

A Conceptual Model of Factors Affecting the Satisfaction of Online Customers

Deyalage, P A.,

Department of Information Technology

University of Sri Jayewardenepura

piruni@sjp.ac.lk

Kulathunga, K M S D.,

Department of Information Technology

University of Sri Jayewardenepura

dushyantbak@sjp.ac.lk

Abstract

Customer satisfaction has been identified as an important phenomenon in relation to online shopping. Therefore, the investigation of what cause customer satisfaction is becoming paramount for online businesses. Although prior studies have examined this area, there is no agreement among them as to what really affects online customer satisfaction. Further, there are contradictory findings. Thus, previous studies remain broad and appear relatively fragmented. Therefore, the purpose of this study is to develop a conceptual model to identify the determinants which would better reflect online customer satisfaction. A comprehensive literature review was conducted to identify the determinants of customer satisfaction in an online context. The literature review revealed that there are forty-five determinants which have been tested by different researchers. Amongst them, the researchers selected the most cited five determinants to develop the conceptual model. Those determinants included: Website design, Security perception, Customer service, Product information quality, and Purchasing process convenience. A conceptual model was developed illustrating the relationship between aforementioned determinants and online customer satisfaction. The validity of the model will be tested statistically in future research.

Keywords: Customer satisfaction, E- satisfaction, Online shopping

INTRODUCTION

The technological advancements and the Internet have resulted in proliferation of online shopping activities. This provides many opportunities for businesses to create and retain the relationships and interactions with the customers (Pappas et al., 2014). Online shopping or electronic retailing has captured the attention of many retailers since it has been established as an alternative channel in combination with traditional offline retail channels (Rowley, cited in

Harn et al., 2006). Thus, online shopping has posed challenges for traditional offline channels and it has reshaped the customers' purchasing habits.

The elimination of the time and location constraints is considered to be the main feature that distinguishes between online shopping and the traditional shopping format (Sheth and Sisodia, as cited in Chiang and Dholakia, 2003). According to Pentina et al. (2011), online shopping is playing a prominent role in global marketplace since it empowers the customers by providing them with more rich information.

The Internet offers many benefits to customers as it makes online shopping activities more efficient and effective (McGaughey and Mason, as cited in Momtaz et al., 2011). Customers have the opportunity to purchase products at any time and anywhere. Online shopping is considered as a user friendly method compared to in store purchasing since they can fulfill their requirement just with a click of a mouse without leaving their home.

Even though the online mechanisms may provide easy to use and efficient methods of shopping (Momtaz et al., 2011), the customers may not opt for them if those mechanisms do not meet their expectations. Customers usually have a particular level of expectation in relation to a product or service. When expectations match with the performance, it is said that customers are satisfied, whereas the customers are dissatisfied when expectations are lower than the performance (Swan and Combs, 1976). In general, a highly satisfied customer stays loyal to the company for a longer period of time (Williams and Naumann, 2011). They tend to purchase more when company introduce new products, spread positive word of mouth about the company and its products, offer new ideas to the company, provide less attention towards competing brands and less sensitive to the price (Kotler and Keller, 2012). When the customer is satisfied with a particular online or offline store, there is a high tendency that he or she will shop again from that store.

Alternatively, customer dissatisfaction signals about the fact that service encountered was not matched with the expectations (Churchill et al., 1982). Customer dissatisfaction will lead to loss of customer loyalty, which in turn results in discontinuity of subsequent transactions and repeat purchases by that customer (Moriuchi and Takahashi, 2016). Further, it has been identified that customer dissatisfaction arise as a result of service failure or feeling of service

unfulfillment. Customer dissatisfaction has been identified as a significant predictor of customers' switching behavior (Bougie et al., 2003)

When considering the above scenario, it is apparent that customer satisfaction is a very important factor which would determine the attraction of customers to an organization and its products and services. Further, it is apparent that customer satisfaction is important for retention of those customers with the organization in the long run. The concept of customer satisfaction and the resultant customer retention are critical for both online and offline businesses. Accordingly, the organizations would be interested in knowing the factors which can enhance the customer satisfaction.

Even in the Sri Lankan context, the Internet penetration is growing rapidly. According to statistics, during 2016, the Internet penetration of Sri Lanka has increased by 30% and the number of Internet users has increased up to 6.1 million due to the widespread subscriptions of cellular mobile connections, broadband and dial up Internet connections (Digitalmarketer.lk, 2018). Further it was found out that there is a significant growth in domestic e-commerce sites during last few years which provide the opportunity for consumers to purchase a large variety of consumer products including groceries, apparel and electronics (export.gov, 2018).

Previous research examined customer satisfaction from different perspectives and in different contexts. While "price" of a product or service has been found as an influencing factor for customer satisfaction (Khan et al. 2015), "price on the Internet" has a different effect for organizations (Pham and Ahammad, 2017). Price transparency on the Internet facilitates customers to compare prices among different vendors much easily. Comparison of prices has become much easier due to the availability of "price comparison sites" (Bodur et al., 2015). Customers can easily switch between different vendors with a few mouse clicks with minimum time and effort. Consequently, the price transparency has increased the competition between online vendors to new heights and naturally led to a price war between vendors to attract more customers for them (Grewal et al., 2004). When there is a price war between online vendors, there is no doubt that it is going to affect their profits and also very survival in the business.

