



Beyond online sales; From service quality to e-loyalty and electronic word of mouth

Más allá de la venta online; de la calidad del servicio a la lealtad y boca a boca electrónicos

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Abstract

The purpose of this research is to demonstrate how service quality is an antecedent, influencing through trust and satisfaction, in electronic loyalty and word-of-mouth within e-commerce businesses. Data was collected from 300 users with e-commerce shopping experience and to test the proposed hypothesis the results were analysed using the Structural Equation Model (SEM) approach based on Partial Least Square (PLS). The results showed that service quality has a positive effect on e-satisfaction and e-trust, and these in turn influence e-loyalty and electronic word of mouth. The main contribution of this research is to expand knowledge on the relationship between service quality and word of mouth in an e-commerce environment.

JEL Code: M1, M31, M15

Keywords: eService quality; e-TailQ; e-commerce; e-loyalty; e-wom

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Resumen

El presente trabajo busca demostrar cómo la calidad del servicio es un antecedente, influyendo a través de la confianza y satisfacción, en la lealtad y el boca a boca electrónicos dentro de negocios de ecommerce. Se recopiló información de 300 usuarios con experiencia en compra electrónica y para comprobar las hipótesis propuestas se analizaron los resultados mediante el modelamiento de ecuaciones estructurales (SEM) con la técnica de mínimos cuadrados parciales (PLS). Los resultados mostraron que la calidad de servicio tiene un efecto positivo en la satisfacción y confianza electrónicas, y éstas a su vez influyen en la lealtad y boca a boca. El principal aporte de esta investigación es ampliar el conocimiento en la relación entre la calidad de servicio y el boca a boca, en un entorno de e-commerce.

Código JEL: M1, M31, M15

Palabras clave: calidad del servicio electrónico; e-TailQ; comercio electrónico; lealtad electrónica; boca a boca electrónico

Introduction

Thanks to the Internet, e-commerce became one of the businesses with huge growth prospects (Eduardsen, 2018), creating a new business model known as Business to Consumer (B2C), which became one of the most common transactions within so-called e-commerce. As a result, the number of B2C companies has increased significantly (Ting et al., 2016), which has led, in 2020, to a turnover of 4.28 trillion dollars. It is expected to reach up to 5.4 trillion dollars in 2022 (Coppola, 2021), drastically changing the purchasing landscape in industries (Faqih, 2016) so that online retailing is gaining more popularity among clients worldwide, thanks to its offers and ease of purchase (Erjavec & Manfreda, 2022).

In Latin America, online retail sales reached \$85 billion in 2021 and are projected to reach \$160 billion by 2025. Brazil and Mexico are vying for the leading role at the regional level. Nevertheless, countries like Peru have attracted increasing attention due to their rapid growth. Although it still represents a small part of the region's market, in 2020, it had the third-largest growth in online retail revenues, reaching approximately \$6 billion (Chevalier, 2022).

Due to the success of e-commerce globally, companies with more experience have begun to understand that the key to success or failure is not the presence on the website but the quality of electronics (Rehman et al., 2022), which has been consolidated as one of the key factors of action for online sites (Ahmad et al., 2016). Therefore, preserving and developing service quality can be an effective way to get consumers to share positive comments about the service obtained. With this, word-of-mouth recommendation becomes a key tool for companies' strategies (Jain et al., 2023) because it has been possible to demonstrate that website reviews positively affect e-commerce sales (Aakash & Aggarwal, 2019). Nevertheless, despite this rapid progress, it has been identified that companies face certain

difficulties in maintaining consumer loyalty and, thus, generating positive word-of-mouth recommendations (Ahmad et al., 2017b).

Numerous studies in the last decade have verified the relation between e-service quality and e-loyalty (Sheng & Liu, 2010; Ghane et al., 2011; Sadeh et al., 2011; Pearson et al., 2012; Chinomona et al., 2014; Puriwat & Tripopsakul, 2017; Al-dweeri et al., 2019; Khan et al., 2019; Juwaini et al., 2022), in addition to its impact on both satisfaction and e-trust (Kim, Jin, & Swinney, 2009; Li, Tevrizci, & Aham-Anyanwu, 2014; Ahmad et al., 2016; Al-Adwan & Al-Horani, 2019; Ginting et al., 2023; Alnawas & Al Khateeb, 2022; Al-Bourini et al., 2021).

Thus, Li et al. (2014), Rasheed and Abadi (2014), Ting et al. (2016), Loureiro et al. (2018), Rita et al. (2019), Alnaim et al. (2022), Juwaini et al. (2022), and Akroush et al. (2021) confirm that both e-satisfaction and e-trust positively influence e-loyalty. Nevertheless, there are few studies where e-loyalty is shown as an antecedent of electronic word-of-mouth. Only Giao, Vuong, and Quan (2020) confirm this relation. Regarding what has been described, it is important to highlight that this study aims to investigate e-service quality under the e-TailQ model proposed by Ahmad et al. (2016), which is comprised of five dimensions: web information, web layout, security/privacy, customer service, and fulfillment. Wolfenbarger and Gilly (2003), Kim et al. (2009), Li, Aham-Anyanwu, Tevrizci, and Luo (2015), and Al-dweeri et al. (2019) also studied this same scale in e-commerce.

Despite all the empirical evidence in the studies mentioned above, it can be stated that many researchers have studied e-service quality and its significant relation with satisfaction, client trust, and e-loyalty, but not with electronic word-of-mouth (Blut et al., 2015). Moreover, the role of the eTailQ scale, after its psychometric properties were validated in different product categories by Caruana and Ewing (2006), has increased in relative importance, so it is necessary to have more studies that can validate its propositions. Consequently, it is important to investigate the e-tailQ scale components' role in forming positive word-of-mouth. Therefore, the objective of this paper is to demonstrate how the e-TailQ model, considering its dimensions disaggregated into web information, web layout, Security/Privacy, customer service, and fulfillment, are positively related to e-satisfaction and e-trust and how these can influence loyalty and the formation of positive word-of-mouth in e-commerce.

Conceptual framework and hypotheses

Quality of service (e-TAILQ)

Quality represents a series of attributes that consumers of a product or service will evaluate as positive (Espinoza & Torres, 2022), while service quality refers to consumers' perception of the performance of

products and services (Grönroos, 1984). Subsequently, Parasuraman et al. (1985) added to this concept the difference between consumers' expectations and the performance of the companies, so that years later SERVQUAL (Zeithaml et al., 2002) appeared, which has become a very popular academic research factor, the key to differentiating the service offered and enabling the construction of a competitive advantage (Santos, 2003).

The move from SERVQUAL to e-service quality (ESQ) is based on strategically recognizing companies with a web presence. As more clients opt for relations with various brands through the Internet and focus on the results of the service (Collier & Bienstock, 2006; Nandankar et al., 2023), it is becoming a key factor for clients who expect service quality levels equal to or higher than traditional channels (Kalia & Paul, 2021).

