation styles can confuse and negatively affect consumers' willingness to browse or buy through an online channel (Nielsen, 1999). Navigation design refers to the navigational scheme used to help or delay users as they access different sections of a website (Garrett, 2003). Navigation tools, such as: menus, directories, frames, buttons, site maps, subject trees, a search engine, image maps and colors (Clyde, 2000) should help users to maintain a mental map of where they are, and how the various sections / pages are related to each other. It is useful to have a sitemap that Web site users can use to see the layout on a particular site and maneuver around it (Hudson et al., 2000). Clyde (2000) proposed one way to mitigate this problem through including a search engine on the site.

Montoya-Weiss, Voss & Grewall (2003) found that graphic styles of sites influence the use of online channels and overall satisfaction by reducing the perception of security risks. In a similar manner, Ko and Rhee (1994) proposed that displaying products can attract consumers into making impulse purchases.

8.1.4 RELIABILITY

Reliability refers to the ability to provide the promised service accurately and consistently, including: the frequency of update of the site, quick answers to the demands of the customers and the accuracy of online purchase and invoicing, fast deliveries and conservation of personal information secure (Janda, Trocchia & Gwinner, 2002; Lee & Lin, 2005). This element was observed by Yang (2001) as a determining factor of reliability for online service quality. The importance of reliability has been emphasized by the information technology-based service. Moreover, Zhu, Wymer and Chen (2002) argued that reliability dimension has a direct positive effect on the perceived service quality and client satisfaction. Online stores must provide error free and secure transactions online so that customers feel comfortable with online shopping (Lee & Lin, 2005).

Availability dimension refers to the extent to which online information resources are equipped to provide customers with the products / services that are easy to locate wanted. These services also have the difficulty of linking web pages, and facilitate purchase decisions (Madu & Madu, 2002). However, technical software problems are problems related to purchasing on the Internet (Fram and Grady (1995). When consumers use a website for browsing or buying, functional problems such as missing links and buttons that don't work leads to frustration and out of the site (Fram & Grady, 1995), and as a result the online retailer loses a valuable opportunity to build customer loyalty (Wachter, 2002). According to Santos (2003), prevention and removing broken links and links to sites that no longer exist or are under construction are related to the quality of e-service total.

Having products in stock, delivering the products within the time frame promised, and the accuracy of service promises are incorporated into this dimension and are of importance (Zeithaml, et al. 2002a). According to Kim and Lennon (2004) when customers are notified about stock that has sold out after selecting an item to purchase, they show stronger negative emotions and lower purchase intent than when notified before the selection. Yang and Fang (2004) indicated that the execution of the specific commands and promises of maintaining service are

primary service quality elements that lead to customer satisfaction and dissatisfaction. Reliability has a direct positive effect on perceived service quality and customers' satisfaction Lee & Lin (2005).

8.1.5 SECURITY/PRIVACY

The dimension of privacy is defined as the degree to which the site is safe and protects customer information (Parasuraman, et al., 2005). The issue of privacy is a critical issue in online retailing and consumers are very weary in this regard due to the dangers and risks of disclosing personal information to unknown sources (Sharma & Sheth, 2004). Due to the abuse of the risks associated with personal information, many people are still reluctant to buy products on the Internet and because of these concerns with privacy, online retailers are now more aware of the importance of providing consumer privacy policy (Ranganathana & Ganapathy, 2002). The security/privacy dimension has been rated most critical when influencing non-purchasers' perceptions of service quality and has also been shown to have a strong impact on a customer's intention to purchase (Van Riel, et al., 2003), satisfaction (Szymanski & Hise, 2000), and over all site quality (Yoo & Donthu, 2001). While security deals with the technical specifications of a website security and payment methods, this dimension also includes reputation for the company, trust and the general confidentiality between consumers and those who operate from within the company, participation in the communication process (Van Riel, et al., 2003).