Therefore, businesses are turning to other options and factors to increase customer satisfaction, and customer loyalty, which would help an organization to retain those customers in the long run. Customer retention helps a business to attract repeat purchases from existing customers

and consequently increase their revenue as well as profits. Thus, past researchers have looked at a variety of factors, other than price, which would increase customer satisfaction. Accordingly, a research study conducted in Greek online shopping context have identified product information quality, user interface quality, service information quality, purchasing process convenience, security perception and product attractiveness as the significant determinants of customer satisfaction (Madininos and Theodoridis, 2010). Another study done by Trong et al. (2014) have found website design, merchandise attributes, transaction capability, security/privacy, payment, delivery, customer service as the significant predictors of online customer satisfaction. Additionally, a recent study conducted by (Tandon et al., 2017) have revealed website functionality and perceived usefulness as factors leading to customer satisfaction in an online shopping environment.

However, analysis of previous research indicated that the findings are inconsistent. For instance, Chen et al. (2012) found that website design is the most powerful independent variable which influence customer satisfaction in online shopping environment. In contrary to this study, Ranjbarian et al. (2012) have identified that there is no significant association between website design and customer satisfaction. Further, Maditinos and Theodoridis (2010) identified that product information quality is highly related to the overall customer satisfaction. As oppose to this result, Evanschitzky et al. (2004) found that product information quality is not a significant determinant of online customer satisfaction.

The above discussion indicated that there is no agreement about the specific factors influencing customer satisfaction. Therefore, the purpose of this study is to identify the factors that affect customer satisfaction and to develop a conceptual model depicting the relationships between identified factors and customer satisfaction.

Although there were studies to identify the factors affecting the customer satisfaction in an online shopping context, the researchers were unable to find a single research in the Sri Lankan context. Therefore, it is worthwhile examining the situation in Sri Lanka as it would contribute to the theory as well as provide practical implications to business, especially for Sri Lankan online vendors, to better address the area of customer satisfaction.

LITERATURE REVIEW

Customer Satisfaction

Customer satisfaction is identified as one of the most examined constructs in marketing literature. This plays a major role in competitive environment because of its ability to retain the existing customers and introduce new customers. (Tandon et al., 2017). Kotler and Keller (2012, p.128) identified satisfaction as “a person’s feeling of pleasure or disappointment which occurs as a result of the comparison between product or service performance and expectation”. Another view point was provided by Oliver (2015, p.8), where he defined customer satisfaction as the “consumer’s fulfillment response. It is a judgment related to a product/service feature, or the product or service has actually provided (or is providing) a pleasurable level of consumption-related fulfillment”. Giese and Cote (2000) stated that customer satisfaction encompasses three basic components: *a response* (emotional or cognitive) pertaining to a particular *focus* (expectations, product, consumption experience, etc.) determined at a particular *time* (after consumption, after choice, based on accumulated experience, etc.).

According to expectation-disconfirmation paradigm (Oliver, 1980), satisfaction judgments are derived as a result of consumers’ perception on the difference between product performance and their predictions of performance. Further, it has identified that positive disconfirmation leads to high satisfaction whereas negative disconfirmation reflects the opposite effect (Parker and Mathews, 2001). In fact, the satisfaction depends on the offer’s performance in relation to customer expectation and in turn, customer expectation is derived through their past buying experience, advice of friends and associates and information and promises given by marketers and competitors (Kotler, as cited in Lin, 2003).

However, in this research, customer satisfaction construct is mainly identified as the satisfaction of the customer in relation to his/her previous purchasing experience on online shopping. According to Flavián, et al. (2006) user satisfaction depends on the fulfillment of customer expectations. Therefore, it is important to undertake detailed analysis on the requirements of web site user. Also the attention need to be given on providing customers with adequate amount of information, which facilitates the acquisition of required knowledge, more personalization, and closer customer attention. Such facilitations lead to an increase in the level of customer satisfaction.

Benefits of Customer Satisfaction

Customer satisfaction is one of the essential factors in an online environment due to several reasons. Satisfaction has been identified as a good predictor of future purchasing behavior (McQuitty et al., 2000). Similarly, Sanchez-Gracial et al. (ascited in Lin and Lekhawipat, 2014) stated that satisfied customers are expected to repurchase more in the future than dissatisfied customers. Therefore, in an online environment, customer satisfaction plays a significant role by assisting decision making of customers, which in return leads to repurchase behaviors and repeat purchases (Gupta and Kim, ascited in Lin and Lekhawipat, 2014)

According to Bhattacharjee (2001), greater believability is associated with the personal experience. He also stated that satisfied customers are considered to be less costly and they become more effective communication channels in spreading positive word of mouth about the organization. Further, Howat & Crilley (ascited in Biscaia et al., 2017) found that when customers are satisfied they tend to increase the usage of service and recommend the business and its services to others enabling customer retention. In addition, it has identified that the satisfaction on quality of online service offered, determines the success or failure of the online business (Reichheld & Schefer, as cited in Hsu, 2008). When customers are dissatisfied with the service offered by an online retailer, they tend to discontinue their purchases with the company and disseminate negative information to the potential customers (Hsu, 2008). He further stated that the negative experience a customer had with a particular retailer can easily be shared among potential customers in the online context, since customers have different platforms to post their reviews or feedbacks about the online retailers.

Also, Anderson et al. (1994) stated that customer loyalty depends on customer satisfaction and when loyalty of the current customers increases, it results in more repurchases in the future. This will increase the profitability of the firm by ensuring steady stream of future cash flows. Therefore, it can be stated that customer satisfaction through loyalty leads to higher level of revenue and better financial performance for businesses (Eklof et al. 2018).

Factors influencing Online Customer Satisfaction

The above discussion revealed that customer satisfaction provides various benefits to businesses, making it an extremely important factor to be considered by any organization. Consequently, various researchers have attempted to identify the determinants of customer satisfaction. As the usage and demand for online transactions have increased recently, more attention has been focused on factors leading to satisfaction of online customers. In this section research done by different researchers in relation to online customer satisfaction is discussed.

