



Original Article

Impacts of E-service Quality on Customer Satisfaction: A Case Study of Lazada

Duong Thi Hoai Nhung*, Nguyen Thi Ngan

Foreign Trade University, No. 91, Chua Lang Street, Dong Da District, Hanoi, Vietnam

Received: August 29, 2021

Revised: February 25, 2022; Accepted: April 25, 2022

Abstract: The most important issue for online shopping providers is how to retain customer satisfaction. To survive and thrive, they must improve their service quality. This study aims at identifying factors that affect Lazada's customer satisfaction on its e-service quality as a leading e-commerce market in Vietnam. Data was gathered from 220 customers who used Lazada to buy products. The model test indicates four factors that positively influence customer satisfaction in terms of e-service quality at Lazada including web design, security, fulfillment, and customer service. A number of managerial implications are proposed for Lazada and other online shopping providers to improve service quality.

Keywords: Customer satisfaction, service quality, online shopping.

1. Introduction

The development of information technology has changed consumer behavior from shopping in physical stores to shopping in virtual stores [1, 2]. Nowadays, customers do online shopping by making a few clicks to order and pay, and then wait for goods to be delivered at the door. Many customers find online shopping much more convenient than offline shopping [3]. Vietnam is considered at the top of Asian countries in online shopping and the numbers of customers are expected to continue to rise at a fast pace, thanks

to relatively flexible bandwidth services and low cellular data cost [4]. With the increasing accessibility to the Internet, more and more shoppers will have the opportunity to access and use e-commerce services.

E-commerce is the performance of transactions of buying and selling products and services over the Internet, supporting online sales and customer service [5]. The terms of e-commerce and e-business are interchangeable [6]. A good illustration of the closeness between the two terms can be found in the IBM definition of e-business: "The transformation of key

* Corresponding author

E-mail address: nhungth@ftu.edu.vn

<https://doi.org/10.25073/2588-1108/vnueab.4676>

business process through the use of internet technologies” [7].

Service quality is the key element for businesses to achieve customer satisfaction [8]. Customer satisfaction helps businesses to increase returns and achieve competitive advantage [9]. In addition, customer satisfaction leads to long-term profits by making customers loyal to the organization [10].

Problems customers are often exposed to when shopping online include poor quality products, shipping weaknesses [11], online-payment related security [12] and uncompleted commitments by sellers, and so on. Online shopping has not received a high level of trust and consumer satisfaction; this has limited the scale and revenue to reach its potential [9]. Therefore, it is necessary to study customer satisfaction of e-service quality. Previous studies focus on traditional service quality while differences between traditional service quality and e-service quality do exist. E-service quality measurement describes the impact on service quality assessment when technology is introduced. Concepts such as system quality, information quality, technology adoption, end user satisfaction and self-service technologies are not significant in the case of traditional services, but relevant in the context of online services.

The study examines relationships between e-service quality and customer satisfaction in the case of Lazada, which is the largest e-commerce company in Vietnam, with approximately 27.03 million visitors per month in 2019. Therefore, our study of buying behavior of customers shopping online at Lazada can reflect the buying habits of customers, thereby predicting the influence of service quality factors on customer satisfaction. The study results offer unique insights for e-commerce platforms on how to manage e-service quality. It also contributes to the vast amount of research on information systems, service marketing and consumer behavior by providing insights about the concept of e-service quality and its relationship with customer satisfaction.

2. Theoretical framework and hypotheses development

2.1. Customer satisfaction

Customer satisfaction is the outcome felt by those who experience goods or services over time that have fulfilled their expectations [13]. Customer satisfaction is the feeling of like or dislike of certain products by customers and the results of comparison of customer expectations with the performance of the product [14]. Actionable information on how to make customers further satisfied is, therefore, a crucial outcome [15].

Customer satisfaction in e-commerce is shown as a customer with a high level of satisfaction with a website will always make a lot of visits. Products create customer satisfaction become popular on e-commerce websites. A customer with a high level of satisfaction will maintain their choice to buy on the website he/she trusts [16].

2.2. E-service quality

Service quality is defined as the distance between customer expectations of the service and their perception after using that service [17]. E-service quality can be considered as the conditions that a website can create to make online shopping transactions and delivery effectively [18]. More specifically, the definition of e-service quality is determined by the extent to which a website facilitates and effectively facilitates the procurement, purchase and delivery of products and services [19].