Even though privacy and security have been found by some to not influence perceptions of website quality significantly (Wolfinbarger & Gilly, 2003) or satisfaction with a website (Kim & Stoel, 2004) there has been much research that supports the importance of the security / privacy in online retailing (Santos, 2003). Security is perceived as a critical dimension in terms of quality and service satisfaction, and is unique in the Internet environment (Szymanski & Hise, 2000). A lack of assurance of security has been regarded as the main barrier preventing customers from shopping online as was also found by Ranganathan and Ganapathy (2002), where privacy and security have been found to have a significant impact on the intent to purchase. Moreover it has been proven that trust in the company and the e-service quality environment positively influences both the quality of the service as a whole and the satisfaction of the client (Lee & Lin, 2005). Security also refers to the attributes of privacy which are essential for making transactions online (Zeithaml, et al., 2002b). Customers may weary that their transactions and personal data can access or use via the Internet by third parties and which has been shown as the main concerns of consumers in previous studies (Hoffman, Novak, & Peralta, 1999). Privacy is a theme that was echoed by a variety of authors such as Zeithaml, et al. (2002b) and they describe privacy as one of the key dimensions that consumers use to evaluate the quality of a web site (or quality of eservice). In a similar manner, Stewart and Pavlou (2002) recognized concerns about privacy/security as being crucial for thinking about the effectiveness of interactive media (Parasuraman & Zinkhan, 2008).

8.1.6 INREACTIVITY/PERSONALIZATION

Interactivity refers to how the web site responds to its customers in an online environment (Zeithaml, et al., 2002a). How can the needs and complaints of customers be answered via email in a manner polite? Responsiveness can be defined as "effective handling of problems and returns through the site (Parasuraman, et al., 2005), as well as the willingness to help online customers". It can be measure by the time needed before responding to a client's question (Watson, et al., 1998). Responsiveness measures online retailer's ability to provide appropriate problem solving information to customers, having mechanisms for handling returns and providing online guarantees. The issue of responsiveness can be seen in two ways: load time and search time Wan (2000). While search time is mainly based on the size of a database, loading time can be a problem, and most of the designers take this into account in the design of web pages. Responsive web site proves to be highly

important for end users and consumers expect online stores to respond to their inquiries promptly. (Robbins & Stylianou, 2003). Responsiveness describes how often an online shop voluntarily provides services that are important for its customers (Kim & Lee, 2002).

Customization or personalization results in the media which is best created a virtual experience and stronger attitude; additionally, interactivity and richness are strong predictors of telepresence, an antecedent of flow, productivity and satisfaction (Mathwick & Rigdon, 2004). Examples of personalization could involve sending post purchase e-mails and creating a personalized interactive environment online for each individual customer. Other characteristics of personalization include means of customer interaction such as message boards and customer hotlines (Lee & Lin, 2005).

Another phase of the importance of the customer information is in the interactivity of some e-commerce sites. For example, to make plane reservations, online shoppers feel that they can investigate further options of what they can offline. Also, information can be printed and saved, something that cannot be done on the basis of a telephone conversation with a travel agent (Wolfinbarger & Gilly, 2001). Personalization implies individual attention; personal thank you notes online shops, and the availability of a message for questions or comments from the customer zone (Yang, 2001). The lack of interaction in real time tends to prevent that potential customers through the purchase of online shopping (Yang & Jun, 2002). Previous studies have examined the influence of the customer service provided by Internet retailers in the perception of the customers on the quality and service satisfaction (Wolfinbarger & Gilly, 2003), it was found that personalization in an online environment does not increase significantly the quality of electronic services in general or of the satisfaction of the customer that has been linked to the fact that people are wary of providing personal information online for fears of being used elsewhere. This has severely reduced the possibilities of customization that rising levels of customization will be seen without high levels of confidence (Lee & Lin, 2005).

9. CONCLUSION AND RECOMMENDATIONS

The main objective of this study was to identify and explore the dimensions of service quality in an online context and discover how these dimensions helped the customer satisfaction.

9.1 RESEARCH FINDINGS

The findings emphasize that the quality of electronic service, in fact influence satisfaction. As service quality is a determinant factor of an organization website success, the analysis of literature in e-service quality showed that there is a positive relationship between e-service quality and customer satisfaction. However, the result expressed that organization customers are satisfied in three dimensions of e-service quality which are: information, ease of use and security/privacy while the overall impact of the other three (design, interactivity /personalization and reliability) are important.