Cho and Park (2001) have developed an Electronic Commerce User-Consumer Satisfaction Index (ECUSI) by incorporating the instruments relevant to consumer satisfaction, user information satisfaction and electronic commerce literature. Further, Kim (2004) in his study developed an Electronic Commerce Customer Satisfaction Index (ECCSI) using weighted sum model. This analysis suggested an acceptable model providing generalizable set of measures which can be used to evaluate online satisfaction.

Szymanski and Hise (2000) examined the possible antecedents to e-satisfaction. They developed the conceptual model based on the data collected using focus group interviews and it was empirically tested with online shoppers. The effect of convenience, product offering, product information, site design and financial security on e-satisfaction level was estimated using correlation matrix and regression coefficients. Convenience, product information, site design and financial security had statistically significant effect on online customer satisfaction.

Evanschitzky et al. (2004) replicated the study done by Szymanski and Hise (2000) to examine the consumer satisfaction with Internet retail shopping and Internet financial services sites by using a sample of German consumers. The study found that, amongst the variables tested convenience, product offering, site design and financial security had significant effect on e-satisfaction.

Schaupp and Bélanger (2005) examined the role of technology, product and shopping factors on online customer satisfaction. The study examined three categories of factors: Technological factors (security, usability and site design, privacy); Shopping factors (convenience, trust and trustworthiness, delivery); and Product factors (merchandising, product value, product

customization). Results of this study indicated that privacy, merchandizing and convenience as the significant factors that affect online customer satisfaction.

Lin (2007) examined the effect of system quality, information quality and service quality on customer satisfaction. In order to measure this effect, a total of seven variables were used. System quality included website design, interactivity variables; Information quality included informativeness, security variables and Service quality included responsiveness, trust and empathy variables. Website design, interactivity, informativeness, security, responsiveness and trust had significant influence on customer satisfaction.

Yang and Tsai (2007) examined the effectiveness of e-service quality in explaining the variance in the e-shoppers' satisfaction and loyalty. Seven independent variables; efficiency, systems availability, fulfillment, privacy, responsiveness, compensation and contact, were tested in this study. Study revealed that all the independent variables tested had strong and significant effect on customer satisfaction.

Kim and Stoel (2004) have developed a model to determine the significance of website quality dimensions on shoppers' satisfaction. They examined the effect of Web appearance, entertainment, information fit-to-task, transaction capability, response time and trust on online customer satisfaction. The results revealed that information fit-to-task, transaction capability and response time as having significant effect on overall customer satisfaction.

Liu et al. (2008) have proposed a model to identify the factors influencing Chinese customers' online shopping satisfaction. They examined the variables information quality, website design, merchandise attributes, transaction capability, response, security/privacy, payment, delivery and customer service to identify their effect on overall customer satisfaction. The results of the analysis indicated that customer service, delivery, information quality, website design, merchandise attributes, transaction capability, security/privacy, and payment have a significant and positive effect on online customer satisfaction in China.

An effort has been taken by Chang and Chen (2009) to study the relationship among interface quality, perceived security and customer loyalty. As a part of the conceptual model, the effect of interface quality and perceived security towards customer satisfaction was tested

and revealed that interface quality and perceive security significantly and positively affect customer satisfaction.

The role e-tail quality, e-satisfaction and e-trust in online loyalty development process was examined by Kim et al. (2009) using four e-tail quality dimensions. This included website design, security/privacy, fulfillment/reliability and responsiveness. Study revealed that only website design, security/privacy and fulfillment/reliability dimensions significantly and positively influence the e-satisfaction.

The determinants of online customer satisfaction and the resultant behavioral intention were tested by Zeng et al. (2009) using online customers. They tested the effect of customer service, fulfillment/reliability, ease of use, product/service portfolio and security on online customer satisfaction. The results of the analysis demonstrated that only customer service, fulfillment/reliability, ease of use and product/service portfolio were significantly related with online customer satisfaction.

Alam and Yasin (2010) investigated the influence of website design, reliability and product variety and delivery performance on customer satisfaction of online shopping. This analysis revealed that website design, reliability, product variety and delivery performance were significantly associated with the online customer satisfaction.

Another research was conducted by Maditinos and Theodoridis (2010) to empirically validate several literature-based constructs on customer satisfaction in Greek online shopping context. The product information quality, user interface quality, service information quality, purchasing process convenience, security perception, product attractiveness and user participation were tested against e-commerce customer satisfaction. Results of this study indicated that product information quality, user interface quality, service information quality, purchasing process convenience, security perception, and product attractiveness had significant influence on overall satisfaction.

The factors affecting Saudi customers' trust, satisfaction and loyalty towards B2C ecommerce were investigated by Eid (2011). Here, user interface quality, information quality, perceive privacy and perceive security were tested in order to identify their effect of e-customer trust and

e-customer satisfaction. Study revealed that only interface quality and information quality created significant effect on customer satisfaction.

Gelard and Nagahdari (2011) have presented a new framework for customer satisfaction related to electronic commerce. Six independent variables; convenience, merchandising, site design, security, company and serviceability were tested to identify their effect on online customer satisfaction. Results of this study revealed that customer satisfaction is significantly affected by all the aforementioned variables.

Al-Kasasbeh et al. (2011) have examined user satisfaction with e-services using independent variables; website design, website navigation and website personalization. Study indicated that website design and website navigation are significantly related to the e-service satisfaction.

Another study has been conducted by Lin et al. (2011) to ascertain the factors that affect online consumers' satisfaction in Taiwan. This study tested the significance of information quality, system quality, service quality, product quality, delivery quality and perceived price on customer satisfaction. Results of the study revealed that online customer satisfaction was positively and significantly affected by information quality, system quality, service quality, product quality, delivery quality and perceived price.