Consequently, ESQ became the overall evaluation of clients regarding the excellence and quality of providing an e-service (Kumar & Dash, 2015; Parasuraman et al., 2005; Poon & Lee, 2012; Rahman et al., 2020; Santos, 2003; Zehir & Narcikara, 2016). For this reason, companies varied their business focus from e-commerce to e-service (Parasuraman et al., 2005) because ESQ makes information more interactive (Ghosh et al., 2004) as ESQ is based on efficiency, effectiveness, and product delivery (Parasuraman et al., 2005) so it should be controlled at all transaction levels to improve the quality of service thereby provided to the consumer (Aly Shared, 2019).

In addition to the above, ESQ can be studied based on two approaches (Li et al., 2014): firstly focused only on website quality, measured by Sitequal (B. Yoo & Donthu, 2001), Webqual (Loiacono et al., 2002), and PeSQ (Cristobal et al., 2007); and secondly, based only on retail service quality, measured through e-Servqual (Zeithaml et al., 2002), e-Squal (Parasuraman et al., 2005), E-RecSQUAL (Parasuraman et al., 2005), e-Transqual (Zehir & Narcikara, 2016), and e-TailQ (Wolfenbarger & Gilly, 2003).

According to models that measure the quality of service on websites, Sitequal measures the perception of quality in retail pages in four dimensions: ease of use, aesthetic design, processing speed, and security (B. Yoo & Donthu, 2001). Subsequently, the Webqual model (Loiacono et al., 2002) appeared, which, unlike Sitequal, has been used to predict users' revisiting behavior on websites. It comprises five dimensions: ease of use, usefulness, entertainment, complementary relation, and customer service. Nevertheless, none captures all aspects of the online shopping process, and they do not include the entire web service quality (Parasuraman et al., 2005).

Regarding service quality in e-retail, the most widely used model is e-Servqual (Zeithaml et al., 2002), which is based on four dimensions: efficiency, compliance, reliability, and privacy. This model measures all service quality information, but in various contexts, from e-banking (Herington & Weaven,

2009), airline e-commerce (Elkhani et al., 2014), and e-commerce websites (Camilleri, 2022), to online reviews (Chatterjee et al., 2023).

Like e-Servqual, e-Squal uses the same dimensions. Nevertheless, reliability was added instead of system availability (Parasuraman et al., 2005). Another model is e-Recsqual, which is relevant only for clients who interact with websites in a non-routine way. So, it uses only three dimensions of e-Servqual: responsiveness, compensation, and contact (Santouridis et al., 2012).

Subsequently, e-Transqual arose, capturing all stages of the e-service process through 5 dimensions: functionality/design, processes, reliability, response, and enjoyment (Bauer et al., 2006). Finally, e-TailQ is studied holistically since it measures the end-to-end e-commerce transaction (Wolfenbarger & Gilly, 2003). Both were the first to study e-TailQ based on web design, customer service, security/privacy, and fulfillment. Subsequently, Caruana and Ewing, 2006 Kim et al. (2009) and Li et al. (2015) apply the same model in supermarkets and bookstores. On the other hand, Connolly et al. (2010) question Wolfenbarger and Gilly's model because they consider that the effectiveness of instruments to measure the service quality of websites has been, until recently, less than satisfactory since they do not consider all the dimensions they should. Therefore, the authors supplement their research with the dimensions of efficiency, system availability, privacy, responsiveness, interactivity, empathy, and contact.

Similarly, Ahmad et al. (2016) highlighted that the e-TailQ model started to receive several criticisms since it does not attach great importance to customer service or measure web design specifically. As a result, the e-TailQ model started to be questioned and modified. Likewise, Al-Adwan and Al-Horani (2019) agree that models measuring e-service quality, including e-TailQ, have been developed before the emergence of Web 2.0 technology and the widespread penetration of social media in e-commerce, so they believe that the meaningful impact of social influence on consumers' online shopping behavior has been overlooked.

Ahmad et al. (2017) propose a new model with five dimensions: web layout, information, customer service, security/privacy, and fulfillment. The web design dimension proposed by Wolfenbarger and Gilly was divided into two concepts. In accordance with what was previously reviewed, the e-TailQ scale will be taken as a model according to the dimensions studied by Ahmad et al. (2017) since it studies the quality of service through a more specific model by considering web layout and web information. This model is important since information and design offer most consumers a better experience, impacting their purchase.

Web layout

The web layout is the structure that enables users to find important information at first glance (Poon & Lee, 2012) and is responsible for displaying the products on the web, always in a readable way, with easily identifiable images, and with an appropriate animation color (Aladwani & Palvia, 2002). Therefore, the website should not be too complex for online shoppers (Santouridis et al., 2012). It should be entertaining and eye-catching in order for them to enjoy their experience on the online site (Vaičiukynaitė & Gatautis, 2013), as this generates satisfaction in clients (Bhatti et al., 2020; Kim et al., 2009; Montoya-Weiss et al., 2003; Zia et al., 2022)

Information on the web

Website information is defined as the communicated material displayed on the website (Poon & Lee, 2012), which includes details related to service, order status, or tracking (Yang & Fang, 2004). Outdated content will confuse and frustrate clients (Montoya-Weiss et al., 2003) and may spoil the image built by the company (Cao et al., 2005). That is why the information provided must be updated, complete, and easy to understand (Fassnacht & Koese, 2006); if this does not happen, the site will become less relevant and will influence their satisfaction (Clyde, 2000; Cristobal et al., 2007). The experience of the website can significantly influence the final purchase since the information about the product provides greater benefits to the client. Therefore, they are more satisfied (Jiang & Rosenbloom, 2005; Zia et al., 2022)

Security/privacy

This corresponds to the privacy of sharing information and the security provided at the time of payment (Lopes et al., 2019; Wolfinbarger & Gilly, 2003), in addition to maintaining the confidentiality of information, which provides security and assurance to the website (Ping et al., 2000). It is important to mention that consumers should feel confident that their information is safeguarded during the payment process, as they may not buy or give their trust if they notice a misuse of their personal information (Kim et al., 2009; Ahmad et al., 2017; Al-Adwan & Al-Horani, 2019). Therefore, how the consumer's personal information is managed to provide some service or sell a product is important (Al-dweeri et al., 2019). Ahmad et al. (2017), Al-Adwan and Al-Horani (2019), and Rita et al. (2019) highlight that this dimension provides comprehension and understanding of the satisfaction construct. Nevertheless, Kim et al. (2009)

and Li et al. (2014) mention that it also affects trust and that the more security is provided about the client's personal information, the less concern there will be about data and transaction sharing.