Online shopping is a complex process that can be broken into various sub-processes such as navigating, finding information, transacting online or interacting with customers. Customers are not likely to evaluate each sub-process in detail in an online store visit, but will perceive service quality as an overall process and outcome [20]. This study uses dimensions in the EtailQ model [22] to examine the impacts of e-service quality on customer satisfaction in Lazada because this model has been applied in

many areas of e-service such as banking, online shopping, and flight ticket booking. It is also appropriate for addressing the whole issue of service quality provided by a business.

2.3. Dimensions of e-service quality

The EtailQ model includes four factors of e-service affecting the online retailing experience. These include website design, privacy/security, fulfillment/reliability, and customer service [22].

Web design

Web design consists of the characteristics of a website that consumers experience at the website (except for customer service), including navigation, information search, order processing, appropriate personalization and product selection. A good website must have an attractive, creative design with the right content for users to trust and effectively interact with the seller [22].

To convert the people who search for information into consumers, the quality of information regarding products and the convenience of information use is crucially important. The structure of the e-store needs to be easy to understand and navigate [23]. Users will leave the website if it is difficult to be used, illegible, does not answer the users' questions or generally or lacks enough attraction [24].

Security

Security means how well an online shopping website is able to protect its consumer's personal information from any potential threat of unauthorized use through the transaction process [9]. Online shopping security is also identified as one of the prime factors to protect online consumers engaging with online shopping. [25]. Online consumers care about the security, liability and privacy of any website. Privacy risk is psychological risk and disappointment of shopping online when consumers are required to disclose their personal information in order to settle the online transaction which is mainly caused by the privacy information lost [26]. E-retailers

need to be very clear that none of their activities threaten the security of the consumer [23].

Fulfillment

Fulfillment refers to the actual performance of a company in contrast with what is promised through the website, and incorporates accuracy of service promises, such as having products in stock and timely delivery [27]. Online marketers can use their customers' trust of online trading, meaning their orders can be fulfilled, which in turn reduces the perceived performance risks and subsequent financial risk. Providing clearer and more transparent information on the online shopping website, such as announcements about when to order, release and deliver helps develop trust in the transaction [28].

Customer service

Customer service is the provision of responsive, helpful, willing services to quickly respond to customers' inquiries [22]. It can be perceived when the buyer's requests and suggestions are responded to, answered and supported during the use of the service [19]. A quick response to requests is also an important way for e-commerce companies to show that they are customer-oriented and is likely to increase the perceived convenience and diminish the uncertainty. Therefore, customers expect online websites to respond to their inquiries promptly and customers identify a fast response as an element of high-quality services.

2.4. Hypotheses development

The first dimension of e-service is web design which incorporates all components related to a customer's experience of dealing with a website, excluding customer service [22]. These components include order processing, information search, product selection, negotiation and proper personalization. Well-designed websites reduce information research time and avoid potential mismatches [29]. In addition, design elements related to direct cues (e.g. layout and color) are very important to get positive feedback from users and facilitate user

entries [30]. With reference to the design factors of a website, a good design must provide not only beauty and appeal, but also high levels of usability (a consumer's ability to identify where he or she is and what he or she can do in every moment of the navigation) to positively influence the affective state of the users [31]. Website design has a substantial effect on customer satisfaction [31, 32]. Therefore, website design is expected to have a positive influence on customer satisfaction.

H1: Web design has a positive influence on customer satisfaction

Online security is also an important concern for any online shoppers. Karim and Gide [33] found that online security has a significant impact on consumer satisfaction; online consumers are mainly concerned with the online transaction security and personal information security. Online security provides a positive relationship with online consumer satisfaction [34]. Every factor from the categories of product features and website design, which included security, was found to be impactful on online consumer satisfaction. Based on the result of previous research, security has a significant relationship with online consumer satisfaction [35]. The following hypothesis is formulated after the section of literature review:

H2: Security has a positive influence on customer satisfaction

Fulfillment/reliability is regarded as the capability of the website of a retailer to deliver the exact product in the expected condition and at the expected time [22]. Several studies concluded that fulfillment/reliability has a positive influence on e-satisfaction [36]. This study argues that fulfillment/reliability acts as a source of comfort for customers as it confirms their expectations with regard to the process of purchasing, and subsequently generates preferable feelings and positive attitudes toward the websites of e-retailers. Hence, the following hypothesis is proposed:

H3: Fulfillment has a positive influence on customer satisfaction

In offering good customer service, the response to customer inquiry promptly improves the perception of service quality and customer satisfaction [18]. Consumers expect that e-retailers must respond to their inquiries promptly. Two important aspects regarding responsiveness are the speed of information retrieval and the load time of the website. Consumers want to find accurate information quickly. If the loading time of the website is delayed, the consumer might look for another provider [23]. Customer service reflects a customer's perceptions of the service provider's ability and willingness to respond to his/her needs; it is also expected to impact satisfaction. Therefore, the researchers expect:

H4: Customer service has a positive influence on customer satisfaction

3. Research methodology

3.1. Proposed research model

In this study, the researcher has chosen independent variables, which are the elements of E-Service Quality to analyze customer satisfaction in Lazada Vietnam.

As shown in Figure 1, the research framework was developed based on the previous researches, with the independent variables including web design, security, fulfillment, and customer service. These variables are expected to be associated with and have direct influence on customer satisfaction as indicated by H1, H2, H3 and H4 respectively.

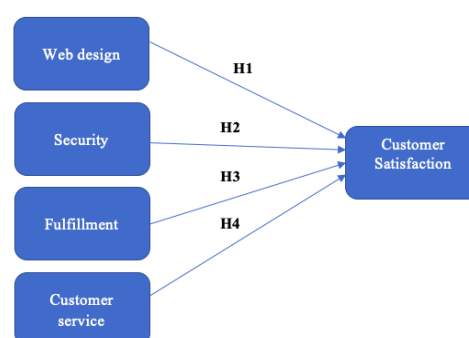


Figure 1: Research theoretical framework
Source: Adapted and developed by the authors.

3.2. Measurements and questionnaire

The Likert scale is used to measure the independent and dependent variables. In the Likert scale part (5 levels), there are 27 items where 23 items come from e-service quality including web design (6 items), security (4 items), fulfillment (4 items), customer service (5 items), and 4 items from customer satisfaction. The scales were modified based on previous studies including Parasuraman et al. [21], Wolfenbarger & Gilly [22] and Brown & Jayakody [37].

3.3. Data collection and analysis

In the study, questionnaires were distributed to 235 respondents who have used/purchased from Lazada website at least once a year in order to ensure the validity of the answers and collected 220 responses. The questionnaires were reached by respondents through the shared links in Google Form, Facebook, Email, Messenger and Zalo. To analyze the quantitative data, this study employs SPSS 20.0. The following techniques are applied including demographic analysis; descriptive analysis; reliability analysis through Cronbach's Alpha, Exploratory factor analysis (EFA), and regression analysis.

4. Empirical findings

4.1. Demographic of respondents

The target respondents of the research are teenagers and young adults, both male and female customers of Lazada products. The demographic factors include 4 basic personal information questions: gender, age, occupation and frequency of online purchasing.

The total number of respondents was 220. There were more females taking part in this survey than males, of which 40.9% of them were male and 59.1% were female. The age of

respondents was from 18 to 26 years-old accounting for 72.7%. This reflects the recent trend of shopping behavior from the youth in Vietnam [1]. In terms of occupation, respondents who are students account the highest (64.5%), and the rest includes officers (23,6%), workers (5%) and others (6.8%).

4.2. Hypothesis testing

4.2.1. Validity and reliability of variables

In this research, the Cronbach's Alpha is carefully calculated so the variables can be tested. The measurement of internal consistency used in this research is the Cronbach's Alpha coefficient. This coefficient measures how well a set of variables or items measure a single construct. From the calculation, the Cronbach's Alpha of the data is average at 0.8 (shown in Table 1). This confirms the Web design (WEB), Security (SE), Fulfillment (FU), Customer service (CSE), Customer satisfaction (CS) are appropriate and reliable. Therefore, all of the observed variables can be used in the next step of the EFA analysis.

Findings of the EFA analysis show that the cumulative percentage of the sum of squared loadings is 70.823%, which is greater than 50%. This also indicates that observed variables can account for up to 70.823 percent of the variability in the rotated component matrix. As a result, the cumulative of the squared loadings is deemed satisfactory in this study. After that, all data are suitable for the EFA analysis.

