

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/289378947>

# Determinants of online store customer satisfaction

Article in *Romanian Journal of Marketing* · October 2015

---

CITATIONS  
0

---

READS  
586

**2 authors:**



**Costinel Dobre**  
West University of Timisoara

11 PUBLICATIONS 37 CITATIONS

SEE PROFILE



**Anca Maria Milovan**  
West University of Timisoara

12 PUBLICATIONS 14 CITATIONS

SEE PROFILE

# Determinants of online store customer satisfaction

**Costinel DOBRE**

*Faculty of Economics and Business Administration, West University of Timișoara*

**Anca-Maria MILOVAN-CIUTA**

*Faculty of Economics and Business Administration, West University of Timișoara*

**Abstract:** *Customer satisfaction is a central concept in the theory and practice of marketing, and at the same time, a critical aspect in the success of any business.*

*In this article, we aimed to identify the factors that determine online stores customer satisfaction. Based on literature review, we have developed our own research model and tested the hypotheses formulated regarding the relationships formed between the online stores customer satisfaction and the identified factors. This involved survey sampling, questionnaire administration being carried out on the Internet. The research sample included respondents who own an account on the social network Facebook, assuming that respondents who socialize online have the necessary time to fill in the questionnaire and are more likely to have purchased online at least once. Data analysis implied testing the reliability of each scale, conducting exploratory factor analysis and finally, research hypothesis testing through simple linear regression.*

**Keywords:** online marketing, satisfaction, perceived website quality, perceived online services quality.

**JEL classification:** M31, L81

## 1. Introduction

The concept of customer satisfaction was considered one of the fundamental concepts in marketing literature since its inception (Kotler, 1969; Fornell & Werneldt, 1987 in Siddiqui, 2012). The importance of consumer satisfaction comes from the fact that it leads to increased likelihood of repeat purchase, it stimulates word-of-mouth communication, it reduces price sensitivity, it reduces complaints, it leads to loyalty and positively affects the value obtained by shareholders (Anderson et al., 1994; Heskett et al., 1994; Reichheld & Sasser, 1990; Johnson & Fornell, 1991 in Siddiqui, 2012).

According to Brashear, Kashyap, Musante and Donthu (2009), although the Internet is the retail channel with the highest growth, consumers still don't consider this medium as a common way to shop. The increase in the number of purchases made online did not keep up with the expansion of Internet users (Overby & Lee, 2006), and the low rate of conversion from visitors to buyers and the inability to attract

repeat purchases are the main problems online retailers have to face (Mummalaneni, 2005). Referring to the sales volume on the Internet, many researchers put the large gap between predictions and reality on behalf of the limited understanding of the specific buying behavior of the online customer (Jayawardhena, 2004; Cheung, Chan and Limayem, 2005).

The contradiction between those who use the Internet and the number of people that purchase on the Internet confirms the need to further investigate the factors influencing this ratio.

## 2. Theoretical background regarding online stores customer satisfaction

The term „satisfaction” is of Latin origin: „satis” meaning enough and „facere” meaning to do, the two words together suggesting that what is looked for is provided to the point where enough (Vanhamme, 2001). This meaning is also found in the Larousse French dictionary (1983) where

satisfaction is defined as a state resulting from the fulfillment of what we asked for or wanted.

Giese and Cote (2000) identified three general components for the definition of consumer satisfaction:

- consumer satisfaction is an emotional and / or cognitive response;
- the response refers to a specific orientation - expectations, consumption, experience;
- the response occurs in a particular moment- after consumption, by choice or it relies on multiple experiences aggregation.

Literature regarding satisfaction starts from the idea that satisfaction is either a process or a response to a process which consists of comparing the expectations consumers form, with the perceived performance of the object of satisfaction – the online store, the purchased product / service, the purchased brand.

Consumer satisfaction is a theoretical construct for which the marketing literature shows a growing importance. Increasing concern for

the study of customer satisfaction in the online environment starts from the consensual finding that in the online distribution, as in the traditional distribution, satisfaction is crucial to the performance of the organization, being at the same time, an important predictor for consumer loyalty and, consequently, for the lifetime and success of any business.

Evanschitzky, Gopalkrishnan, Hesse and Ahlert (2004) note, relying on research identified in the literature (Anderson & Srinivasan, 2003; Bitner et al., 2000; Parasuraman & Grewal, 2000), that it is still not clear whether offline satisfaction dimensions are valid for online customer satisfaction as well. Evanschitzky et al. (2004) consider that an obvious cause for the differences between the satisfaction perceived by consumers in the two contexts is the replacement of human interaction, that we find in the offline distribution, with the man-machine interaction in the case of online stores.

According to Wolfinbarger and Gilly (2003) addressing the concept of perceived service quality of offline stores is inadequate in the online environment.

In literature, there is no consensus regarding the fact that factors responsible for online stores customer satisfaction are classified into two categories: factors under the control of the online retailer and personal characteristics of the customers.

Factors associated with the online retailer relate primarily to the store's offer attributes that influence the perceived website quality, the perceived service quality and the perceived quality of the customer's experience throughout store navigation.

Endogenous factors relate to education, age, gender, personality traits, customer values, motivations for Internet use (utilitarian, experiential), customer experience as an Internet user, experience with the online distributor and experience with the same distributor in the offline environment in the case of bricks and clicks businesses, frequency of store visits.

In this paper we try to establish relationships between the factors

under the control of e-tailers and online customer satisfaction.

There have been several attempts to build research models or to identify determinants for the buyers' satisfaction, starting with website quality (Ho & Wu, 1999), behavioral intentions (Bai, Law and Wen, 2008), interactivity (Ballantine, 2005), perceived quality of information (Evanschitzky et al., 2004), the online service quality (Chang, 2008; Jun, Yang and Kim, 2004), perceptions regarding the payment method (Liu, He, Gao and Xie, 2008).

Dimensions for perceived quality in the online environment are structured based on perceived quality models that are recognized offline. Thus, the model of Grönroos (1984), that comprises the technical quality (what is being offered) and the functional quality (how it is offered) as perceived quality dimensions, can be applied online. The model proposed by Rust and Oliver (1994) is also relevant in the online context and it includes three dimensions: the produced service (similar to the technical quality in the model of Grönroos), the delivered service (similar to the functional quality of the previous model) and the service's environment. The ECSI model (Martensen, Gronholdt and Kristensen, 2000) which includes the hardware quality and the humanware quality is also useful to systematize efforts in clarifying the subject of online satisfaction.