Customer service

This refers to the prompt help the client requires (Wolfenbarger & Gilly, 2003) in the face of any problem, so the service personnel should always be available to solve whatever arises (Gaur & Anshu, 2018). This means that the website should respond to customer inquiries, requests, and complaints promptly (Li et al., 2015), as it has also been found that customer service is an important component in the online shopping environment (Zeithaml et al., 2002). Thus, shoppers expect hassle-free shopping (Brady & Cronin, 2001), personalized service, timely delivery of products, and quick responses to their queries (Ahmad et al., 2016), so it is concluded that customer service has a relation with satisfaction because it helps to solve the problems or concerns of the consumer (Li et al., 2014; Kim et al., 2009; Udo et al., 2010; Brady & Cronin, 2001). On the other hand, Li et al. (2014), Konradt et al. (2003), agree that it also has an important effect on trust because a quick and helpful response to queries positively affects the client's trust.

Fulfillment

This refers to the product that the consumer receives being in accordance with the product description on the website (Koufteros et al., 2014; Wolfenbarger & Gilly, 2003), which means that product shipment is important and has been a challenge for brands (Kim et al., 2009), so it becomes one of the most important factors that determine website quality (Ahmad et al., 2016) as service promises and proper shipment of orders lead to client satisfaction (Yang & Fang, 2004). Additionally, Singh and Sirdeshmukh (2000) indicate that reliable and honest service is directly related to trust in the company. Therefore, fulfilling promises to clients regarding the product information presented should be a necessary condition to generate consumer trust (Urban et al., 2001). Based on the above, the following hypotheses are postulated:

H1: E-service quality has a positive effect on online consumer satisfaction.

H2: E-service quality has a positive effect on online consumer trust.

Satisfaction and trust in e-commerce

Satisfaction starts as the evaluation after comparing expectations and the shopping experience (Henao, 2020), generating the person's well-being (Quintero et al., 2022). In the online sector, it is described as

the result of consumer perceptions of online sales, convenience, design, and security (Szymanski & Hise, 2000). It is also the relation of the shopping experience with a certain company through its e-commerce (Srinivasan et al., 2002; Flavián et al., 2006), and it is determined by the performance and the product provided by the website (Eid, 2011).

On the other hand, Wang (2011) highlights that consumer satisfaction results in post-purchase behavior and is a determinant for improving the loyalty of existing clients (Yang, 2007). It is also known that although satisfaction levels are similar in both physical and virtual environments, the relation between satisfaction and loyalty is higher in virtual environments (Shankar et al., 2003). Similarly, Li et al. (2014) agree that developing loyalty in an online environment depends entirely on consumer satisfaction. In view of the above, the following hypothesis is formulated:

H3: Satisfaction positively influences online client loyalty.

E-trust is the belief that the client has in the fulfillment of the expectations of a brand (Valvi & West, 2013) and therefore affects the performance and success of any industry (Quintero et al., 2022), which becomes an essential component in the online purchase decision-making process (Arango-Botero et al., 2021) as it develops as the relation and experience of the consumer with the brand evolves (Al-Adwan & Al-Horani, 2019).

Therefore, trust becomes a critical factor in stimulating purchases (Jarvenpaa et al., 2000), and clients who do not feel trust toward a virtual platform will not be loyal, even if they are satisfied with their purchase (Anderson & Srinivasan, 2003). J. Lee et al. (2000) state that loyalty depends directly on the degree of trust; that is why trust plays an essential role in loyalty toward e-commerce (Harris & Goode, 2004; Li et al., 2014; Rasheed & Abadi, 2014). In view of the above, it is posited:

H4: Trust positively influences online client loyalty.

Loyalty and electronic word-of-mouth

E-loyalty is the commitment to repurchase a product or service on the web consistently in the future, causing repetitive purchases of the brand despite competitors' situations, influences, and marketing efforts (Ameer, 2013; Garcia et al., 2020). Similarly, Anderson and Srinivasan (2003) specify it as the consumer's favorable attitude toward an e-business, resulting in repeat purchases. This factor is extremely important from a marketing point of view, as successful online business companies owe their success to repeat purchases from loyal clients (Ting et al., 2016) since clients, when they are more loyal, tend to buy and spend more (Harris & Goode, 2004).

The Internet has become the main source and medium of electronic communication (Hennig-Thurau et al., 2004), giving rise to the birth of electronic word-of-mouth (e-wom) defined as all informal

communication directed to consumers over the Internet through instant messaging, e-mail, or blogs (Litvin et al., 2008) proving over time, to have greater credibility, empathy, and relevance for consumers (Bickart & Schindler, 2001) and becoming decisive in consumers' purchasing decisions (Liu & Zhao, 2015).

That is why the relation between loyalty and word-of-mouth emerged when the scope of client recommendations increased (Hallowell, 1996). Subsequently, Salehnia et al. (2014) stated that loyalty strongly and positively influences word-of-mouth since the loyal client promotes the brand by emphasizing or spreading its attributes.

Similarly, Giao et al. (2020) indicate that loyal consumers make positive recommendations to acquaintances or friends. This is related to the fact that, according to Wangenheim (2005), if consumers lack loyalty to a brand, they tend to switch to another alternative and possibly spread negative opinions. Yoo et al. (2013) and Del Río et al. (2001) agree that there is a strong relation between a client's e-loyalty and electronic word of mouth.

H5: Loyalty influences positive electronic word-of-mouth generated by online consumers.

The research model concerning the proposed hypotheses is presented below:

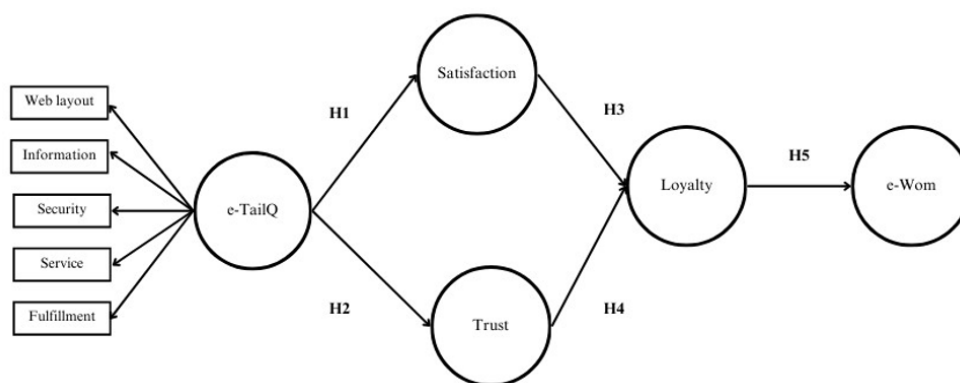


Figure 1. Conceptual model
 Source: Created by the authors.

Methodology and sample

Due to the proposed model, an explanatory type of research was applied as the most appropriate to solve causal relations (Field, 2017), and a type of non-probabilistic convenience sampling. For data collection,

a questionnaire was developed and shared with 423 people through the main social networks such as WhatsApp and Instagram, of which 300 claimed to have purchased online from retailers (department stores and home stores) in the last 6 months, which was a prerequisite for the correct resolution of the survey. The research was conducted between February and March 2021, and the sample results showed that most respondents were women (57 %), compared to 43 % of men, aged 18-25 years (45 %). According to online shopping frequency, 68 % shop monthly through websites and it usually takes half an hour to place their order (49 %).