9.2 RESEARCH RECOMMENDATIONS

- Firms should give more attention to its e-service quality especially in the three dimensions which could meet its customer's expectation which are: interactivity/personalization, design and reliability.
- However, as the users become more mature, they know exactly what they expect to be e-service quality factors. Therefore, it will be valuable to find out the solutions to investigate failures in firm electronic service quality and fill the gap between what is perceived by the customers view through in depth qualitative inquiry. The solution will include the integration of internal functional departments and

external integrations of channel. Nowadays, called customer relationship management (CRM) and supply chain management have become the main factors.

References

Agarwal, J. & Malhotra, N. 2005. An integrated model of attitude and affect: Theoretical foundation and an empirical investigation. *Journal of Business Research*, 58(4): 483-98.

Aladwani, A. & Palvia, P. 2002. Developing and validating an instrument for measuring user-perceived web quality. *Journal of Information and Management*, 39: 467-476.

Al-Momani, K. & Noor, N.A. 2009. E-service quality, ease of use, usability and enjoyment as antecedents of E-CRM performance: An empirical investigation in Jordan Mobile Phone Services. *The Asian Journal of Technology Management*, 2(2): 50-63.

Anderson, E., Fornell, C. & Lehmann, D. 1994. Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(July): 53-66.

Ariely, D. 2000. Controlling the information flow: Effects on consumers' decision making and preferences. *Journal of Consumer Research*, 27(2): 233-248.

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

Berry, L.L., Parasuraman, A. & Zeithaml, V.A. 1988. The service-quality puzzle. *Business Horizons*, 31(5): 35-43.

Boshoff, C. & Gray, B. 2004. The relationships between service quality, customer satisfaction and buying intention in the private hospital industry. *South African Journal of Business Management*, 35(4): 27-37.

Chen, H., Wigand, R. & Nilan, M. 1999. Optimal experience of web activities. *Computers in Human Behavior*, 5(1): 585-608.

Chu, R. 2001. What online Hong Kong travelers look for on airline/travel websites? *International Journal of Hospitality Management*, 20(1): 95-100.

Cohen, J. & Areni, C. 1991. Affect and consumer behavior, in *Handbook of Consumer Behavior*. Edited by T. Robertson & H. Kassarjian. Eaglewood Cliffs, NJ: Prentice-Hall. 188-240.

Collis, J. & Hussey, R. 2003. Business research: A practical guide for undergraduate and postgraduate students. 2nd ed. New York, NY: Palgrave MacMillan.

Cox, J. & Dale, B. 2001. Service quality and e-commerce: An exploratory analysis. *Managing Service Quality*, 11(2): 121-131.

Cronin, J. 2003. Looking back to see forward in services marketing: Some ideas to consider. *Managing Service Quality*, 13(5): 332-337.

Dodds, W., Monroe, K. & Grewel, D. 1991. Effects of Price, Brand, and Store Information on Buyer's Product Evaluations. *Journal of Marketing Research*, 28(3): 307-319.

Eighmey, J., & McCord, L. 1998. Adding value in the information age: uses and gratification of sites on the World Wide Web. Journal of Business Research, 13(3): 187-194.

Ennew, C.T., Reed, G.V. and Binks, M.R. 1993. Importance-performance analysis and the measurement of service quality. European Journal of Marketing, Vol. 27 No. 2: 59-70.

Feindt, S., Jeffcoate, J. & Chappell, C. 2002. Identifying success factors for rapid growth in SME ecommerce. Small Business Economics, 19(1): 51-62.

Fisher, C., & Kingma, B. 2001. Criticality of data quality as exemplified in two disasters. *Information and Management*, 39(2): 109-116.

Flavian, C., & Gurrea, R. 2008. Reading newspapers on the internet: the influence of websites attributes. *Internet Research*, 18(1): 26-45.

Francis, J. & White, L. 2002. PIRQUAL: A scale for measuring customer expectations and perceptions of quality in internet retailing, in Proceedings of the 2002 American Marketing Association Winter Educators' Conference: Marketing theory and applications. Edited by K.R. Evans and L.K. Scheer. Chicago, Il: American Marketing Association. 263-270.