A study has been done by Anand (2007) in order to examine the role that online convenience, merchandising, serviceability, site design and financial security play in e-satisfaction. The results of the analysis confirmed that convenience, serviceability, site design and financial security had statistically significant influence on online satisfaction level.

The same set of variables used by Anand (2007) were tested by Rajbarian et al. (2012) in order to identify their effect on e-satisfaction of Iranian customers. This study also revealed that e-satisfaction is significantly influenced by the convenience, merchandising, site design, security and serviceability aspects of e-shopping.

Guo et al. (2012) have investigated the determinants of customer satisfaction towards online shopping in China. A total of eight independent variables; website design, security, information quality, payment method, e-service quality, product quality, product variety and delivery service were tested in this study. The results of the analysis have highlighted that all the eight

variables are positively and significantly related to the Chinese customer satisfaction in online shopping context.

In the study of Polites et al. (2012) they examined the effect of information quality, system quality, perceived usefulness, perceived value and trust on e-satisfaction and site stickiness. The results indicated that information quality, system quality, perceived usefulness and perceived value were significant predictors of e-satisfaction.

Chen et al. (2012) investigated the influence of trust, information quality, price, privacy, payment, website design and delivery on online customer satisfaction. Study revealed that all tested variables had significant effect on online customer satisfaction.

The Antecedents of online customer satisfaction and customer loyalty in the Indonesian online store context were tested by Dharmesti and Nugroho (2012) using independent variables; information quality, website design, product variation, transaction ability, response, security/privacy, payment system, delivery and customer service. The results demonstrated that only the information quality, security/privacy, payment system, delivery and customer service were significantly related with online customer satisfaction.

Bellaaj (2013) tested the effect of web system quality, web content quality and web service quality on online customer satisfaction. All the three variables had positive and significant effects on online customer satisfaction.

Another research has been conducted by Trong et al. (2014) to evaluate the factors influencing customer satisfaction towards online shopping in Vietnam. Constructs including website design, merchandise attributes, transaction capability, security/privacy, payment, delivery and customer service were tested. The results of this study confirmed the significant relationship existed between all the tested constructs and customer satisfaction.

Khan et al. (2015) used an empirical study to identify perceived factors affecting customer satisfaction which in turn influence re-purchase intention in e-stores. They tested the influence of perceived benefits and perceived risks on customer satisfaction. Perceived benefits examined in this study included price benefits, convenience benefits, product information, and return policy benefits. Perceived risks examined included product risk, financial risk, and

delivery risk. Study revealed that all the perceived benefits and perceived risks identified, have significant and positive influence on customer satisfaction.

A recent study done by Ting et al. (2016) studied the association between E-service quality, E-satisfaction and E-loyalty of online shoppers in Malaysian business to consumer market. Consequently, they measured the effect of efficiency, privacy and trust, fulfilment, responsiveness, contact and website design on e-satisfaction of online customers. The results of the study indicated that all the above independent variables identified, positively and significantly affect e-satisfaction of online shoppers.

Another recent study conducted by Tandon et al. (2017) aimed at analyzing the key determinants that influence customer satisfaction towards online shopping in India. They examined the effect of website functionality, Perceived usefulness and Perceived usability on customer satisfaction. Study revealed that website functionality and perceived usefulness have significant and positive effects on online satisfaction.

In the Sri Lankan context, several attempts were there to study customer satisfaction in relation to areas like online banking, Internet banking, mobile banking etc. In general, most of the studies have tested the effect of variables such as security, customer service, price, convenience etc. on customer satisfaction. Silva and Abeysekara (2012) examined the influence of Internet banking on customer satisfaction. In this research, authors have considered the technological aspects, staff assistance, experiential convenience and promotional aspects as the independent variables. The study proved that technological aspects, staff assistance, experiential convenience and promotional aspects are significant determinants of customer satisfaction with Internet banking.

Thilakarathne and Abeysekara (2016) studied customer satisfaction in mobile money services. They have used customer care, convenience, service convenience and economical price perception as independent variables in their study. This study revealed that economical price perception, improved security and quality of customer care as significant determinants of customer satisfaction.

Summary of Determinants of Online customer satisfaction

The determinants of customersatisfaction identified based on the extensive review of literature is presented in Table 1.

Table 22: Summary of determinants of online customer satisfaction

No.	Determinant	Literature citation	Citation count (n = 31)	
			Frequency	Percentage
01	Website design	Szymanski & Hise (2000); Cho & Park (2001); Evanschitzky (2004); Kim(2005); Kim & Stoel (2004); Lin (2007); Anand (2007); Liu et al. (2008); Kim et.al.(2009);Chang & Chen (2009) ; Alam & Yasin (2010), Maditinos and Theodoridis (2010); Al-Kasasbeh et al.(2011); Eid (2011); Gelard & Negahdari (2011);Chen et al.(2012), Guo et al. (2012); Dharmesti & Nugroho (2012);Ranjbarian et al. (2012); Trong et al.(2014); Ting et al. (2016); Tandon et al.(2017)	22	76%
02	Security	Szymanski & Hise (2000); Evanschitzky (2004); Kim(2005); Schaupp & Belanger (2005); Lin (2007); Anand (2007); Liu et al. (2008);Zeng et al. (2009); Kim et.al.(2009) ; Chang & Chen (2009); Maditinos and Theodoridis (2010); Eid (2011); Gelard & Negahdari (2011); Guo et al. (2012); Dharmesti	18	62%