All items of the present questionnaire were adapted from previous research to ensure validity. In addition, a pilot test with 30 online shoppers was previously developed to improve the comprehension of the questionnaire (In, 2017). The e-TailQ dimensions with 16 items were adapted from Ahmad et al. (2016). For trust and satisfaction, 3 items each were considered, adapted from Ahman et al. (2016) and Kim et al. (2009). Finally, for electronic word-of-mouth and e-loyalty, 4 items were used for each, adapted from Al-Adwan and Al-Horani (2019). All scales used in the research were previously used in other research.

A five-point Likert scale measured all items (Chang, 1994) ranging from 1, “Strongly disagree” to 5, “Strongly agree.” This type of measurement enables calculating attitudes and knowing the degree of agreement with any statement presented, which captures the intensity of the respondent’s feelings (Gadermann et al., 2012).

Results

Variance-based structural equation modeling (SEM) was used for data analysis and hypothesis testing. Partial Least Squares (PLS) was chosen among the different SEM techniques, as PLS-SEM is recommended for its ability to test a predictive model (Hair et al., 2014). The use of multidimensional or higher-order constructs has become popular in recent times because they help to reduce the number of relations of the proposed model, enabling the study of increasingly complex research models. Considering that e-TAILQ is a multidimensional construct of a reflective nature, the disjoint two-stage approach was adopted, so the validation of the model was done in three steps: the model measurement of lower-order reflective constructs, higher-order reflective constructs, and structural model evaluation (Sarstedt et al., 2019).

Lower-order measurement model

A reliability analysis of the scale items was conducted, which should be greater than 0.708 (Carmines & Zeller, 1979); the results show the above values. For the internal consistency of the constructs, Cronbach's alpha and composite reliability (Nunnally & Bernstein, 1994) were used. According to the results obtained, the loadings of the indicators of all reflective constructs are greater than 0.707. On the other hand, the analysis of convergent validity was developed using the average variance extracted (AVE), which sets the minimum value of the constructs ≥ 0.5 (Hair et al., 2019). All the results show that the analyzed constructs comply with the established indices, thus assuring adequate reliability and convergent validity. (Table 1)

Table 1
 Reliability and convergent validity of the first-order model.

Item	Loads	Alpha	rho_A	Composite Reliability	(AVE)	VIF
e-Wom1	0.819					1.942
e-Wom2	0.898					3.042
e-Wom3	0.909	0.923	0.928	0.946	0.813	3.261
e-Wom4	0.847					2.186
Ful1	0.819					1.618
Ful2	0.792	0.858	0.858	0.914	0.780	1.487
Ful3	0.880					1.880
Loyal1	0.874					2.620
Loyal2	0.918					3.588
Loyal3	0.932	0.879	0.879	0.925	0.805	4.191
Loyal4	0.882					2.788
Sat1	0.853					1.804
Sat2	0.896	0.891	0.892	0.925	0.755	2.551
Sat3	0.900					2.578
Serv1	0.824					1.995
Serv2	0.910					4.205
Serv3	0.902	0.775	0.782	0.870	0.691	4.048
Serv4	0.885					3.248
Serv5	0.793					2.176
Sec1	0.895					3.425
Sec2	0.910					3.728
Sec3	0.927	0.915	0.926	0.936	0.747	3.862
Sec4	0.864					2.364
Tru1	0.902					2.466
Tru2	0.893	0.921	0.925	0.944	0.809	2.383
Tru3	0.896					2.398
Inf1	0.774					1.384
Inf2	0.816	0.704	0.704	0.835	0.627	1.525
Inf3	0.786					1.302
Wlay1	0.820					1.875
Wlay2	0.804					1.638
Wlay3	0.734	0.813	0.820	0.876	0.640	1.752
Wlay4	0.838					2.308

Notes: AVE = Average Variance Extracted, VIF = Variance Inflation Factor

Source: created by the authors.

Finally, discriminant validity was conducted (Table 2) using the Heterotraitmonotrait (HTMT) index. The HTMT represents the average of the correlations between indicators measuring different variables concerning the correlations of the same variable (Hair et al., 2019). Henseler et al. (2015) suggest values below 0.90 to assess validity. Regarding this, in the results of this study, all indicators were greater than the proposed minimum value, so it can be concluded that no discriminant validity problem was found in the lower-order model.

Table 2
Discriminant validity of the first-order model

	Loyal	Sat	Tru	e-Wom	Ful	Serv	Sec	Inf	Wlay
Loyal									
Sat	0.716								
Tru	0.609	0.814							
e-Wom	0.832	0.848	0.698						
Ful	0.682	0.844	0.853	0.746					
Serv	0.581	0.493	0.436	0.566	0.573				
Sec	0.502	0.661	0.643	0.650	0.583	0.493			
Inf	0.556	0.656	0.584	0.622	0.730	0.613	0.561		
Wlay	0.651	0.652	0.566	0.697	0.599	0.485	0.558	0.783	

Source: created by the authors.

Higher-order measurement model

In analyzing the measurement model, scores were obtained for the latent variables of the first-order model that served as single-item weights for the corresponding second-order constructs. Then, second-order construct reliability, convergent validity, and discriminant validity were calculated. Table 3 shows the results of Cronbach's alpha and composite reliability, whose values were higher than 0.7; the AVE results showed values higher than 0.5; therefore, convergent validity was proven. Finally, the discriminant validity of the eTAILQ scale was estimated using the HTMT (Heterotrait- Monotrait ratio). Table 4 shows that all values are below 0.9; consequently, no discriminant validity problem was found in the higher-order reflective model.

Table 3
Assessment of the reliability and convergent validity of the higher-order model

	Alpha	rho_A	Composite reliability	AVE
E-tailQ	0.829	0.845	0.879	0.593

Source: created by the authors.

Table 4
Discriminant validity of the higher-order model

	Loyal	Sat	Tru	e-Wom	E-tailQ
Loyal					
Sat	0.716				
Tru	0.609	0.814			
e-Wom	0.832	0.848	0.698		
E-tailQ	0.769	0.858	0.801	0.850	

Source: created by the authors.

Analysis of the structural model

In the second phase of data analysis, the structural model was evaluated through the coefficient of determination (R^2), predictive relevance (Q^2), and structural relations (Hair et al., 2019). Before continuing the process, multicollinearity was ruled out through the variance inflation factor (VIF), whose values must be less than 5 (Hair et al., 2019). The results in Table 1 show the absence of multicollinearity.