4.2.2. Regression analysis

The multiple linear regression analysis is to predict the value of a dependent variable outcome, which is Customer satisfaction, based on the value of four independent variables, and to measure the cause and effect relationship between independent and dependent variables. Results from the multiple linear regression analysis are presented in Table 2.

Table 1: Exploratory factor analysis

| KMO and Bartlett's Test | | | | |
|--|---------------------|----------------------------|----------------------|------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | | | 0.848 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | | | 2305.627 |
| | df | | | 135 |
| | Sig. | | | 0.000 |
| Rotated Component Matrix | | | | |
| | Web design (WEB) | Customer service (CSE) | Security (SE) | Fulfillment (FU) |
| WEB6 | .864 | | | |
| WEB3 | .797 | | | |
| WEB5 | .793 | | | |
| WEB2 | .790 | | | |
| WEB1 | .786 | | | |
| CSE5 | | .873 | | |
| CSE1 | | .853 | | |
| CSE3 | | .761 | | |
| CSE4 | | .727 | | |
| CSE2 | | .704 | | |
| SE2 | | | .881 | |
| SE3 | | | .843 | |
| SE1 | | | .815 | |
| SE4 | | | .787 | |
| FU2 | | | | .846 |
| FU1 | | | | .844 |
| FU3 | | | | .797 |
| FU4 | | | | .733 |
| Cronbach's Alpha: | .884 | .881 | .875 | .856 |
| Cronbach's Alpha: | | Customer satisfaction (CS) | | .887 |
| Total variance explained | | | | |
| Extraction of sums of squared loadings | | | Cumulative %: 70.823 | |

Source: Data processing result by authors.

Table 2: Multiple regression analysis

| Model | Standardized coefficients | t | Sig. | Collinearity statistics | |
|--|----------------------------------|----------|-------------|--------------------------------|------------|
| | Beta | | | Tolerance | VIF |
| Constant | | -0.764 | 0.446 | | |
| Web design (WEB) | 0.289 | 6.259 | 0.000 | 0.831 | 1.204 |
| Security (SE) | 0.227 | 4.931 | 0.000 | 0.839 | 1.192 |
| Fulfillment (FU) | 0.302 | 6.336 | 0.000 | 0.784 | 1.275 |
| Customer service (CSE) | 0.304 | 6.201 | 0.000 | 0.739 | 1.354 |
| Adjusted R square: 0.611 | | | | | |
| Dependent variable: Customer satisfaction (CS) | | | | | |

Source: Data processing result by authors.

All the four variables, which are Web design, Security, Fulfillment and Customer service, are found to have a significant and positive influence on Customer satisfaction at a significance level of 1%. The R-square of 0.611 indicates that 61.1 percent of the variance in customer satisfaction is explained by the variations in the four independence variables. The multiple linear regression equation is represented below:

$$CS = 0.289 (WEB) + 0.227 (SE) + 0.302 (FU) + 0.304 (CSE)$$

The regression equation shows that Customer service (CSE) with the estimated coefficient of 0.304 is the most significant determinant of Customer satisfaction (CS). This is followed by Fulfillment (FU) (0.302), Web design (WEB) (0.289) and Security (SE) (0.227).

Based on the results of the EFA test and regression analysis, several major findings are acknowledged. These findings substantively support H1, H2, H3 and H4.

4.3. Discussion of empirical findings

H1: Web design has a positive influence on customer satisfaction

The website not only plays an important role in establishing and implying satisfaction on the part of customers [38], but also, the website acts as a communication tool which acts as a “bridge” between the seller and the buyer. The customers feel satisfied because of the ease of the Lazada search engine; it helps them to find goods that they want through the cross-border feature in Lazada. The convenience and ease of use are the main reasons why customers choose to buy things at its website.

H2: Security has a positive influence on customer satisfaction

It proves that there is a positive relationship between security and consumer satisfaction. The results show that the higher the security level of payment and personal privacy, the more satisfied customers are [33]. This finding is aligned with the previous research showing that the security variable has significant influence on customer satisfaction [25]. Therefore, there is a significant

effect of e-service quality’s security towards customer satisfaction in Lazada.