		& Nugroho (2012);Ranjbarian et al. (2012); Trong et al.(2014) ; Thilakarathne & Abeysekara (2016)		
03	Customer service	Cho & Park (2001); Kim (2005); Anand (2007); Yang & Tsai (2007); Liu et al. (2008); Zeng et al. (2009); Gelard & Negahdari (2011) ; Lin et al.(2011); Ranjbarian et al. (2012); Guo et al.(2012); Silva & Abesekara (2012); Trong et al.(2014); Dharmesti & Nugroho (2012); Bellaj (2013); Thilakarathne & Abeysekara (2016); Ting et al. (2016)	16	55%
04	Product Information Quality	Szymanski & Hise (2000);Cho & Park (2001); Evanschitzky (2004); Kim (2005); Lin (2007) Liu et al.(2008); Maditinos and Theodoridis (2010); Eid (2011) ; Lin et al. (2011) Gelard & Negahdari (2011); Chen et al. (2012); Polites (2012) Guo et al.(2012) ; Dharmesti & Nugroho (2012); ; Khan (2015)	15	52%
05	Purchasing process convenience	Szymanski & Hise (2000); Cho & Park (2001) ;Evanschitzky (2004) ; Kim (2005) ; Schaupp & Belanger (2005) ; Anand (2007) ; Maditinos	12	41%

		and Theodoridis (2010); Gelard & Negahdari (2011); Ranjbarian et al.(2012);Silva & Abeysekara (2012); Khan (2015); Thilakarathne & Abeysekara (2016)		
06	Delivery	Cho & Park (2001); Kim (2005);Schaupp & Belanger (2005); Liu et al. (2008); Alam & Yasin (2010); Lin et al. (2011); Chen et al.(2012); Guo et al.(2012); Dharmesti & Nugroho (2012) ; Trong et al. (2014)	10	34%
07	Response	Kim & Stoel (2004); Lin (2007); Yang & Tsai (2007); Liu et al. (2008); Kim et al. (2009); Dharmesti & Nugroho (2012; Ting et al. (2016)	7	24%
08	Payment	Cho & Park (2001); Kim (2005); Liu et al. (2008); Guo et al.(2012); Dharmesti & Nugroho (2012); Chen et al. (2012), Trong et al. (2014)	7	24%
09	Merchandising	Cho & Park (2001); Schaupp & Belanger (2005); Anand (2007); Liu et al. (2008) ; Ranjbarian et al. (2012) ; Trong et al. (2014)	6	21%
10	Price	Cho & Park (2001); Kim (2005); Lin et al. (2011) ; Chen et al.(2012) ; Khan (2015) ; Thilakarathne & Abeysekara (2016)	6	21%

11	Privacy	Schaupp & Belanger (2005); Yang & Tsai (2007); Eid (2011); Chen et al. (2012); Ting et al. (2016)	5	17%
12	Fulfillment/reliability	Yang & Tsai (2007); Kim et al. (2009); Zeng et al. (2009); Alam & Yasin (2010); Ting et al. (2016)	5	17%
13	Transaction capability	Kim & Stoel (2004); Liu et al. (2008); Dharmesti & Nugroho (2012); Trong et. al. (2014) ;	4	14%
14	Product Offerings	Szymanski & Hise (2000); Evanschitzky (2004);Zeng et al. (2009);Gelard & Negahdari(2011)	4	14%
15	Trust	Kim & Stoel (2004); Lin (2007); Polites(2012); Chen et al.(2012)	4	14%
16	System Quality	Lin et al. (2011); Polites(2012); Bellaj (2013)	3	10%
17	Perceived usability	Schaupp & Belanger (2005); Polites(2012) ; Tandon et al. (2017)	3	10%
18	Product quality	Schaupp & Belanger (2005); Lin et al. (2011); Guo et al. (2012)	3	10%
19	Product variety	Alam & Yasin (2010); Dharmesti & Nugroho (2012); Guo et al.(2012)	3	10%
20	Ease of use	Cho & Park (2001) ; Zeng et al. (2009)	2	7%
21	Product attractiveness	Kim (2005); Maditinos and Theodoridis (2010)	2	7%

22	Service information quality	Maditinos and Theodoridis (2010); Trong et. al. (2014)	2	7%
23	Efficiency	Yang & Tsai (2007); Ting et al. (2016)	2	7%
24	Perceived usefulness	Tandon et al. (2017)	1	3%
25	Navigation	Al-Kasasbeh et al. (2011)	1	3%
26	Personalization	Al-Kasasbeh et al. (2011)	1	3%
27	Company	Gelard & Negahdari (2011)	1	3%
28	Additional information services	Cho & Park (2001)	1	3%
29	Interactivity	Lin (2007)	1	3%
30	Empathy	Lin (2007)	1	3%
31	Perceived value	Polites (2012)	1	3%
32	User participation	Maditinos and Theodoridis (2010)	1	3%
33	Product customization	Schaupp & Belanger (2005)	1	3%
34	System Availability	Yang & Tsai (2007)	1	3%
35	Compensation	Yang & Tsai (2007)	1	3%
36	Time	Alam & Yasin (2010)	1	3%
37	Return policy	Khan (2015)	1	3%
38	Web content quality	Bellaaj (2013)	1	3%
39	Promotional aspect	Silva & Abeysekara (2012)	1	3%
40	Technological aspect	Silva & Abeysekara (2012)	1	3%

41	Information fit to task	Kim & Stoel (2004)	1	3%
42	Entertainment	Kim & Stoel (2004)	1	3%
43	Product risk	Khan (2015)	1	3%
44	Delivery risk	Khan (2015)	1	3%
45	Financial risk	Khan (2015)	1	3%

CONCEPTUAL MODEL

The purpose of this research is to develop a conceptual model to examine the determinants of online customer satisfaction. In order to achieve this objective, a comprehensive literature review was performed. The literature review enabled the researchers to uncover forty-five different determinants of online customer satisfaction (see Table 1). For the purpose of this research, the researchers decided to select the most cited five determinants to develop the conceptual framework. The five determinants have been used by more than 40% of the previous researchers, indicating the importance attributed to these determinants. Hence, in this study, the selection of these five determinants amongst the forty-five determinants identified can be justified. The five determinants of online customer satisfaction chosen for the study include: Website design, Security perception, Customer service, Product information quality, and Purchasing process convenience. Based on the above justification the conceptual model (shown in Figure 1) depicting the relationships between five determinants and online customer satisfaction was developed.