The coefficient of determination (R^2) value indicates the combined effect of the endogenous variables on the exogenous variables, that is, the amount of variance in the independent constructs explained by the dependent constructs linked to it (Hair et al., 2014). The R^2 value of Electronic Mouth to Mouth (0.574) indicates that 57.4% of its variance is explained by all the exogenous variables linked to it, which indicates that it is a moderate explanatory level (Hair et al., 2019). Furthermore, the R^2 values indicate that the respective exogenous variables explain 42.8% of the variance of Loyal, 54.6% of Sat, and 50.0% of Con, indicating a relatively moderate explanatory power (Hair et al., 2019), although, in general, R^2 values are highly context-dependent (Hair et al., 2017).

Then, to investigate predictive relevance, the blindfolding process was run with a 7-step omission distance (Stone, 1974). The Q^2 values (mentioned in Table 6) are 0.429 for word-of-mouth, 0.342 for Loyal, 0.420 for Sat, and 0.395 for Con, indicating moderate predictive relevance (Hair et al., 2019).

As a next step, the magnitude and statistical significance of the path coefficients are analyzed to determine the relations of the structural model. In order to assess whether the interaction effect and main effects were relevant, bootstrapping of 5 000 subsamples with a P-value less than 0.05 was conducted. Table 5 shows that E-tailQ influences satisfaction ($\beta=0.739$; $P=0.000$) and trust ($\beta=0.707$; $P=0.000$), accepting both hypotheses. In addition, satisfaction ($\beta=0.497$; $P=0.000$) and trust ($\beta=0.201$; $P=0.003$) influenced loyalty. Finally, loyalty influences Electronic Word of Mouth ($\beta=0.757$; $P=0.000$).

Table 5
 Path coefficients and P-Value

	Path Coef.	t-statistics	P - Value	Hypothesis
Loyal -> e-Wom	0.757	31.033	0.000	Accepted
Sat -> Loyal	0.497	8.144	0.000	Accepted
Tru -> Loyal	0.201	2.997	0.003	Accepted
E-tailQ -> Sat	0.739	22.68	0.000	Accepted
E-tailQ -> Tru	0.707	18.478	0.000	Accepted

R²: Loyal=0.428; Sat=0.546; Tru=0.500; e-Wom = 0.574

Q²: Loyal=0.342; Sat=0.420; Tru=0.395; e-Wom = 0.429

Source: created by the authors.

Conclusions

The study presents a series of contributions associated with online consumer behavior, particularly in incorporating the model of electronic word-of-mouth as an attitude generated after loyalty, which is a theoretical contribution to the studies of Al-Adwan and Al-Horani (2019) Ahmad and Khan (2017), and Al-dweeri et al. (2019). In addition, service quality has been studied as a higher-order reflective construct through the disjoint two-stage approach, which enables a better evaluation of the proposed model.

To this end, the first contribution is the incorporation of electronic word-of-mouth as a finalizing variable of the model and loyalty, which is presented with a strong association to the construction of positive word-of-mouth by consumers of online channels. The results are in tune with Kaur (2020), Salehnia et al. (2014), and Pereira et al. (2017), although the relation between the variables for the present model is stronger. It can be confirmed that loyal consumers become brand promoters by publicizing their attributes and sharing their positive experiences, which confirms the importance of generating loyalty through satisfaction and trust.

The second contribution has to do with the importance of loyalty within the model, which, as previously stated, is a strong antecedent of electronic word-of-mouth; it is also so in its relation to trust and satisfaction. As seen in the results, the two mentioned variables are fundamental to the creation of loyalty, as previously claimed by Li et al. (2014), Al-Adwan and Al-Horani (2019), Ahmad et al. (2017), Giao et al.(2020), Goutam and Gopalakrishna (2018), Alnaim et al. (2022), Akroush et al. (2021), and Juwaini et al. (2022). In both cases, it can be confirmed that trust and satisfaction play an essential role in the formation of loyalty and that the client, if he or she does not feel trust toward a virtual platform and is not satisfied with it, will not be loyal to it. Nevertheless, it is worth noting the strong relation between satisfaction and loyalty, which, according to the results, is twice as strong as that shown by trust, implying a stronger effect of the first-mentioned variable on loyalty than the second.

Finally, this research has also proven the importance of service quality, particularly the eTailQ scale as a start in the consumer journey regarding e-loyalty and positive electronic word of mouth. As can be seen from the results, service quality is essential to generate satisfaction and trust in the consumers of an online retailer. In both cases, the strong relation between both behaviors can be confirmed. These results are also in line with the observations obtained by Ahmad et al. (2017), Al-Adwan and Al-Horani (2019), Al-dweeri et al. (2017), Kim et al. (2009); Li et al. (2014); Rita et al. (2019). Consumers then expect high levels of security and good customer service. In addition to being easy to navigate, the website should be entertaining and provide the right information for consumers to enjoy their experience. In addition, the product that the consumer purchases through the website should be the same as the one received at the time of dispatch because, as confirmed by Ahmad et al. (2016), this is one of the most relevant characteristics to maintain a positive perception of the quality of the website.

Given the growing competition and ever-increasing customer expectations, e-commerce companies have become more interested in identifying, understanding, nurturing, and keeping their clients happy. In order to be more efficient in the quality of service, website managers must have greater control over user accounts, which means the client has greater security during their presence on the website. Accordingly, it would be positive if the accounts inform through an e-mail the time and place of connection and the notification when a purchase is conducted (by mail and cell phone number). In addition, each product that is placed on the websites is a letter of introduction to the clients and, therefore, it is important to emphasize the management of UX - User Experience that can ensure the monitoring of the website in its entirety, as well as the implementation of improvements that may arise from the comments of the clients.

Regarding limitations, it is suggested that other territories in the region be explored to verify the results. Another limitation is that the study does not distinguish different categories of products, so it is recommended that a more specific focus be given to some of them, such as clothing, household appliances, and home furnishings since they were the most purchased.

References

- Aakash, A., & Aggarwal, A. G. (2019). Role of EWOM, Product Satisfaction, and Website Quality on Customer Repurchase Intention. 144–168. <https://doi.org/10.4018/978-1-5225-7888-8.CH010>
- Ahmad, A., & Khan, M. N. (2017). Developing a Website Service Quality Scale: A Confirmatory Factor Analytic Approach. *Journal of Internet Commerce*, 16(1), 104–126. <https://doi.org/10.1080/15332861.2017.1283927>