Based on models that are relevant offline, researchers focused their studies either on one part of the customer experience or on their whole experience. Thus, some authors were concerned mainly with measuring perceived website quality (Loiacono, Watson and Goodhue, 2002; Loiacono et al., 2007; Yoo & Donthu, 2001), while other authors were concerned with understanding and measuring the perceived online service quality (Wolfinbarger & Gilly, 2003; Evanschitzky et al., 2004; Barnes & Vidgen, 2002; Zeithaml, Parasuraman and Malhotra, 2002) and other authors measured the perception of the whole experience of the online visitors (Bauer, Falk and Hammerschmid, 2006; Novak, Hoffman and Yung, 2000).

In one of the first reference studies regarding online satisfaction, Szymanski and Hise (2000 in Kim, Kim and Kandampully, 2009) indicate convenience, website design and financial security as antecedents of satisfaction.

Barnes and Vidgen (2000) developed the WebQual 1.0 scale to measure the following dimensions for website quality:

- ease of use or tools offered to the customer in order to get around the site and find what he is looking for, the possibility for simple, intuitive and consistent navigation;
- information quality, the information must be easy to read and understand, relevant, current, reliable and in the appropriate level of detail and format;
- communication and integration refer to the way the site is integrated with the external environment and communicates with the user. This includes the ability to find a website and return to it, creating links to other websites, speed and security of communication, the possibility to provide feedback and other contact.

WebQual was refined by Barnes and Vidgen (2002) through several successive stages, so that in the WebQual 4.0 scale the five dimensions of the WebQual scale are grouped into three main components, a thing that confirms previous research:

- usability is a dimension associated with features regarding website design, ease of use and navigation. It includes aspects such as the appearance of the website and the image conveyed to the user;
- information quality refers to the quality of the website content, that is given by the adequacy of information to the user's purposes, including aspects such as accuracy, format and relevance of information;
- service interaction quality that leads to the formation of trust and empathy between distributors and visitors. Covers issues such as

security of transactions and information, product delivery, personalization and the possibility to communicate with the website owner.

The WebQual method was developed iteratively by applying it in various domains such as online bookstores, websites of business schools in the UK, websites for small companies, and auction sites on the Internet (Barnes & Vidgen, 2002).

For Yoo and Donthu (2001) the perceived quality of a site is influenced by nine factors: the competitive pricing in comparison to offline retail stores and competing online stores; the clarity of ordering; the name value of the site owner and brands in the store assortment; the uniqueness of products sold online; the customer's self-assurance of product quality obtained while interacting with the online retailer; the ease of site use and ability to search for information; the aesthetic design of the website; the promptness of processing and providing interactive responses to customer's requests; the security of financial information and information about customers. According to the authors, the nine factors can be divided into two groups: the first group includes assessments made by the customer regarding the distributor, while the second group includes evaluations linked to the quality of the website. Stressing that both groups are essential for the online purchase, Yoo and Donthu developed the SITEQUAL scale with the following dimensions: security, processing speed, ease of use, aesthetic design.

Loiacono et al. (2007) have developed the WebQual scale and identified 12 dimensions that can be used to measure the perceived quality of a website. The 12 dimensions are divided into four categories: website usefulness, ease of use, entertainment and complementary relationship. Website usefulness included dimensions such as: fit-to-task information, trust in the online retailer for the security of transactions and personal information. Ease of use perception was measured through the ease of understanding the component elements of the website and by the possibility given to the client to

perform intuitive operations. The entertainment value of a website was determined through the quality of the visual means and techniques used on the website, through the perceived innovativeness and creativity embedded in the website construction and through the inclusion of textual and visual components that have an emotional appeal to the users. Complementary relationship perception depended on the website's ability to transmit a consistent and coherent overall image of the company and on the customer's possibility to perform all operations online and on the relative advantage of the online user in relation to other communication channels.

The authors have developed a simplified version of the model presented above and proposed website evaluation using the following four dimensions: ease of use, usefulness in gathering information, usefulness in carrying out transactions, entertainment value of the website.

The relationship between perceived service quality and the buyer's satisfaction has received increased attention in recent years. Parasuraman, Zeithaml and Malhotra (2005) found, on several occasions, that while buyers were satisfied with a particular service, they did not consider that it was of high quality. The idea of such asymmetry between perceived quality and satisfaction and between satisfaction and loyalty is emphasized by Finn (2011). However, Jun et al. (2004) propose and validate a positive relationship between perceived service quality and satisfaction.

The perceived quality of online services depends on how the Internet facilitates effective shopping, purchase and delivery of products and services (Zeithaml et al., 2000). Therefore, measuring the perceived quality of online services includes factors that occur before, during and after the online purchase (Swaid & Wigand, 2009).

Zeithaml et al. (2000, 2002) developed the e-SERVQUAL instrument to measure e-service quality taking into account the following seven dimensions: efficiency, fulfillment, reliability, privacy, responsiveness, compensation and contact. The first four dimensions - efficiency, fulfillment, reliability and

privacy - were used by the authors in developing the e-SERVQUAL scale to measure perceived quality for core services. These dimensions include the criteria used to evaluate routine online services when users have no questions and do not encounter problems using the site. Efficiency refers to the ability of users to reach the website, to find the desired product and the information about it, and to leave the website, all with minimum effort. Fulfillment is given by the accuracy of the promised service, the availability of products in stock and the delivery within the time promised. Reliability is given by the quality of the technical functioning of the website, in particular by its availability and proper functioning. Privacy reflects the customer's perception that his shopping behavior data are not given to other users and credit card information is secure. These dimensions show how consumers mentally organize their information on service quality. Of these, privacy was highlighted as the most important (Zeithaml & Bitner, 2000 in State & Istudor, 2009).

Numerous studies establish relationships between the security and confidentiality of personal information, trust and customer satisfaction. Moreover, the confidentiality of personal information continues to be a major concern for Internet users, 62% continue to worry about the confidentiality of information disclosed online (Han & Malaren, 2002 in Cătoi, Orzan, Macovei and Iconaru, 2014). Relationships between confidentiality of personal information, trust and perceived risks associated with the use of social networks were analyzed in the literature with reference to the online stores, online monetary transactions, the customization of user experience on websites and online marketing campaigns, especially email campaigns (Pand & Zinkhan, 2006; Eastlick, Lotz and Warrington, 2006; Liao, Liu and Chen, 2011; Lee & Cranage, 2011; Cases et al., 2010 in Cătoi, et al., 2014).