H3: Fulfillment has a positive influence on customer satisfaction

Fulfillment/reliability is endorsed as an important factor when it comes to building online satisfaction between customers and e-commerce websites [22]. In online shopping, customers cannot directly (face-to-face) interact with e-retailers, and they cannot physically evaluate and examine products. Thus, customers need to be assured that their purchased products will be received as expected. In the context of online retailing, e-retailers pick out products that customers have ordered [34]. Customers may be concerned with not receiving the exact products that they have ordered. Additionally, customers fear that products can be damaged while shipping. Consequently, it is critical to ensure the delivery of the right products, in the promised condition, within the expected time frame [33].

H4: Customer service has a positive influence on customer satisfaction

It shows that customers agree that the customer service is provided when there is an appropriate response to customers when a problem occurs in the website [21]. Customer service is defined as the extent to which customers believe that the web-based services that they want to use will be available at all times and will provide prompt responses [23]. It means that when customers want to search products, Lazada could provide better responses to users. According to their experience in the Internet, customers stated that Lazada’s website is clean and also loads quickly which makes them satisfied in their online shopping experience. Therefore, it indicates that the quicker the website, the higher the customer satisfaction.

5. Managerial implication

The findings on e-service quality dimensions and the importance of each in ensuring customer satisfaction have provided insight for managers to better understand how to retain online

customers. The service quality of e-commerce websites can be improved based on the results of this study.

Web design

This study demonstrates that the design of an e-commerce website correlates significantly with customer satisfaction. It is necessary to simplify operations for customers when making transactions; to reduce clicks to the minimum possible to complete a transaction. The website should have illustrative steps or clear instructions so that customers can easily understand the procedures and perform them fast. The website structure should be clear, easy to search and manipulate, not making customers spend too much time searching for certain information or understanding procedures and ways to transact via the website. Lazada needs to upgrade, check and maintain regularly the server system and fiber optic cable to ensure a good transmission line, to optimize the speed of handling website access. It must make sure to provide accurate, complete, timely and regular information so that customers always have the latest updates and find the information they want.

Security

This result shows that customers' positive perception of security/privacy is associated with their high perceptions of satisfaction. Some recommendations for the security factor are as follows: enhancing the security of customers' personal information and financial data; applying modern security technologies, encryption techniques, new-generation firewall application and system access control to prevent hackers from stealing personal data and customer account information; regularly testing the security of the system by using risk assessment methods and multiple-choice attacks; ensuring transactions are done correctly, especially online payments. To do this, Lazada's payment system needs to work better and be more automated, instead of having to manually filter every single order.

Fulfillment

Fulfillment/Reliability has positive direct effects on e-satisfaction. Thus, e-retailers should keep their promises in terms of delivering the right quality and quantity of products or implementing the right services on time. Competition is high in the digital space and e-retailers should distinguish their products/services from others by offering moral competence and reliable performance. E-retailers should adopt practices that can reliably expose the honesty of services/products to customers and encourage positive customer perceptions towards e-retailers, which subsequently will enhance customer satisfaction. For example, applying free delivery and full return and refund policies may result in a positive effect on consumer e-satisfaction and e-trust.

Customer service

The findings suggest that customer service (responsiveness) directly and positively influences customer satisfaction. Customers involved in online shopping need fast feedback on their questions and enquiries, and they expect e-retailers to respond to their enquiries and questions instantly. Thus, the speed of processing responses quickly, and responding promptly to customer inquiries and complaints with continuous customer care is one of the keys to customer satisfaction. Lazada needs to improve the process of information feedback and complaint handling, ensuring that the steps for receiving and handling complaints to notify results to customers must be within the maximum time frame as well as ensuring this process is strictly followed. Customers should always be kept up to date to see where their questions are being addressed and when processing results are available.

5. Conclusion

The research results indicate that web design, security, fulfillment and customer service have significant positive effects on

customer satisfaction. The finding of this study is consistent with the results of previous studies [19, 21, 22]. It is found that customer service is the most important factor to make customers satisfied with purchased products. Besides, it makes customers feel comfortable and safe and to trust e-retailers. E-retailers therefore need to improve the fulfillment of services, provide transaction security and have easy-to-access and friendly web-designs. It is critical for marketers to find out what customers' expectations are in advance, because a failure to meet or exceed these expectations could lead to dissatisfaction and defection. This research is believed to benefit the growing market of online shopping or e-commerce by helping researchers and businesses to better understand factors affecting online consumer satisfaction. Besides, in order to attract new customers and retain the old ones, in the future, the study will consider more other factors such as customer experience, trust, attitude to improve e-customer satisfaction because when the managers develop a culture that matches customers' interest, it will attract new customers and turn them into loyal customers.