Gardiner, R. 2004. Evaluating the service delivery of a consulting engineering firm. MBA. Port Elizabeth Technikon.

Gattiker, T., & Goodhue, D. 2005. What happens after erp implementation: Understanding the impact of interdependence and differentiation on plant-level outcomes. MIS Quarterly, 29(3): 559-585.

Grewal, Dhruv, Iyer, Gopalkrishnan R., & Levy, Michael. (2004). Internet retailing: Enablers, limiters and market consequences. Journal of Business Research, 57(7), 703–713.

Hansemark, O. C. & Albinson, M., 2004, Customer Satisfaction and Retention: The Experiences of Individual Employees, Managing Service Quality, 14 (1), 40-57.

Hayes, B. (1998). Measuring Customer Satisfaction. Milwaukee, WI: ASQ Quality Press.

Hoffman, D. & Bateson, J. 2002. Essentials of service marketing. Fort Worth, TX: Harcourt College Publishers.

Ismail, I., Haron, H., Ibrahim, D. & Isa, S. 2006. Service quality, client satisfaction and loyalty towards audit firms: Perceptions of Malaysian public listed companies. *Managerial Auditing Journal*, 21(7): 738-756.

Jillian C. Sweeney, Geoffrey N. Soutar, Lester W. Johnson (1997). Retail service quality and perceived value: A comparison of two models, Journal of Retailing and Consumer Services, 4(1): 39-48.

Johnson, Michael D., and Claes Fornell. (1991). "A Framework for Comparing Customer Satis- faction Across Individuals and Product Categories," Journal of Economic Psychology 12(2) (Fall), 267-286.

Johnston, R. (1995), "The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service", International Journal of Service Industry Management, Vol. 6 No. 2, pp. 46-61.

Kaynama, S. & Black, C. 2000. A proposal to assess the service quality of online travel agencies: An exploratory study. *Journal of Professional Services Marketing*, 21(1): 63-89.

Kim, M. & Stoel, L. 2004. Apparel retailers: Web site quality dimensions and satisfaction. Journal of Retailing and Consumer Services, 11: 109-117.

Krug, S. 2000. Don't Make Me Think: A Commonsense Approach to Web Usability. Indianapolis: New Riders Publishing.

Laros, F. & Steenkamp, J-B. 2004. Importance of fear in the case of genetically modified food. *Psychology and Marketing*, 21(11): 889-908.

Lee, G. & Lin, H. (2005). Customer perceptions of e-service quality in online Shopping. International Journal of Retail & Distribution Management, 33(2), 161-176.

Lee, M. & Hwan, I. 2005. Relationships among service quality, customer satisfaction and profitability in the Taiwanese banking industry. *International Journal of Management*, 22(2): 285-293.

Lee, Y., & Kozar, K. 2006. Investigating the effect of website quality on e-business success: An analytic hierarchy process (AHP) approach. *Decision Support Systems*, 42(3): 1383-1398.

Loiacono, E., Watson, R. & Hoodhue, D. 2002. WEBQUAL: Measure of web site quality. *Marketing Educators Conference: Marketing Theory and Applications*, 13: 432-437.

Long, M. & McMellon, C. 2004. Exploring the determinants of retail service quality on the internet. *Journal of Services Marketing*, 16(1): 78-90.

Lynch, J.G. & Ariely, D. 2000. Wine online: Search costs affect competition on price, quality and distribution. *Marketing Science*, 19(1): 83-103.

Madu, C. & Madu, A. 2002. Dimensions of e-quality. International Journal of Quality & Reliability, 19(3): 246-259.

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

Monsuwe, T. P., Dellaert, B. and Ruyter, K. (2004) 'What drives consumers to shop online A literature review,' International Journal of Service Industry Management, 15 (1), 102-121.

Novak, T., Hoffman, D., & Yung, Y. 2000. Measuring the customer experience in online environments: A structural modeling approach. Marketing Science, 19(1): 22-42.

Oliver, R. 1993. Cognitive, affective and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3): 418-430.

Oliver, R. 1997. Satisfaction: A behavioral perspective on the consumer. Boston, MA: Irwin-Mc GrawHill.