Zeithaml et al. (2002) found that the other three dimensions - responsiveness, compensation, and contact - become important only when online users have

questions or encounter a problem in getting the service. These dimensions were conceptualized as components of the E-RECs-QUAL scale. Responsiveness measures the ability of online vendors to provide adequate information to customers when a problem occurs, the availability of mechanisms for handling returns and the possibility of providing guarantees online. Compensation involves refunds and returning shipping and handling costs. Contact considers the need for customers to discuss face to face or on phone with a representative of the online retailer, assuming the retailer has the ability to manage multiple channels. Compared to the SERVQUAL instrument, it is considered that e-SERVQUAL instrument includes more cognitive than emotional evaluations.

Cho & Park (2001) identified the following antecedents of Internet shopping satisfaction: perceived quality of information on the products sold, the quality of products in the retailer's portfolio, perceived quality of the website design, ease of use for the website, satisfaction with the purchasing process, quality of services delivered online, satisfaction with the purchase and delivery outcomes, satisfaction with delivery time and payment methods. According to the authors, each antecedent may have several dimensions. Thus, the perception on the quality of product information is assessed through the ease of understanding the information, the level of detail for this information, describing the external appearance of the product, the veracity of information regarding the conditions of purchase, the proper placement of the product information. The quality of the product portfolio can be measured using dimensions such as: product variety, novelty character of the products, including some special products in the assortment. Website design quality is given by the color quality used to create the website, by the quality of the menu, by the quality of the website structure and by the quality of its appearance. Ease of use is appreciated by consumers online through the ease of registration, the ease to make changes to the registration, the ease of use of the information, providing appropriate information on

how to use the website. Satisfaction with the purchase process is determined through the ease of searching for products, through the shopping cart functionality, through the usefulness of product categories and the convenience of carrying out orders. Service quality perception is influenced by the update in post-sale services, the friendliness of post-sale services, the purchase information protection, the free post-sale services provision, the privacy of information assurance, the information updating, the provision of additional services other than the expected ones. Delivery reliability, availability of spacial delivery, free delivery regardless of purchase amount or quantity and the satisfaction obtained for the paid price, all contribute to the satisfaction with the results of purchase and delivery. Satisfaction with the terms of delivery and payment is determined by the duration of delivery, precision of delivery time, delivery costs, variety of credit cards accepted, variety of means of payment or provision of appropriate information regarding the delivery.

Results of research conducted by Ballantine (2005) suggest that the level of interactivity and the amount of information provided by a website have a significant effect on the buyer's satisfaction. Ballantine shows that online interactivity is defined by the direction of communication, the user's control over the communication process, the necessary time for communication, the active control, the two-way communication and synchronization. Website interactivity refers to the website's ability to dynamically generate results based on questions and searches made by customers (Shankar, Smith and Rangaswamy, 2003), taking into consideration that a static website can increase search efforts for online buyers, thus reducing their satisfaction. On the other hand, a well designed website in terms of interactivity could generate greater satisfaction by allowing users to customize their search for information. High levels of interactivity allow customers to obtain greater control over the shopping experience, enabling them to communicate with others through the website or through

interactive access of information from online databases.

The buyer's overall satisfaction may depend also on the ease of obtaining relevant information in choosing the service provider (Shankar et al., 2003). Having relevant information, buyers make better decisions that lead to higher satisfaction. Information submitted by online stores supports and complements customer service and facilitates searching for products in the store. Information must be useful and relevant in predicting the quality and utility of a product or service (Wolfenbarger & Gilly, 2001). To meet the needs of buyers in terms of getting the information they need, information must be updated, sufficient, consistent and easy to understand (Park & Kim, 2008).

Chang (2008) highlights the importance of perceived control over online buying satisfaction. Control over unpleasant events reduces the negative feelings such as anxiety. For online shoppers who may be looking for greater control in the process of service delivery, perceived control has a positive influence on their satisfaction.

It should be noted that along with the academic efforts in dealing with this subject, research companies or online retailers in the business environment have also developed studies and measurement tools. Literature (Zeithaml et al., 2002; Wolfenbarger & Gilly, 2003) mentions about tools developed by BizRate.com, Gomez.com, Forrester Research & Jupiter Communications Networks comScore / Media Metrix. BizRate calculates an overall score for each e-tailer by interviewing buyers immediately after placing the order and another score after the product has been delivered. Buyers are required to rate and classify e-tailers based on the following attributes: ease of placing orders, product selection, information about products, price, delivery time, the representation of products, customer support, privacy policies, transport and handling of products.

Gomez.com (Zeythaml, 2002) offers an alternative evaluation system of online service quality perception in which subjects are researchers who are asked to measure

site performance and classify them based on various criteria. The evaluation takes into account the direct examination of the website, performance monitoring of various pages of the site, account opening operations, interaction with the distributor's representatives, pricing transactions, questionnaires filled out by each company.

Attributes measured by Gomez.com can be grouped in the following categories:

- ease of use for the website which includes aspects such as functionality, design and navigation consistency, smoothness of interactions;
- efficient access to information;
- customer confidence refers to the breadth and depth of service options, the inclusion of some channels of interaction, promptness and accuracy of responses by e-mail, privacy policies, guarantees;
- reliability includes loading time and security of the website;
- resources on the site include product availability, availability of responses to requests, the existence of detailed information about each product line;
- relationship services that consider maintaining the relationship between customers and distributors through online help and tutorials, recommendations, customization of information, using customer information to facilitate future interactions, incentive programs;
- the total cost which includes the total cost of goods and services purchased, shipping and handling fees etc.;
- year since the website or company are present on the market.

Scales that measure perceived quality of online services mainly focus on evaluating purchasing behaviors that have a specific purpose, utilitarian value, without taking into account the quality of hedonic aspects. According to the flow theory, the interaction with the store services and ambiance causes affective reactions generated by certain features of the Internet, such as the multimedia component,

interactivity and the high level of control during navigation (Childers, Carr, Peck and Carson, 2001).