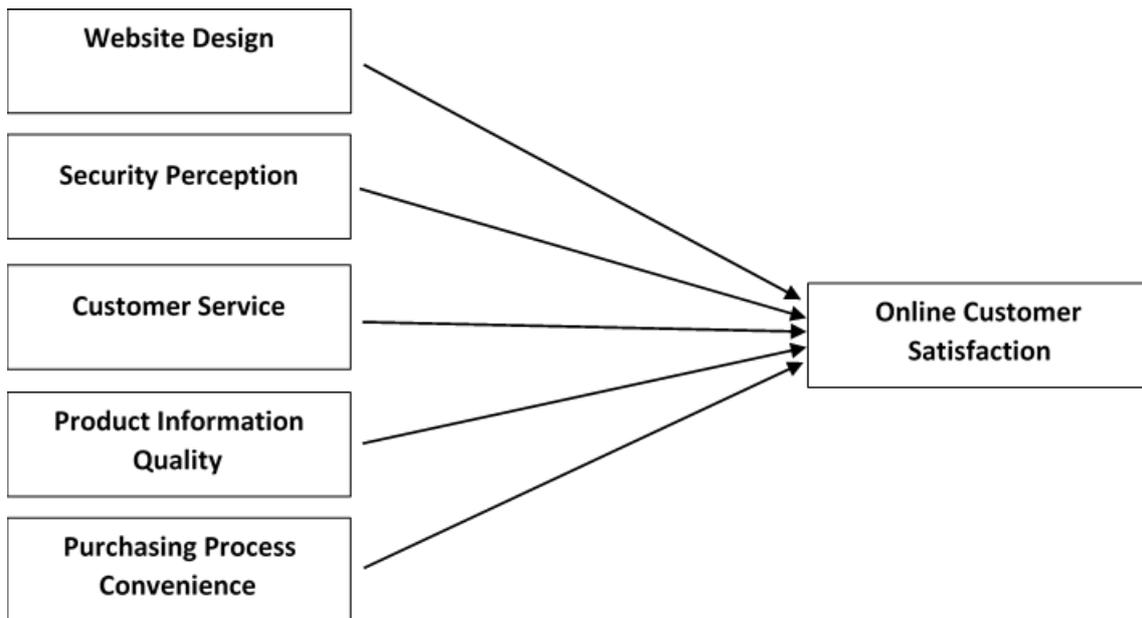


Figure 10: Conceptual Model

CONCLUSION

The objective of this study was to develop a conceptual model to identify the determinants of online customer satisfaction. In order to achieve this objective, a comprehensive literature review was performed. A total of fifty-six research papers were reviewed during this process. Research papers were carefully selected to ensure the validity and reliability of them. The researchers focused on the research papers which were published in well-recognized scientific journals.

Amongst the research papers studied, thirty-one research papers were related to the determinants of online customer satisfaction. Thus, the thirty-one research papers were used in the process of identifying the determinants used in different studies. This process helped the researchers to explore forty-five determinants with different frequencies of usage. After evaluating the forty-five determinants, most commonly cited five determinants, with the highest frequencies, were selected to develop the conceptual model. Those five determinants included: Website design, Security perception, Customer service, Product Information Quality, and Purchasing Process Convenience. Finally, the conceptual model was developed depicting the relationship between each of the determinant identified and online customer satisfaction.

FUTURE RESEARCH DIRECTION

The researchers intend to perform a large scale survey to empirically validate the conceptual model developed. Further, the researchers aim to identify the significant determinants of online customer satisfaction in the Sri Lankan context. The study findings will provide important theoretical and managerial implications.

REFERENCES

- Al-Kasasbeh, M., Dasgupta, S. and Al-Faouri, A. (2011), "Factors affecting e-service satisfaction", *Communications of the IBIMA*, Vol. 2011, No. 2011, pp. 1–12.
- Alam, S.S. and Yasin, N.M. (2010), "An investigation into the antecedents of customer satisfaction of online shopping", *Journal of Marketing Development and Competitiveness*, Vol.5, No.1, pp. 71–79.
- Anand, A. (2007), "E-satisfaction - A comprehensive framework", *Second International Conference on Internet and Web Applications and Services*, 13-19 May.
- Anderson E.W., Fornell, C. and Lehmann, D.R. (1994), "Customer satisfaction, market share and profitability: findings from Sweden", *Journal of Marketing*, Vol. 58, No.3, pp.53-66.
- Bellaaj, M. (2013), "Web-based information systems success : testing the antecedents of online customer satisfaction", *International Journal of Internet and Enterprise Management*, Vol.8. No.2, pp. 129–145.
- Bhattacharjee, A. (2001), "An empirical analysis of the antecedents of electronic commerce service continuance", *Decision Support Systems*, Vol. 32, No. 2, pp. 201–214.
- Biscaia, A. R., Rosa, M. J., Moura e Sá, P and Sarrico C.S.(2017), "Assessing customer satisfaction and loyalty in the retail sector", *International Journal of Quality and Reliability Management*, Vol.34, No.9, pp. 1508–1529.
- Bodur, H. O., Klein, N. M. and Arora, N. (2015), "Online price search: impact of price comparison sites on offline price evaluations", *Journal of Retailing*, Vol.91, No.1, pp. 125–139.
- Bougie, R., Pieters, R. and Zeelenberg, M. (2003), "Angry customers don't come back, they get back: the experience and behavioral implications of anger and dissatisfaction in services", *Journal of the Academy of Marketing Science*, Vol. 31, No.4, pp. 377–393.
- Chang, H. H. and Chen, S. W. (2009), "Consumer perception of interface quality, security, and loyalty in electronic commerce", *Information and Management*, Vol.46, No.7, pp. 411–417.
- Chen, Z., Ling, K.C., Ying, G.X and Meng, T.C.(2012), "Antecedents of online customer satisfaction in China", *International Business Management*, Vol.6, No.2, pp. 168-175.