- Ahmad, A., Rahman, O., & Khan, M. N. (2016). Consumer's Perception of Website Service Quality: An Empirical Study. *Journal of Internet Commerce*, 15(2), 125–141. <https://doi.org/10.1080/15332861.2016.1144442>
- Ahmad, A., Rahman, O., & Khan, M. N. (2017). Exploring the role of website quality and Hedonism in the formation of e- satisfaction and e-loyalty: evidence from internet users in India. *Journal of Research in Interactive Marketing*, 34(1), 1–5. <https://doi.org/10.1108/JRIM-04-2017-0022>
- Akroush, M. N., Zuriekat, M. I., Mahadin, B. K., Mdanat, M. F., Samawi, G. A., & Haddad, O. J. (2021a). Drivers of E-loyalty in E-recruitment: The role of E-service quality, E-satisfaction, and E-trust in Jordan, an emerging market. *Journal of Electronic Commerce in Organizations*, 19(2), 17–33. <https://doi.org/10.4018/JECO.2021040102>
- Al-Adwan, A. S., & Al-Horani, M. A. (2019). Boosting customer e-loyalty: An extended scale of online service quality. *Information*, 10(12), 1–27. <https://doi.org/10.3390/info1012000>
- Al-Bourini, F. A., Aljawarneh, N. M., Almaaitah, M. F., Altahat, S., Alomari, Z. S., & Sokiyna, M. (2021). The role of E-Word of mouth in the relationship between online destination image, Esatisfaction, E-Trust & E-Service quality for international tourists perception. *Journal of Information Technology Management*, 13, 92–111. <https://doi.org/10.22059/jitm.2021.80756>
- Al-dweeri, R. M., Obeidat, Z. M., Al-dwiry, M. A., Alshurideh, M. T., & Alhorani, A. M. (2017). The Impact of E-Service Quality and E-Loyalty on Online Shopping: Moderating Effect of ESatisfaction and E-Trust. *International Journal of Marketing Studies*, 9(2), 92. <https://doi.org/10.5539/ijms.v9n2p92>
- Al-dweeri, R. M., Ruiz Moreno, A., Montes, F. J. L., Obeidat, Z. M., & Al-dwairi, K. M. (2019). The effect of e-service quality on Jordanian student's e-loyalty: an empirical study in online retailing. *Industrial Management and Data Systems*, 119(4), 902–923. <https://doi.org/10.1108/IMDS-12-2017-0598>
- Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring userperceived web quality. *Information and Management*, 39(6), 467–476. [https://doi.org/10.1016/S0378-7206\(01\)00113-6](https://doi.org/10.1016/S0378-7206(01)00113-6)
- Alnaim, A. F., Sobaih, A. E. E., & Elshaer, I. A. (2022). Measuring the Mediating Roles of E-Trust and E-Satisfaction in the Relationship between E-Service Quality and E-Loyalty: A Structural Modeling Approach. *Mathematics*, 10(13). <https://doi.org/10.3390/MATH10132328>
- Alnawas, I., & Al Khateeb, A. (2022). Developing and validating a multidisciplinary scale of E-retailing website elements. *Journal of Retailing and Consumer Services*, 66. <https://doi.org/10.1016/J.JRETCONSER.2021.102905>

- Aly Shared, H. (2019). The Relationship between E-Service Quality and E-Customer Satisfaction: An Empirical Study in Egyptian Banks. *International Journal of Business and Management*, 14(5), 171. <https://doi.org/10.5539/ijbm.v14n5p171>
- Ameer, I. A. (2013). Satisfaction- A behavioral perspective on consumer: Review, criticism and contribution. *International Journal of Research Studies in Management*, 3(1), 75–82. <https://doi.org/10.5861/ijrsm.2013.406>
- Anderson, R. E., & Srinivasan, S. S. (2003). E-Satisfaction and E-Loyalty: A Contingency Framework. *Psychology and Marketing*, 20(2), 123–138. <https://doi.org/10.1002/mar.10063>
- Arango-Botero, D., Valencia-Arias, A., Bermúdez-Hernández, J., & Duque-Cano, L. (2021). Factors that promote social media marketing in retail companies. *Contaduría y Administración*, 66(1), 1–20. <https://doi.org/10.22201/fca.24488410e.2021.2475>
- Bauer, H. H., Falk, T., & Hammerschmidt, M. (2006). eTransQual: A transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*, 59(7), 866–875. <https://doi.org/10.1016/j.jbusres.2006.01.021>
- Bhatti, A., Akram, H., Shafique-Ur-rehman, Naqvi, S. M. R., Khan, A. U., & Basit, H. M. (2020). The Customer Satisfaction Influenced by Web Design and ICT Mediator. *Journal of Advanced Research in Dynamic and Control Systems*, Volume 12(07-Special Issue), 2507–2515. <https://doi.org/10.5373/JARDCS/V12SP7/20202383>
- Bickart, B., & Schindler, R. M. (2001). Internet Forums As Influential. *Journal of Interactive Marketing*, 15(3), 31–40. <https://doi.org/10.1002/dir.1014>
- Blut, M., Chowdhry, N., Mittal, V., & Brock, C. (2015). E-Service Quality: A Meta-Analytic Review. *Journal of Retailing*, 91(4), 679–700. <https://doi.org/10.1016/j.jretai.2015.05.004>
- Brady, M. K., & Cronin, J. J. (2001). Customer Orientation: Effects on Customer Service Perceptions and Outcome Behaviors. *Journal of Service Research*, 3(3), 241–251. <https://doi.org/10.1177/109467050133005>
- Camilleri, M. A. (2022). E-commerce websites, consumer order fulfillment and after-sales service satisfaction: the customer is always right, even after the shopping cart check-out. *Journal of Strategy and Management*, 15(3), 377–396. <https://doi.org/10.1108/JSMA-02-2021-0045>
- Cao, M., Zhang, Q., & Seydel, J. (2005). B2C e-commerce web site quality: An empirical examination. *Industrial Management and Data Systems*, 105(5), 645–661. <https://doi.org/10.1108/02635570510600000>
- Carmines, E., & Zeller, R. (1979). Reliability and Validity Assessment. In *Reliability and Validity Assessment*. <https://doi.org/10.4135/9781412985642>