In order to integrate both the utilitarian and hedonic dimensions in the online service quality evaluation, Bauer et al. (2006) developed the eTransQual model, a transaction process model adapted for electronic services. Bauer et al. (2006) suggest that the four stages transaction model (information search- actual transaction- delivery - post-purchase evaluation) is also applicable in the online retailers' service quality perception research. Bauer et al. (2006) identify five distinct dimensions for the perceived quality of services offered by online retailers: functionality / design, enjoyment, process, reliability and responsiveness.

When buying online, customers can not actually see or handle the product, they are not sure if what is represented on the site is consistent with what they will receive. In these circumstances, characterized by uncertainty concerning the performance of products and services, price perceptions play an important role in determining post-purchase satisfaction (Liu & Arnett, 2000). Buyers are forced to rely on clues given by prices, cases in which the price's fairness could be the first determinant factor of satisfaction (Jiang & Rosenbloom, 2005).

In their study on factors influencing online customer satisfaction in Vietnam, Trong, Khanh and Gim (2014) divide factors influencing e-satisfaction in three categories, depending on the stage in the decision making process in which the customer is in. In the first stage, that of information and evaluation, determinants of satisfaction are website design and attributes associated to merchandising. In the actual purchase stage, trading capabilities, security, confidentiality and payment conditions become determinant. In the post-purchase stage online customer satisfaction is influenced by attributes associated with logistics and perceived quality of after-sale services. Moreover, the authors stress that most online customer complaints are caused by misunderstandings on refunds and billing, return policies and exchange of goods, delivery

of defective goods and poor quality of after-sale service.

Jiang & Rosenbloom (2005) conceptualize various aspects of satisfaction given the overall customer experience with the online distributors. For the two authors, satisfaction is a two-dimensional construct comprising at checkout satisfaction and after delivery satisfaction. At checkout satisfaction is given by the following factors: ease of ordering, the information provided about the products, website performance, the product selection, shipping and handling. After delivery satisfaction is given by the confirmation of product expectations, on time delivery, customer support, order tracking possibility.

In some papers satisfaction is measured in relation to the online distributor (Lee & Overby, 2004), in other words, the distributor's image contributes to the formation of customer satisfaction.

A complex instrument for measuring satisfaction was designed by Cho & Park (2001). The authors measure satisfaction with the ECUSI tool (Electronic Commerce User-Consumer Satisfaction Index). The 51 items of the ECUSI tool assess satisfaction according to the following factors: perceived quality of product information, perceived customer service quality, satisfaction with the purchase and delivery outcomes, perceived website design quality, satisfaction with the purchasing process, perceived quality of the product portfolio, satisfaction with delivery time and payment, advantageous payment methods, ease of use, the provision of additional services.

In contrast, Evanschitzky et al. (2004) measure online satisfaction through a single question: "In general, what do you think about your online buying experience?"; respondents having to choose between four possible answers: very dissatisfied / dissatisfied / satisfied / very satisfied.

### 3. Research design

#### 3.1. Research hypotheses

Based on the article by Belanger et al. (2002), in which the hypothesis that perceived quality of online stores has significant and positive

influence on the purchase intention is validated, we want to investigate whether this construct also influences the buyer's satisfaction.

*H1: The perceived online store quality has a positive and direct effect on customer satisfaction.*

According to Park & Kim (2003, in Su, Li, Song and Chen, 2008) the perceived quality of information plays an important role in the online buying behavior. The quality of information presented on a website may determine buyers to accept or reject that website (Lin & Liu, 2000, in Lim, Heinrichs and Lim, 2009).

The perceived quality of information has significant effect on the intention to use online stores (Ahn, Ryu and Han, 2007). The perceived quality of information has a positive effect on users' beliefs regarding online buying acceptance, the ease and convenience of buying online. The perceived quality of information has a significant and positive impact on value perception and on the buyer's satisfaction and it also influences the relationship duration and the intention to repurchase (Bauer et al., 2006). Based on the findings above, we formulated hypothesis H2.

*H1a: The perceived quality of information has a direct and positive influence on the customer's satisfaction with the online store.*

Constantinides, Lorenzo-Romero and Gomez (2010) evaluated the effects of the online store's ease of use on the buying behavior characteristic to Internet users in Spain and the Netherlands. In both countries, the ease of use had a positive and significant influence on consumer decisions. According to Shergill and Chen (2005), the ease of use of an online store facilitates the buying process and may establish consumer confidence in the website. Based on these results, we formulated the hypothesis that the online store's ease of use perception influences the buyers' satisfaction.

*H1b: The website's ease of use perception influences the online customer satisfaction.*

The physical aspect of a website has significant and positive effects on the online consumer satisfaction (Wolfenbarger & Gilly, 2003; Kim et al., 2008; Shergill & Chen, 2005). The more attractive

the design and the ambience of a website, the greater the pleasure experienced by the online buyer (Mummalaneni, 2005). The influence of characteristics related to the website's design and ambience on satisfaction is mediated by the pleasure and stimulation felt by the online buyer (Mummalaneni, 2005). Evanschitzky et al. (2004) concluded that website design is the second most important factor in influencing satisfaction when buying from online stores.

*H1c: The perception of website attractiveness influences customer satisfaction.*

Contact interactivity is defined by the availability and effectiveness of customer support tools on a website and by the degree to which two-way communication with customers is facilitated (Srinivasan, Anderson and Ponnnavolu, 2002). Contact interactivity has a major impact on customer satisfaction for several reasons. According to Alba et al. (1997), interactivity simplifies the search process through which the desired products or services are rapidly localized. Online customers can also get recommendations on other products / services purchased by people with similar tastes and preferences. The user-website interaction is regarded as very important in obtaining pleasure and building loyalty (De Wulf, Schillewaert and Muylle, 2006). Results of research conducted by Ballantine (2005) suggest that the level of interactivity offered by a website has a significant effect on the satisfaction of buyers. A static website leads to increased search effort for online buyers, thus diminishing their satisfaction. From another perspective, a website that provides a high level of interactivity generates greater satisfaction for users due to the fact that they hold control over the search and thus over the customization of this search.

*H1d: There is a significant, direct and positive relationship between perceived interactivity and customer satisfaction.*

There are many researches studying the existence of a relationship between service quality and customer satisfaction in various service industries (Jun et al., 2004; Kim, Ferrin and Rao, 2008).