- Chiang, K.P., Dholakai, R.R. (2003), "Factors driving consumer intention to shop online: an empirical investigation", *Journal of Consumer Psychology*, Vol.13, No.1-2, pp.177-183.
- Cho, N. and Park, S. (2001), "Development of electronic commerce user- consumer satisfaction index for internet shopping", *Industrial Management and Data Systems*, Vol.101, No.8, pp.401-405.
- Churchill, G.A.,Jr. and Surprenant, C. (1982), "An investigation in to determinants of customer satisfaction", *Journal of Marketing Research*, Vol.19, No.4, pp.491-504.
- Dharmesti, M.D.D. and Nugroho, S.S (2012), "The Antecedents of online customer satisfaction and customer loyalty", *The Business &Management Review*, Vol.7, No.2, pp. 57–68.
- Digitalmarketer.lk. (2018) "Internet Usage Statistics in Sri Lanka – Updated for 2017" Available at: <http://www.digitalmarketer.lk/internet-usage-statistics-in-sri-lanka-2016-updated.html> [Accessed 15 October 2018].
- Edi, M.I. (2011), "Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia", *Journal of Electronic Commerce Research*, Vol.12, No.1, pp. 78-93.
- Eklof, J., Podkorytova, O. and Malova, A. (2018), "Linking customer satisfaction with financial performance: an empirical study of Scandinavian banks", *Total Quality Management & Business Excellence*, pp. 1–19.
- Evanschitzky, H., Iyer, G.R, Hesse, J. and Ahlert, D. (2004), "E-satisfaction: A re-examination", *Journal of Retailing*, Vol. 80, No.3, pp. 239–247.
- Export.gov (2018) "Sri Lanka – ecommerce" Available at: <https://www.export.gov/article?id=Sri-Lanka-eCommerce> [Accessed 10 October 2018].
- Flavián, C., Guinalfú, M. and Gurrea, R. (2006), "The role played by perceived usability, satisfaction and consumer trust on website loyalty", *Information and Management*, Vol.43, No.1, pp. 1–14.
- Gelard, P. and Negahdari, A. (2011), "A new framework for customer satisfaction in electronic commerce", *Australian Journal of Basic and Applied Sciences*, Vol.5, No.11, pp.1952-1961.
- Giese, J.L and Cote, J.A. (2000), "Defining Consumer Satisfaction", *Academy of Marketing Science Review*, Vol.2000, No.1, pp.1-27.
- Grewal, D., Iyer, G. R. and Levy, M. (2004), "Internet retailing: Enablers, limiters and market consequences", *Journal of Business Research*, Vol.57, No.7, pp. 703–713.
- Guo, X., Ling, K. C. and Liu, M. (2012), "Evaluating factors influencing consumer satisfaction towards online shopping in China", *Asian Social Science*, Vol.8, No.13, pp. 40–49.
- Harn, A.C.P., Khatibi, A. and Ismail, H.B. (2006), " E-commerce: A study on online shopping in Malaysia", *Journal of Social Sciences*, Vol.13, No.3, pp. 231-242.

- Hsu, S. H. (2008), "Developing an index for online customer satisfaction: Adaptation of American customer satisfaction index", *Expert Systems with Applications*, Vol. 34, No.4, pp. 3033–3042.
- Khan, S.A., Liang, Y. and Shahzad, S. (2015), "An empirical study of perceived factors affecting customer satisfaction to repurchase intention in online store in China", *Journal of Service Science and Management*, Vol.8, No.3, pp. 291-305.
- Kim, H. R. (2004), "Developing an index of online customer satisfaction", *Journal of Financial Services Marketing*, Vol.10, No.01, pp.49-64.
- Kim, J., Jin, B. and Swinney, J.L. (2009), "The role of etail quality, e-satisfaction and e-trust in online loyalty development process", *Journal of Retailing and Consumer Services*, Vol.16, No.4, pp. 239-247.
- Kim, S. and Stoel, L. (2004), "Apparel retailers: Website quality dimensions and satisfaction", *Journal of Retailing and Consumer Services*, Vol.11, No.2, pp. 109–117.
- Kotler, P and Keller, K. L. (2012), *Marketing Management*, Prentice Hall, New Jersey.
- Lin, C. and Lekhawipat, W. (2014), "Factors affecting online repurchase intention", *Industrial Management and Data Systems*, Vol.114, No.4, pp. 597–611.
- Lin, C. C. (2003), "A critical appraisal of customer satisfaction and e-commerce", *Managerial Auditing Journal*, Vol.18, No.3, pp. 202–212.
- Lin, C. C., Wu, H. Y. and Chang, Y. F. (2011), "The critical factors impact on online customer satisfaction", *Procedia Computer Science*, Vol.3, No.2011 pp. 276–281.
- Lin, H. F. (2007), "The impact of website quality dimensions on customer satisfaction in the B2C e-commerce context", *Total Quality Management and Business Excellence*, Vol.18, No.4, pp.363-378.
- Liu, X., He, M., Gao, F. and Xie, P. (2008), "An empirical study of online shopping customer satisfaction in China: A holistic perspective", *International Journal of Retail and Distribution Management*, Vol.36, No.11, pp. 919–940.
- Maditinos, D. I. and Theodoridis, K. (2010), "Satisfaction determinants in the Greek online shopping context", *Information Technology and People*, Vol. 23, No. 4, pp. 312–329.
- McQuitty, S., Finn, A. and Wiley, J. B. (2000), "Systematically varying consumer satisfaction and its implications for product choice", *Academy of Marketing Science Review*, Vol. 2000, No.10, pp. 1–16.
- Momtaaz, H., Islam, A. M., Ariffin, K. H. K and Karim, A. (2011), "Customer satisfaction on online shopping in Malaysia", *International Journal of Business and Management*, Vol. 6, No. 11, pp. 162 - 169.
- Moriuchi, E. and Takahashi, I. (2016), "Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade", *Australasian Marketing Journal*, Vol.24, No.2, pp. 146–156.