References

- [1] Tran, M.T. & Duong, T.H.N., "Empirical Relationship among Dimensions of Customer-Based Brand Equity in E-tailing Service: A Study in Vietnam Context," *Journal International Economics and Management*, 124 (12/2019), 2-23.
- [2] Nguyen, H.Q., Nguyen, T.K.C., Duong, T.H.N, Nguyen, T.K.N., & Le, T.P., "The Influence of Website Brand Equity, E-brand Experience on E-loyalty: The Mediating Role of E-satisfaction," *Management Science Letters*, 10 (2020), 63-76.
- [3] Business.com, "Brick-And-Mortar Vs. Ecommerce Stores - Business.Com," 2017, <https://www.business.com/articles/brick-and-mortar-vs-ecommerce-stores/> (Accessed June 14, 2020).
- [4] Wahab, N. A., Nayan, S., & Cheah, Y. K., "Internet User and Economic Growth: Empirical Evidence from Panel Data," *Journal of Emerging Economies and Islamic Research*, 8 (3) (2020) 17-25.
- [5] Chintagunta, P., Chu, J. & Cebollada, J., "Quantifying Transaction Costs in Online/Offline Grocery Channel Choice," *Marketing Science*, 31 (1) (2012) 96-114.
- [6] Rainer, R. & Casey G. Cegielski, *Enabling and Transforming Business*, John Wiley & Sons, Singapore, 2011.
- [7] Schneider, G., *Electronic Commerce* (11th ed.), Ron Montgomery, 2011.
- [8] Cox, J. and Dale, B., "Service Quality and E-commerce: An Exploratory Analysis," *Managing Service Quality: An International Journal*, 11 (2) (2001) 121-131.
- [9] Shafiee, M.M., & Bazargan, N.A., "Behavioral Customer Loyalty in Online Shopping: The Role of E-service Quality and E-recovery," *Journal of Theoretical and Applied Electronic Commerce Research*, 13 (1) (2018) 26-38.
- [10] Jochen W., "An Examination of the Quality and Context-Specific Applicability of Commonly Used Customer Satisfaction Measures," *Journal of Service*, 5 (4) (2003) 345-355.
- [11] Sunitha, C.K., & Gnanadhas, M.E., "Problems towards Online Shopping," *International Journal of Emerging Technologies in Engineering Research*, 6 (1) (2018) 14-17.
- [12] Chen, J., Xie, X., & Jing, F., "The Security of Shopping Online," in *Proceedings of 2011 International Conference on Electronic & Mechanical Engineering and Information Technology*, 9 (2011) 4693-4696.
- [13] Angelova, B., & Zekiri, J., "Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model)," *International Journal of Academic Research in Business And Social Sciences*, 1 (3) (2011) 232-258.
- [14] Kotler, P., & Keller, K.L., *Marketing Management* (15E), Pearson Education Limited, England, 2016.
- [15] Oliver, R.L., "Whence Consumer Loyalty," *Journal of Marketing*, 63 (1999) 33-34.
- [16] Hristoski, I. & Mitrevski, P. & Dimovski, T. & Kotevski, Z., "Evaluating e-Customers' Satisfaction in B2C e-Commerce: The Case of Macedonian Students," *Proceedings of the 6th International Conference On Applied Internet And Information Technologies*, 2016.
- [17] Parasuraman, A., Zeithaml, V.A. & Berry, L.L., "A Conceptual Model of Service Quality and Its Implications for Future Research," *Journal of Marketing*, 49 (1985) 41-50.
- [18] Parasuraman, A., Zeithaml, V.A. & Berry, L.L., "SERVQUAL: A Multiple-Item Scale for