A well-known theory in the service management is that quality services are an antecedent of satisfaction (Anderson & Fornell, 1994 in Kim et al., 2008). The quality of online services alongside trust, design and privacy are dominant factors in influencing perceptions formed regarding the online buying experiences. In a study conducted by Shergill & Chen (2005) in New Zealand on a sample of online shoppers, online service quality had the most influence on the buyers' satisfaction, after trust in the online store.

*H2: The perceived quality of online services influences customer satisfaction.*

A primary goal of promoting B2C online distribution is to enhance consumer trust (Ha, Muthaly and Akamavi, 2010) and thus increase customer satisfaction with every transaction made. Trust creates positive attitudes towards the future conduct of the e-tailer and influences the consumers' purchase intentions, satisfaction and loyalty (Luarn & Lin, 2003; Martin & Camarero, 2008). The lack of trust is a major impediment to the adoption of online services (Li & Suomi, 2007).

Repeat customer purchase intentions are influenced by the trust in the e-tailer and the perception that the website was useful. Unexperienced customers are not influenced by perceived usability, but only by trust in the online vendor (Constantinides et al., 2010).

Consumer trust in online buying was also modeled by Lee and Turban (2001, in Kim & Benbasat, 2003) who used four groups of factors as antecedents: trust in the online vendor; trust in the online buying environment; contextual factors such as perceptions of the effectiveness of third party certification bodies and public key security infrastructure systems; other factors such as the size and demographic variables.

In the study by Shergill and Chen (2005) it is highlighted that respondents in New Zealand considered trust in the online store the most important factor that contributes to satisfaction in the buying process.

The relationship between trust and the satisfaction of buyers has

been studied and confirmed by Belanger, Hiller and Smith (2002), Shergill and Chen (2005) and De Wulf et al. (2006).

*H2a: Trust in service quality has a positive influence on the e-tailer's customer satisfaction.*

Functionality as antecedent of satisfaction was analyzed by Bai et al. (2008).

Cho and Park (2001) identified numerous antecedents of online buying satisfaction: satisfaction with the buying process (ease of search, shopping cart functionality), satisfaction with the delivery time and payment (delivery duration, accuracy of delivery duration, delivery costs, providing appropriate information concerning the delivery), the provision of additional services.

*H2b: There is a direct and positive relationship between the functionality of services and the online store customer satisfaction.*

The logistic support is an antecedent of customer satisfaction with the online store that requires a rapid response to the formulated needs, easily accessible communication channels, fast delivery of goods and provision of after-sale services (Ho & Wu, 1999). Schaupp and Belanger (2005) tested the relationship between delivery time and satisfaction and made the evaluation based on the following aspects: the e-tailer reduces the delivery time to a minimum, the e-tailer informs the buyer about the potential delays in the shipment and provides the buyer an order tracking code.

*H2c: Service promptness has a positive influence on online store customer satisfaction.*

In the present research empathy refers to the way an online store manages to customize the buyer's experience and the care it shows each step of the buying process.

Customization and care shown to the customer (Srinivasan et al., 2002) are antecedents of online customer satisfaction. Online buyers appreciate stores that offer customized experiences. According to Kim et al. (2009), the customization of online services has a positive influence on satisfaction. Customization is given by the attributes of services that reflect the needs of each customer and allow customers to choose the suitable products, services and buying

experiences. Customized pages offer customers the possibility to keep a record of purchases, preferences and other types of information about the product. Examples of attributes of customized services are: complementary product suggestions, links to alternative sites, offering alternative payment and order placement arrangements. Customization is defined as the extent to which the online store can recognize a customer and then adapt the offer of products, services and the buying experience for that customer.

Care refers to the attention that the online retailer gives to all activities before and after purchase, designed to facilitate both immediate customer operations and long-term relationships with the customer. Care is defined by the extent to which a customer is informed about product availability and order status, and by the efforts to minimize interruptions in providing desired services.

*H2d: Perceived empathy influences the satisfaction with the online services.*

*H3: The perceived experience customers form with the online store influences their satisfaction.*

The satisfaction concept involves meeting expectations and a positive emotional state based on previous results obtained in relation to the website. Satisfaction is important for the buyer because it reflects a positive result after spending his limited resources to cover unmet needs (Ho & Wu, 1999), being a result of performance (Evanschitzky et al., 2004). Satisfaction is measured in relation to a reference (Oliver, 1997 in Evanschitzky et al., 2004), or in other words, the buyer is satisfied if expectations regarding the buying experience have been confirmed (Jun et al., 2004). With each new exchange, the buyer's perception is fueled with new information and perception determines the level of satisfaction at a given point (Flavia, Guinal and Gurrea, 2006).

Expectations regarding performance establish the base for customer requirements (Lemon, 1996 in Balabanis, Reynolds and Simintiras, 2006). While the basis for performance increases, this relationship requires continuous improvement of the offer in order to maintain the level of satisfaction.

*H4: Overall satisfaction is influenced by the expectations customers form regarding the store.*

### 3.2. Research methodology

The research involved adopting a positivist approach and a deductive logic, in which we sought to test the extent to which the assumptions made based on literature review are verified in the present research. This involved conducting a quantitative research using a standardized questionnaire. The questionnaire was administrated over the Internet, the sample under research including respondents who own a Facebook account on the social network. Initially, respondents were selected from the researchers' contact lists on the social network Facebook. Through a snowball approach, respondents were asked to name other respondents who could provide interesting answers. It thus reduces the negative effect of using respondents that are familiar to the researcher, because the new respondents do not know the researcher.

The Social Network Facebook allows you to contact respondents directly and easily and does not involve allocating financial resources. Those who socialize online are assumed to have needed time to fill in the questionnaire and are more likely to have purchased online at least once.

The questionnaire contains a filter question, following which the respondents who did not purchase online were asked to leave the questionnaire. To complete the second part of the questionnaire, respondents were asked to answer questions keeping in mind the online store from which they purchase most frequently (Janda, Trocchia and Gwinner, 2002; Lee & Overby, 2004; Parasuraman et al., 2005; Ahn et al., 2007).

After the initial version of the questionnaire was developed, it was distributed to 11 respondents for pre-testing the instrument. Respondents were selected among students from West University of Timisoara in their final year and Phd students from the same institution. After pre-testing two questions were eliminated, three statements were reformulated to avoid any ambiguity and for three

questions the method of evaluating the responses was modified.