Oliver, Richard L. (1981), "What is Customer Satisfaction?" The Wharton Magazine, 5 (Spring), 36-41.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1985. A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4): 41-50.

Perdue, R. 2001. Internet site evaluations: The influence of behavioral experience, existing images, and selected website characteristics. Journal of Travel & Tourism Marketing, 11(2/3): 21-38.

Philip, G. and Hazlett, S.A. (1997), The measurement of service quality: a new P-C-P attributes model, International Journal of Quality and Reliability Management, Vol. 14 No. 3, pp. 260-86.

Pratap K. J. Mohapatra, U. Lenka and D. Suar 2009. Service Quality, Customer Satisfaction, and Customer Loyalty in Indian Commercial Banks. Journal of Entrepreneurship, 18(1): 47-64.

Redman, T. 1998. The impact of poor data quality on the typical enterprise. *Communications of the ACM*, 41(2): 79-82.

Santos, J. 2003. E-service quality - a model of virtual service dimensions. *Managing Service Quality*, 13(3): 233-247

Schubert, P., & Selz, D. 1999. Web assessment - measuring the effectiveness of electronic commerce sites going beyond traditional marketing paradigms. Preceedings of the 32nd Hawaii International Conference on System Sciences. Hawaii.

Song, J., & Zinkhan, G. 2003. Features of web site design, perceptions of web site quality, and patronage behavior. *Association of Collegiate Marketing Educators Conference* (pp. 106-14). Houston, TX: Proceedings of Advances in Marketing.

Spreng, R.A. and R.D. Mackoy (1996), An Empirical Examination of a Model of Perceived Service Quality and Satisfaction, Journal of Retailing, Vol. 72(2), pp. 201-214.

Udo, G.J., Bagchi, K.K. & Kirs, P.J. 2008. Assessing web service quality dimensions: The ESERVPERF approach. *Issues In Information Systems*, 9(2): 313-322.

Van Riel, A., Liljander, V. & Jurriens, P. 2001. Exploring consumer evaluations of e-services: A portal site. *International Journal of Service Industry Management*, 12(4): 359-377.

Vanitha, S., Lepkowska, E. & Rao, B.P. 1999. Browsers or buyers in cyberspace? An investigation of factors influencing electronic exchange. *Journal of Computer Mediated Communication*, 5(2): unpaged.

Wang, R. & Strong, D. 1996. Beyond accuracy: What data quality means to data consumers. Journal of Management Information Systems, 12(4): 5-34.

Wolfinbarger, M. & Gilly, M. 2001. Shopping online for freedom, control, and fun. *California. Management Review*, 43(2): 34-55.

Wolfinbarger, M. & Gilly, M. 2003. eTailQ: dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, 79(3): 183-198.

Yaobin, L. and Tao, Z. (2005). An empirical analysis of factors influencing consumers' initial trust under B2C environment. *Nankai Business Review*, 8(6), 96-101.

Yoo, B. & Donthu, N. 2001. Developing a scale to measure the perceived quality of an internet shopping site SITEQUAL. *Quarterly Journal of Electronic Commerce*, 2(1): 31-47.

Young, C., Cunningham, L. & Lee, M. 1994. Assessing service quality as an effective management tool: The case of the airline industry. Journal of Marketing Theory and Practice, 2(Spring): 76-96.

Zeithaml, V.A. 2000. Service quality, profitability and the economic worth of customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1): 67-85.

Zeithaml, V.A. 2002. Service excellence in electronic channels. Managing Service Quality, 12(3): 135-139.

Zeithaml, V.A., Berry, L. & Parasuraman, A. 1996. The behavioral consequences of service quality. *Journal of Marketing*, 60(2): 31-46.

Zeithaml, V.A., Parasuraman, A. & Malhorta, A. 2002a. *An empirical examination of the service quality-value-loyalty chain in an electronic channel*. Working paper, University of North Carolina. Chapel Hill, NC: University of North Carolina.

Zeithaml, V.A., Parasuraman, A. & Malhotra, A. 2002b. Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4): 362-375.

Zhang, X. & Prybutok, V. 2005. A consumer perspective of e-service quality. *IEEE Transactions on Engineering Management*,52(4): 461-477.