- Measuring Consumer Perceptions of Service Quality,” *Journal of Retailing*, 64 (1988) 12-40.
- [19] Zeithaml, V., Parasuraman, A., & Malhotra, A., “Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge,” *Journal of the Academy of Marketing Science*, 30 (4) (2002) 362-375.
- [20] van Riel, A.C.R., Liljander, V. and Jurriens, “Exploring Customer Evaluations of E-service: A Portal Site,” *International Journal of Service Industry Management*, 12 (4) (2001) 359-77.
- [21] Parasuraman, A., Zeithaml, V. A., & Malhotra, A., “E-S-QUAL: A Multiple E-Item Scale for Assessing Electronic Service Quality,” *Journal of Service Research*, 7 (3) (2005) 213-33.
- [22] Wolfinger, M., & Gilly, M.C., “ETAILQ: Dimensionalizing, Measuring and Predicting E-Tail Quality,” *Journal of Retailing*, 79 (3) (2003) 183-98.
- [23] Yang, Z. & Jun, M., “Consumer Perception of E-Service Quality from Internet Purchaser and Non-Purchaser Perspectives,” *Journal of Business Strategies*, 19 (2002) 19-41.
- [24] Haghghinasab, M., & Tabein, A., “Assessing Domestic Customer's Attitude for Website Usability and Attractiveness in Iran Petrochemical Commercial Company (IPCC) in B2B Market Space,” *Iranian Business Management*, 1 (1) (2009) 21-38.
- [25] Niranjana Murthy, M., & Chahar, D., “The Study of E-commerce Security Issues and Solutions,” *International Journal of Advanced Research in Computer and Communication Engineering*, 2 (7) (2013) 2885-2895.
- [26] Vijayasathy, L. R., “Product Characteristics and Internet Shopping Intentions,” *Internet Research: Electronic Netkoring Application and Policy*, 12 (5) (2002) 411-426.
- [27] Blut, M., “E-service Quality: Development of a Hierarchical Model,” *Journal of Retailing*, 92 (4) (2016) 500-517.
- [28] Hoang, T.H., Duong, T.H.N., Pham, H.T., “Empirical Analysis of Factors Affecting the Intention of Using Digital Wallet in Vietnam,” *Journal of International Economics and Management*, 21 (1) (2021) 86-107.
- [29] Luo, J., Ba, S., & Zhang, H., “The Effectiveness of Online Shopping Characteristics and Well-designed Websites on Satisfaction,” *MIS Quarterly*, 2012, 1131-1144.
- [30] Eroglu, S.A., Machleit, K.A., & Davis, L.M., “Atmospheric Qualities of Online Retailing: A Conceptual Model and Implications,” *Journal of Business Research*, 54 (2) (2001) 177-184.
- [31] Demir, E., Desmet, P.M., & Hekkert, P., “Appraisal Patterns of Emotions in Human-product Interaction,” *International Journal of Design*, 3 (2) (2009) 41-51.
- [32] Ramayah, T., & Lo, M.C., “Impact of Shared Beliefs on ‘Perceived Usefulness’ and ‘Ease of Use’ in the Implementation of an Enterprise Resource Planning System,” *Management Research News*, 30 (6) (2007) 420-431.
- [33] Karim, S., & Gide, E., “A Study to Analyse Bangladeshi Consumers’ E-commerce Security and Privacy Satisfactions in Small to Mid-sized Enterprises (SMEs),” *Global Journal of Computer Sciences: Theory and Research*, 8 (1) (2018) 32-40.
- [34] Schaupp, L.C., & Bélanger, F., “A Conjoint Analysis of Online Consumer Satisfaction,” *Journal of Electronic Commerce Research*, 6 (2) (2005) 95-111.
- [35] Dharmesti, M.D.D., & Nugroho, S.S., “The Antecedents of Online Customer Satisfaction and Customer Loyalty,” *Journal of Business and Retail Management Research*, 7 (2) (2013) 1-12.
- [36] Ting, O.S., Ariff, M.S.M., Zakuan, N., Sulaiman, Z., & Saman, M.Z.M., “E-service Quality, E-satisfaction and E-loyalty of Online Shoppers in Business to Consumer Market: Evidence From Malaysia,” *In IOP Conference Series: Materials Science and Engineering*, 131 (1) (2016) 1-10.
- [37] Brown, I., & Jayakody, R., “B2C E-commerce Success: A Test and Validation of a Revised Conceptual Model,” *The Electronic Journal Information Systems Evaluation*, 11 (3) (2008) 167-184.
- [38] Nielsen, J., *Designing Web Usability*, New Riders, 1999.