435 invitations were sent to fill out the questionnaire, but because the response rate was 44.37%, only 193 fully completed questionnaires were centralized.

The processing of the collected data was performed using SPSS Statistics software, version 21.

The statistical data analysis consisted of 4 stages: verifying the reliability of the used measurement scales, score factors determination, testing the validity of the constructs included in the research model, hypotheses testing research.

First, the reliability and validity of the developed constructs was checked. For that we used the Cronbach alpha coefficient, which is the indicator most commonly used to test the reliability of a multi-item scale (Cortina, 1993; Santos, 1999)

Scales were considered reliable if the calculated value Cronbach-alpha was at least 0.5, given the recommendation to not use scales showing Cronbach-alpha values below 0.5 (Nunnally, 1978 in Santos, 1999).

The aggregate scores of respondents for each construct were obtained by aggregating variables using factor analysis. Based on factor analysis, irrelevant items which showed low factor loading for the considered construct were dropped.

After verifying the suitability of factor analysis using Bartlett's test of sphericity and the Kaiser-Meyer-Olkin index, each construct was subject to exploratory factor analysis which seeks to show that each set of variables are components of a single construct.

The Kaiser Criterion was used in order to determine the best number of factors (Eigenvalue>1). The extraction method used was that of Principal Axis Factoring. The rotation procedure used was Direct Oblimin Rotation, which allows the extracted factors to be correlated.

Next convergent and divergent validity of constructs were analyzed using the Pearson Correlation Coefficient. Testing the hypotheses from the research model was done with simple linear regression.

In this research, for the operationalization of the online store customer satisfaction construct we used items identified by Flavia et al. (2006).

### 3.3. Research results

Analysing the research results, we find that at the significance level of 0.05 most of the hypotheses proposed for testing are validated: H1, H1a, H1b, H1d, H2, H2a, H2b, H2c, H2d, H3.

At a significance level of 0.05, hypothesis H1c is not validated, which means that the attractiveness or the aesthetic quality perception of an online site does not have a significant influence on customer satisfaction. We think there are two possible explanations for this result. First, respondents were asked to assess satisfaction with respect to the last store visited, each respondent having another store in mind. Thus, it is possible that the time elapsed between the last purchase and the time the survey took place made it impossible to recover the customer information stored in the memory, especially if the impressions were not strong enough to strengthen neural connections. In the second place, reactions to the online store's aesthetic elements are firstly of sensory or visceral nature, they are superficial, the contact with them occurring in the subcortical layer of the limbic system. In this case, it is possible that these reactions may not have turned into cognitive reactions that could be declared in the questionnaire.

Another hypothesis that was not validated, hypothesis H4, according to which expectations have a significant influence on customer satisfaction, is confirmed by most of the literature. In this case, it is possible that respondents were not able to declare their expectations because the study did not target a consecutive moment of a precise purchase in a particular store.

### 3.4. Conclusions and research limitations

Our research aimed to provide marketers and organizations operating in the online environment a better understanding of how buyers perceive experiences with the online stores and how these experiences influence their buying decisions. From literature review and data analysis results from the empirical study we obtained some conclusions that online store managers

might find useful in planning and carrying out their activities.

First of all, just as in previous studies the quality components of the online store influence the level of satisfaction experienced by customers. This means that managers must continue to invest financial and human resources and time in researching and developing the elements related to the quality of information, interactivity, ease of use and style and store attractiveness.

This research was performed subject to several limitations. First, the size and composition of the sample, 193 respondents, the majority being students and master students of the same educational institution, does not allow us to generalize the results to the entire population. For financial reasons and time limitation we turned to convenience sampling using a personal list of contacts on the social network Facebook. Thus, the lack of data representativeness and the reduced accuracy of the measurement are two of the most important limitations of this study.

The inability to delimit the subject with enough precision due to the complexity the phenomenon should also be mentioned as a limitation because it led to ignoring the or to insufficient analytical treatment of the influences of some moderating factors. We could include here the retailer's reputation (acquired both online and offline), the image of the products/services brands, the type of product / service value for the customer (functional, social, psychological, hedonic). Also, for similar reasons to those mentioned above, we analyzed the buyers' perception towards the components of the online distributor's service quality allowing them to freely choose the store they relate to. Choosing a sample of online buyers that are put in a real purchasing situation might better explain how customer satisfaction is formed.

The fact that this study did not measure the respondents' perception towards the products and services after they were ordered and their satisfaction towards the delivery process is another limitation of the present research. It is, however, a research direction that we intend to develop in future studies.

**Figure 1. The proposed research model**



**Table1 Research hypotheses testing results**

Hypothesis		Results	Standard parameter regression $\beta$	Significance level
H1	The perceived online store quality has a positive and direct effect on customer satisfaction.	Hypothesis is accepted	0,504	0,000
H1a	The perceived quality of information has a direct and positive influence on the customer's satisfaction with the online store.	Hypothesis is accepted	0,470	0,000
H1b	The website's ease of use perception influences the online customer satisfaction.	Hypothesis is accepted	0,438	0,000
H1c	The perception of website attractiveness influences customer satisfaction.	Hypothesis is rejected	0,076	0,292
H1d	There is a significant, direct and positive relationship between perceived interactivity and customer satisfaction.	Hypothesis is accepted	0,189	0,009
H2	The perceived quality of online services influences customer satisfaction.	Hypothesis is accepted	0,460	0,000
H2a	Trust in service quality has a positive influence on the e-tailer's customer satisfaction.	Hypothesis is accepted	0,371	0,000
H2b	There is a direct and positive relationship between the functionality of services and the online store customer satisfaction.	Hypothesis is accepted	0,409	0,000
H2c	Service promptness has a positive influence on online store customer satisfaction.	Hypothesis is accepted	0,278	0,000
H2d	Perceived empathy influences the satisfaction with the online services.	Hypothesis is accepted	0,390	0,000
H3	The perceived experience customers form with the online store influences their satisfaction.	Hypothesis is accepted	0,441	0,000
H4	Overall satisfaction is influenced by the expectations customers form regarding the store.	Hypothesis is rejected	0,118	0,101