- Oliver, R. L. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, Vol.17, No.04, pp.460-469.
- Oliver, R.L. (2015), *Satisfaction: A Behavioral Perspective on the Consumer*, Routledge, New York.
- Pappas, I. O., Pateli, A.G., Giannakos, M.N. and Chrissikopoulos, V. (2014), "Moderating effects of online shopping experience on customer satisfaction and repurchase intentions", *International Journal of Retail and Distribution Management*, Vol.42, No.3, pp. 187–204.
- Parker, C. and Mathews, B.P. (2001), "Customer satisfaction : contrasting academic and consumers' interpretations", *Marketing Intelligence & Planning*, Vol. 19, No.1, pp.38-44 .
- Pentina, I., Amialchuk, A. and Taylor, D. G. (2011), "Exploring effects of online shopping experiences on browser satisfaction and e-tail performance", *International Journal of Retail and Distribution Management*, Vol. 39, No.10, pp. 742–758.
- Pham, T. S. H. and Ahammad, M. F. (2017), "Antecedents and consequences of online customer satisfaction: A holistic process perspective", *Technological Forecasting and Social Change*, Vol.124, pp. 332–342.
- Polites, G. L. Williams C.K., Karahanna, E. and Seligman, L. (2012), "A theoretical framework for consumer e-satisfaction and site stickiness: an evaluation in the context of online hotel reservations", *Journal of Organizational Computing and Electronic Commerce*, Vol. 22, No.1, pp. 1–37.
- Ranjbarian, B., Fathi, S. and Rezaei, Z. (2012), "Factors influencing on customers' E-satisfaction: a case study from Iran", *Interdisciplinary Journal of Contemporary Research in Business*, Vol.3, No.9, pp. 1496-1511.
- Schaupp, L. C. and Bélanger, F. (2005), "A conjoint Analysis of Online Consumer Satisfaction", *Journal of Electronic Commerce Research*, Vol.6, No.2, pp. 95–111.
- Silva, L.A.R.H.D and Abeysekara, N. (2012) "Influence of Internet banking on customer satisfaction in the Sri Lankan context", *Annual Academic Sessions*, Open University of Sri Lanka, pp.183-185.
- Swan, J.E. and Combs, L.J. (1976), "Product Performance and Consumer Satisfaction: A New Concept", *Journal of Marketing*, Vol. 40, No. 2, pp. 25-33.
- Szymanski, D.M. and Hise, R.T. (2000), " E- satisfaction: an initial examination", *Journal of Retailing*, Vol.76, No.3, pp. 309-322.
- Tandon, U., Kiran, R. and Sah, A. (2017), "Analyzing customer satisfaction: users perspective towards online shopping", *Nankai Business Review International*, Vol. 8, No. 3, pp. 266–288.
- Thilakarathne, C. and Abeysekara, N. (2016), " Influencing factors for customer satisfaction of mobile-money services, with special reference to mcash service by mobitel Sri lanka", *Asia Pacific Journal of Marketing and Retail Management*, Vol.7, No. 2, pp. 2317-2349.

Ting, O. S., Ariff, M.S.M., Zakuan, N., Sulaiman, Z. and Saman, M.Z.M. (2016), "E-Service Quality, E-Satisfaction and E-Loyalty of Online Shoppers in Business to Consumer Market; Evidence form Malaysia", *IOP Conference Series: Materials Science and Engineering*, Vol.131, pp.1-11

Trong, V.H., Khanh N.T.V and Gim, G.(2014), "Evaluating factors influencing consumer satisfaction towards online shopping in Viet Nam", *Journal of Emerging Trends in Computing and Information Sciences*, Vol.5, no.1, pp. 67-71.

Williams, P. and Naumann, E. (2011), "Customer satisfaction and business performance: a firm-level analysis", *Journal of Services Marketing*, Vol. 25, No.1,pp. 20-32.

Yang, H. and Tsai, F.S. (2007) "General E-S-QUAL scales applied to websites satisfaction and loyalty model", *Communications of the IIMA*, Vol.7, No.2, pp. 115–126.

Zeng, F., Hu, Z., Chen, R. and Yang, Z. (2009), "Determinants of online service satisfaction and their impacts on behavioural intentions", *Total Quality Management and Business Excellence*, Vol. 20, No. 9, pp. 953-969.