## Bibliography

- Ahn, T., Ryu, S. & Han, I., (2007), "The impact of Web quality and playfulness on user acceptance of online retailing", *Information & Management*, 44(3), pp. 263-275.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. & Wood, S., (1997), "Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic", *Journal of Marketing*, 61, pp. 38-53.
- Anderson, R. & Srinivasan, S., (2003), "E-Satisfaction and E-Loyalty: A Contingency Framework", *Psychology & Marketing*, 20(2), pp. 123-138.
- Bai, B., Law, R. & Wen, I., (2008), "The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors", *International Journal of Hospitality Management*, 27, pp. 391-402.
- Balabanis, G., Reynolds, N. & Simintiras, A., (2006), "Bases of e-store loyalty: Perceived switching barriers and satisfaction", *Journal of Business Research*, 59, pp. 214-224.
- Ballantine, P., (2005), "Effects of interactivity and product information on consumer satisfaction in an online retail setting", *International Journal of Retail & Distribution Management*, 33(6), pp. 461-471.
- Barnes, S. & Vidgen, R., (2000), "WebQual: An Exploration of Website Quality", *ECIS 2000 Proceedings*, accessed in 15.02.2010, <http://aisel.aisnet.org/ecis2000/74>
- Barnes, S. & Vidgen, R., (2002), "An Integrative Approach to the Assessment of E-commerce Quality", *Journal of Electronic Commerce Research*, 3(2), pp. 114-127.
- Bauer, H. H., Falk, T. & Hamerschmid, M., (2006), "eTransQual: a transaction process-based approach for capturing service quality in online shopping", *Journal of Business Research*, 59, pp. 866-875.
- Belanger, F., Hiller, J.S. & Smith, W.J., (2002), "Trustworthiness in electronic commerce: the role of privacy, security, and site attributes", *Journal of Strategic Information Systems*, 11, pp. 245-270.
- Brashear, T., Kashyap, V., Musante, M. & Donthu, N., (2009), "A Profile of the Internet Shopper: Evidence from six countries", *Journal of Theory and Practice*, 17(3), pp. 267-282.
- Cătoiu, I., Orzan, M., Macovei, O.I. & Iconaru, C., (2014), *Modelarea încrederii utilizatorilor în rețelele de socializare online*, *Amfiteatru Economic*, Vol. XVI, Nr. 35, pp. 257-271.
- Chang, C.C., (2008), "Choice, perceived control, and customer satisfaction: The psychology of online service recovery", *CyberPsychology & Behavior*, 11, pp. 321-328.
- Cheung, C., Chan, G. & Limayem, M., (2005), "A critical review of online consumer behavior: empirical research", *Journal of Electronic Commerce in Organizations*, 3(4), pp. 1-19.
- Childers, T.L., Carr, C.L., Peck, J. & Carson, S., (2001), "Hedonic and utilitarian motivations for online retail shopping behavior", *Journal of Retailing*, 77, pp. 511-535.
- Cho, N. & Park, S., (2001), "Development of electronic commerce user-consumer satisfaction index (ECUSI) for Internet shopping", *Industrial Management and Data Systems*, 101(8), pp. 400-405.
- Constantinides, E., Lorenzo-Romero, C. & Gomez, M. (2010), "Effects of web experience on consumer choice: a multicultural approach", *Internet Research: Electronic Networking Applications and Policy*, 20(2), pp. 188-209.
- Cortina, J.M., (1993), "What is coefficient alpha? An examination of theory and applications", *Journal of Applied Psychology*, 78(1), pp. 98-104.
- Evanschitzky, H., Gopalkrishnan, R. I. Hesse, J. & Ahlert, D., (2004), "E-satisfaction: a re-examination", *Journal of Retailing*, 80, pp. 239-247.
- Finn, A., (2011), "Investigating the non-linear effects of e-service quality dimensions on customer satisfactions", *Journal of Retailing and Customer Services*, 18, pp. 27-37.
- Flavia, C., Guinal, M. & Gurrea, R., (2006), "The role played by perceived usability, satisfaction and consumer trust on website loyalty", *Information & Management*, 43, pp. 1-14.
- Giese, J. & Cote, J. (2000), "Defining Consumer Satisfaction", *Academy of Marketing Science Review*, 1, <http://amsreview.org/articles/giese01-2000.pdf>.
- Grönroos, C. (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, Vol. 18 No. 4, pp. 36-44.
- Ha, H.Y., Muthaly, S. K. & Akamavi, R. K., (2010), "Alternative explanations of online repurchasing behavioral intentions: A comparison study of Korean and UK young customers", *European Journal of Marketing*, 44, pp. 874-904.
- Ho, C. & Wu, W., (1999), "Antecedents of Customer Satisfaction on the Internet: An Empirical Study of Online Shopping", *Proceedings of the 32nd Hawaii International Conference on System Sciences*, accessed in 22.03.2011 <http://www.google.ro/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CBsQFjAA&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.99.1091%26rep%3Drep%26type%3Dpdf&ei=b7k8ULK0M8HBhAefvIH4Ag&usq=AFQjCNEpER-mxqEC1StfoQEyM-mIztECcw>.
- Janda, S., Trocchia, P.J. & Gwinner, K.P., (2002), "Consumer perceptions of Internet retail service quality", *International Journal of Service Industry Management*, 13(5), pp. 412-431.
- Jayawardhena, C., (2004), "Personal values' influence on e-shopping attitude and behaviour", *Internet Research*, 14(2), pp. 127-138.
- Jiang, P. & Rosenbloom, B., (2005), "Customer intention to return online: price perception, attribute-level performance, and satisfaction unfolding over time", *European Journal of Marketing*, 39 ( 1/2), pp. 150-174.
- Jun, M., Yang, Z. & Kim, D., (2004), "Customers' perceptions of online retailing service quality and their satisfaction", *International Journal of Quality & Reliability Management*, 21 (8), pp. 817-840.
- Kim, D. & Benbasat, I., (2003), "Trust-related arguments in Internet stores: a framework for evaluation", *Journal of Electronic Commerce Research*, 4(2), pp. 49-64.
- Kim, D., Ferrin, D. & Rao, H., (2008), "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents", *Decision Support Systems*, 44, pp. 544-564.
- Kim, J.H., Kim, M. & Kandampully, J., (2009), "Buying environment characteristics in the context

- of e-service”, *European Journal of Marketing*, 43(9/10), pp. 1188-1204.
- Lee, E.J. & Overby, J. W., (2004), “Creating value for online shoppers: implications for satisfaction and loyalty”, *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 17, pp. 54-67.
- Li, H. & Suomi, R., 2007. “Evaluating Electronic Service Quality: A Transaction Process Based Evaluation Model”, *Proceedings of EC-IME 2007, The European Conference on Information Management and Evaluation*, Montpellier, France, 20-21 September 2007, pp.331-340;
- Lim, K. S., Heinrichs, J. H. & Lim, J. S. (2009). “Testing a MIMIC model of e-shopping site usage”, *International Journal of Retail & Distribution Management*, 37 (10), pp. 852-866.
- Liu, C. & Arnett, K.P. (2000). Exploring the factors associated with website success in the context of electronic commerce, *Information and Management*, 38(1), pp. 23–33.
- Liu, X., He, M., Gao, F. & Xie, P., (2008), “An empirical study of online shopping customer satisfaction in China: a holistic perspective”, *International Journal of Retail & Distribution Management*, 36 (11), pp. 919-940.
- Loiacono, E. T., Watson, R. T. & Goodhue, D. L., (2007), “WebQual: An Instrument for Consumer Evaluation of Web Sites”, *International Journal of Electronic Commerce*, 11(3), pp. 51-87.
- Loiacono, E. T., Watson, R. T. & Goodhue, D. L., (2002), “WEBQUAL: A measure of website quality”, *Marketing Theory and Applications*, pp. 1-71.
- Luarn, P. & Lin, H.H., (2003), “A Customer Loyalty Model for E-Service Context”, *Journal of Electronic Commerce Research*, 4(4), pp.156-167.
- Martensen, A., Gronholdt, L. & Kristensen, K. (2000), “The drivers of customer satisfaction and loyalty: cross-industry findings from Denmark”, *Total Quality Management*, Vol. 1, No. 4/5&6, pp. 544-553.
- Martin, S.S. & Camarero, C. (2008). Consumer trust to a website: moderating effect of attitudes toward online shopping, *Cyberpsychology and Behavior*, 11(5), pp. 549-554.
- Mummalaneni, V., (2005), “An empirical investigation of Web site characteristics, consumer emotional states and online shopping behaviors”, *Journal of Business Research*, 58, pp. 526-532.
- Novak, T. Hoffman, D. & Yung, Y., (2000), “Measuring the Customer Experience in Online Environments: A structural Modeling Approach”, *Marketing Science*, 19(1), pp. 22-42.
- Overby, J.W. & Lee, E. J., (2006), “The effects of utilitarian and hedonic online shopping value on consumer preference and intentions”, *Journal of Business Research*, 59(10/11), pp. 1160-1166.
- Parasuraman, A. Zeithaml, V. & Malhotra, A., (2005), “E-S-Qual. A Multiple-Item Scale for Assessing Electronic Service Quality”, *Journal of Service Research*, 7(3), pp. 213-233.
- Park, C. & Kim, Y., (2008), “The Effect of Information Satisfaction and Relational Benefit on Consumer’s Online Shopping Site Commitment”, *Web Technologies for Commerce and Services Online*, pp. 149-169.
- Rust, R.T. & Oliver, R.L., (1994), “Service Quality: New Directions in Theory and Practice”, Thousand Oaks, California, SAGE Publication.
- Siddiqui, K., (2012). “Personality influences on Customer Satisfaction”, *African Journal of Business Management*, 6 (11), pp. 4134-4141.
- Santos, J.R.A., (1999), “Cronbach’s alpha: A tool for assessing the reliability of scales”, *Journal of Extension*, 37(2), pp. 1-5.
- Shankar, V., Smith, A.K. & Rangaswamy, A., (2003), “Customer Satisfaction and Loyalty in Online and Offline Environments”, *International Journal of Research in Marketing*, 20 (2), pp.153-175.
- Schaupp, L. C. & Bélanger, F., (2005), “A conjoint analysis of online consumer satisfaction”, *Journal of Electronic Commerce Research*, 6(2), pp. 95-111.
- Shergill, G.S. & Chen, Z., (2005), “Web-based shopping: consumers’ attitudes towards online shopping in New Zealand”, *Journal of electronic commerce research*, 6(2), pp. 78-92.
- Srinivasan, S. S., Anderson, R. & Ponnnavolu, K., (2002), “Customer loyalty in e-commerce: An exploration of its antecedents and consequences”, *Journal of Retailing*, 78, pp. 41–50.
- State, S. & Istudor, N., (2009), “Studiu calității serviciilor aplicație la nivelul unui hotel utilizând modelul SERVQUAL”, *Amfiteatru Economic*, Vol XI, Nr. 26, pp. 419-428.
- Su, Q., Li, Z. Song, Y.T. & Chen, T., (2008), “Conceptualizing consumers’ perceptions of e-commerce quality”, *International Journal of Retail & Distribution Management*, 36(5), pp. 360-375.
- Swaid, S.I. & Wigand, R. T., (2009), “Measuring the quality of e-service: scale development and initial validation”, *Journal of Electronic Commerce Research*, 10(1), pp. 13-28.
- Trong, V. Khanh, N. & Gim, G., (2014), “Evaluating Factors Influencing Consumer Satisfaction towards Online Shopping in Viet Nam”, *Journal of Emerging Trends in Computing and Information Sciences*, 5(1), pp. 67-71.
- Vanhamme, J. (2001), L’Influence de la Surprise sur la Satisfaction des Consommateurs: Etude Exploratoire par Journal de Bord, Recherche et Applications en Marketing, 16(2), pp. 1-32.
- Wolfenbarger, M. & Gilly, M.C., (2001), “Shopping online for freedom, control, and fun”, *California Management Review*, 43(2), pp. 34-55.
- Wolfenbarger, M. & Gilly, M.C., (2003), “eTailQ: dimensionalizing, measuring and predictingetail quality”, *Journal of Retailing*, 79, pp. 183-198.
- Wulf, K. Schillewaert, N. & Muylle, S., (2006), “The role of pleasure in web site success”, *Information & Management*, 43(4), pp. 434-446.
- 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), pp. 31-47.
- Zeithaml, V., Parasuraman, A. & Malhotra, A., (2000), “A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial Practice”, *MSI Working Paper Series No. 00-115*, Cambridge, MA, pp. 1-49.
- Zeithaml, V. Parasuraman, A. & Malhotra, A., (2002), “Service Quality delivery through web sites: A critical review of extant knowledge”, *Journal of the Academy of Marketing Science*, 30(4), pp. 362-375.