- Caruana, A., & Ewing, M. T. (2006). The psychometric properties of eTail quality: An international investigation across product categories. *International Marketing Review*, 23(4), 353–370. <https://doi.org/10.1108/02651330610678958>
- Chang, L. (1994). A Psychometric Evaluation of 4-Point and 6-Point Likert-Type Scales in Relation to Reliability and Validity. *Applied Psychological Measurement*, 18(3), 205–215. <https://doi.org/10.1177/014662169401800302>
- Chatterjee, S., Ghatak, A., Nikte, R., Gupta, S., & Kumar, A. (2023). Measuring SERVQUAL dimensions and their importance for customer-satisfaction using online reviews: a text mining approach. *Journal of Enterprise Information Management*, 36(1), 22–44. <https://doi.org/10.1108/JEIM-06-2021-0252>
- Chevalier, S. (2022). E-commerce in Latin America. Available in: <https://www.statista.com/aboutus/our-research-commitment/1654/stephanie--chevalier>, last accessed (20/01/22)
- Chinomona, R., Masinge, G., & Sandada, M. (2014). The influence of E-service quality on customer perceived value, customer satisfaction and loyalty in South Africa. *Mediterranean Journal of Social Sciences*, 5(9), 331–341. <https://doi.org/10.5901/mjss.2014.v5n9p331>
- Clyde, L. A. (2000). A strategic planning approach to Web site management. *Electronic Library*, 18(2), 97–108. <https://doi.org/10.1108/02640470010325637>
- Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in E-retailing. *Journal of Service Research*, 8(3), 260–275. <https://doi.org/10.1177/1094670505278867>
- Connolly, R., Bannister, F., & Kearney, A. (2010). Government website service quality: A study of the Irish revenue online service. *European Journal of Information Systems*, 19(6), 649–667. <https://doi.org/10.1057/ejis.2010.45>
- Coppola, D. (2021.). E-commerce Share of Total Retail Sales. Available in: <https://www.statista.com/statistics/534123/e-commerce-share-of-retail-sales-worldwide/>, last accessed (25/01/22)
- Cristobal, E., Flavián, C., & Guinalú, M. (2007). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, 17(3), 317–340. <https://doi.org/10.1108/09604520710744326>
- Del Río, A. B., Vázquez, R., & Iglesias, V. (2001). The effects of brand associations on consumer response. *Journal of Consumer Marketing*, 18(5), 410–425. <https://doi.org/10.1108/07363760110398808>
- Eduardsen, J. (2018). Internationalisation through digitalisation: The impact of e-commerce usage on internationalisation in small-and medium-sized firms. *Progress in International Business Research*, 13, 159–186. <https://doi.org/10.1108/S1745-886220180000013008>

- Eid, M. I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. *Journal of Electronic Commerce Research*, 12(1), 78–93. Available in: https://www.researchgate.net/publication/228867201_Determinants_of_ECommerce_Customer_Satisfaction_Trust_and_Loyalty_in_Saudi_Arabia. Last accessed (20/05/2022)
- Elkhani, N., Soltani, S., & Jamshidi, M. H. M. (2014). Examining a hybrid model for e-satisfaction and e-loyalty to e-ticketing on airline websites. *Journal of Air Transport Management*, 37, 36–44. <https://doi.org/10.1016/J.JAIRTRAMAN.2014.01.006>
- Erjavec, J., & Manfreda, A. (2022). Online shopping adoption during COVID-19 and social isolation: Extending the UTAUT model with herd behavior. *Journal of Retailing and Consumer Services*, 65, 102867. <https://doi.org/10.1016/J.JRETCONSER.2021.102867>
- Espinoza, I., & Torres, J. (2022). Analysis of the quality of public health services with the SERVPERF model: A case in the Isthmus of Tehuantepec. *Contaduría y Administración*, 67(1), 90–118. <https://doi.org/10.22201/fca.24488410e.2022.2956>
- Faqih, K. M. S. (2016). An empirical analysis of factors predicting the behavioral intention to adopt Internet shopping technology among non-shoppers in a developing country context: Does gender matter? *Journal of Retailing and Consumer Services*, 30, 140–164. <https://doi.org/10.1016/j.jretconser.2016.01.016>
- Fassnacht, M., & Koese, I. (2006). Quality of electronic services: Conceptualizing and testing a hierarchical model. *Journal of Service Research*, 9(1), 19–37. <https://doi.org/10.1177/1094670506289531>
- Field, A. (2017). *Discovering Statistics* 3rd edition. 1104.
- Flavián, C., Guinalú, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information and Management*, 43(1), 1–14. <https://doi.org/10.1016/j.im.2005.01.002>
- Gadermann, A. M., Guhn, M., & Zumbo, B. D. (2012). Estimating ordinal reliability for likert-type and ordinal item response data: A conceptual, empirical, and practical guide. *Practical Assessment, Research and Evaluation*, 17(3), 1–13. <https://doi.org/10.7275/n560-j767>
- García, S., Carrete, L., & Arroyo, P. (2020). Automobile manufacturers, marketing channels and consumer loyalty. *Contaduría y Administración*, 65(3), 1–16. <https://doi.org/10.22201/fca.24488410e.2020.2411>
- Gaur, L., & Anshu, K. (2018). Consumer preference analysis for websites using e-TailQ and AHP. *International Journal of Engineering and Technology*, 7(2), 14–20. <https://doi.org/10.14419/ijet.v7i2.11.10999>

- Ghane, S., Fathian, M., & Gholamian, M. R. (2011). Full relationship among e-satisfaction, e-trust, eservice quality, and e-loyalty: The case of Iran e-banking. *Journal of Theoretical and Applied Information Technology*, 33(1), 1–6. Available in: <http://www.jatit.org/volumes/Vol33No1/1Vol33No1.pdf>, last accessed (30/06/21)
- Ghosh, S., Surjadjaja, H., & Antony, J. (2004). Optimisation of the determinants of e-service operations. *Business Process Management Journal*, 10(6), 616–635. <https://doi.org/10.1108/14637150410567848>
- Giao, H. N. K., Vuong, B. N., & Quan, T. N. (2020). The influence of website quality on consumer's eloyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351–370. <https://doi.org/10.5267/j.uscm.2019.11.004>
- Ginting, Y. M., Chandra, T., Miran, I., & Yusriadi, Y. (2023). Repurchase intention of e-commerce customers in Indonesia: An overview of the effect of e-service quality, e-word of mouth, customer trust, and customer satisfaction mediation. *International Journal of Data and Network Science*, 7(1), 329–340. <https://doi.org/10.5267/j.ijdns.2022.10.001>
- Goutam, D., & Gopalakrishna, B. V. (2018). Customer loyalty development in online shopping: An integration of e-service quality model and commitment-trust theory. *Management Science Letters*, 8(11), 1149–1158. <https://doi.org/10.5267/j.msl.2018.8.009>
- Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, 18(4), 36–44. <https://doi.org/10.1108/EUM0000000004784>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616–632. <https://doi.org/10.1007/s11747-017-0517-x>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J., Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing*, 53(4), 566–584. <https://doi.org/10.1108/EJM-10-2018-0665>

- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study. *International Journal of Service Industry Management*, 7(4), 27–42. <https://doi.org/10.1108/09564239610129931>
- Harris, L. C., & Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: A study of online service dynamics. *Journal of Retailing*, 80(2), 139–158. <https://doi.org/10.1016/j.jretai.2004.04.002>
- Henao Colorado, L. C. (2020). Service quality and perceived value as users' satisfaction antecedents of Colombia's telecommunications enterprises. *Contaduría y Administración*, 65(3), 1–23. <https://doi.org/10.22201/fca.24488410e.2020.2318>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. <https://doi.org/10.1002/dir.10073>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Herington, C., & Weaven, S. (2009). E-retailing by banks: E-service quality and its importance to customer satisfaction. *European Journal of Marketing*, 43(9), 1220–1231. <https://doi.org/10.1108/03090560910976456>
- Jain, M., Dixit, S., & Shukla, A. (2023). Role of e-service quality, brand commitment and e-WOM trust on e-WOM intentions of millennials. *International Review of Retail, Distribution and Consumer Research*, 33(1), 23–43. <https://doi.org/10.1080/09593969.2022.2070860>
- Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an Internet store. *Information Technology and Management*, 1(1/2), 45–71. Available in: <http://link.springer.com/10.1023/A:1019104520776>, last accessed (30/04/2021)
- 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), 150–174. <https://doi.org/10.1108/03090560510572061>
- Juwaini, A., Chidir, G., Novitasari, D., Iskandar, J., Hutagalung, D., Pramono, T., Maulana, A., Safitri, K., Fahlevi, M., Sulisty, A. B., & Purwanto, A. (2022). The role of customer e-trust, customer e-service quality and customer e-satisfaction on customer e-loyalty. *International Journal of Data and Network Science*, 6(2), 477–486. <https://doi.org/10.5267/j.ijdns.2021.12.006>
- Kalia, P., & Paul, J. (2021). E-service quality and e-retailers: Attribute-based multi-dimensional scaling. *Computers in Human Behavior*, 115, 106608. <https://doi.org/10.1016/j.chb.2020.106608>

- Kaur, B. (2020). Role of e-service quality in articulating e-WOM: A serial mediation approach. *International Journal of Electronic Customer Relationship Management*, 12(4), 309–325. <https://doi.org/10.1504/IJECRM.2020.113428>
- Khan, M. A., Zubair, S. S., & Malik, M. (2019). An assessment of e-service quality, e-satisfaction and e-loyalty: Case of online shopping in Pakistan. *South Asian Journal of Business Studies*, 8(3), 283–302. <https://doi.org/10.1108/SAJBS-01-2019-0016>
- Kim, J., Jin, B., & Swinney, J. L. (2009). The role ofetail quality, e-satisfaction and e-trust in online loyalty development process. *Journal of Retailing and Consumer Services*, 16(4), 239–247. <https://doi.org/10.1016/j.jretconser.2008.11.019>
- Konradt, U., Wandke, H., Balazs, B., & Christophersen, T. (2003). Usability in online shops: Scale construction, validation and the influence on the buyers' intention and decision. *Behaviour and Information Technology*, 22(3), 165–174. <https://doi.org/10.1080/0144929031000107072>
- Koufteros, X., Droge, C., Heim, G., Massad, N., & Vickery, S. K. (2014). Encounter Satisfaction in Eetailing: Are the relationships of order fulfillment service quality with its antecedents and consequences moderated by historical satisfaction? *Decision Sciences*, 45(1), 5–48. <https://doi.org/10.1111/deci.12056>
- Kumar, A., & Dash, M. K. (2015). E-service quality dimensions' effect on customers' willingness to buy: Structural equation modelling approach. *International Journal of Services and Operations Management*, 22(3), 287–303. <https://doi.org/10.1504/IJSOM.2015.072313>
- Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail and Distribution Management*, 33(2), 161–176. <https://doi.org/10.1108/09590550510581485>
- Lee, J., Kim, J., & Moon, J. Y. (2000). What makes internet users visit cyber stores again? Key design factors for customer loyalty. *Conference on Human Factors in Computing Systems - Proceedings*, 2(1), 305–312. <https://doi.org/10.1145/332040.332448>
- Li, H., Aham-Anyanwu, N., Tevrizci, C., & Luo, X. (2015). The interplay between value and service quality experience: e-loyalty development process through the eTailQ scale and value perception. *Electronic Commerce Research*, 15(4), 585–615. <https://doi.org/10.1007/s10660-015-9202-7>
- Li, H., Tevrizci, C., & Aham-Anyanwu, N. (2014). An empirical study of e-loyalty development process from the e-service quality experience: Testing the etailq scale. *Proceedings - Pacific Asia Conference on Information Systems, PACIS 2014, September 2015*. Available in: <https://core.ac.uk/download/pdf/301362675.pdf>, last accessed (30/072021)

- Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458–468. <https://doi.org/10.1016/j.tourman.2007.05.011>
- Liu, Y., & Zhao, Y. (2015). Compound Attitudes, Customer Engagement and eWOM: An Empirical Study on WeChat. *Conf-Irm*, 45. Available in: <https://aisel.aisnet.org/confirm2015/45>, last accessed (30/08/2021)
- Loiacono, E., Watson, R., & Goodhue, D. L. (2002). WEBQUAL: A measure of website quality, 2002 Marketing Educators. *Marketing Theory and Applications*, 13, 432–437. Available in: <https://www.proquest.com/docview/199486360>, last accessed (20/07/2021)
- Lopes, E. L., de Lamônica Freire, O. B., & Herrero Lopes, E. (2019). Competing scales for measuring perceived quality in the electronic retail industry: A comparison between E-S-Qual and E-TailQ. *Electronic Commerce Research and Applications*, 34(March 2018), 100824. <https://doi.org/10.1016/j.elerap.2019.100824>
- Loureiro, S. M. C., Cavallero, L., & Miranda, F. J. (2018). Fashion brands on retail websites: Customer performance expectancy and e-word-of-mouth. *Journal of Retailing and Consumer Services*, 41(June 2017), 131–141. <https://doi.org/10.1016/j.jretconser.2017.12.005>
- Montoya-Weiss, M. M., Voss, G. B., & Grewal, D. (2003). Determinants of Online Channel Use and Overall Satisfaction with a Relational, Multichannel Service Provider. *Journal of the Academy of Marketing Science*, 31(4), 448–458. <https://doi.org/10.1177/0092070303254408>
- Nandankar, S., Sachan, A., Mukherjee, A., & Adhikari, A. (2023). Electronic service quality (e-SQ) measurement: a cross-functional review. *International Journal of Quality and Reliability Management*, 40(1), 148–168. <https://doi.org/10.1108/IJQRM-05-2021-0153>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. 752.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41. <https://doi.org/10.2307/1251430>
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–233. <https://doi.org/10.1177/1094670504271156>
- Pearson, A., Tadisina, S., & Griffin, C. (2012). The Role of E-Service Quality and Information Quality in Creating Perceived Value: Antecedents to Web Site Loyalty. *Information Systems Management*, 29(3), 201–215. <https://doi.org/10.1080/10580530.2012.687311>

- Pereira, H. G., Cardoso, M., & Dionísio, P. (2017). The determinants of website purchases: The role of ecustomer loyalty and word-of-mouth. *International Journal of Electronic Marketing and Retailing*, 8(2), 136–156. <https://doi.org/10.1504/IJEMR.2017.085705>
- Ping, V. Z., von Dran, Gisela, Paul, B., & Pipithsuksunt. (2000). A Comparison of the Most Important Website Features in Different Domains: An Empirical Study of User Perceptions. Available in: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2351656, last accessed (13/07/21)
- Poon, W. C., & Lee, C. K. C. (2012). E-Service Quality: An Empirical Investigation. *Journal of AsiaPacific Business*, 13(3), 229–262. <https://doi.org/10.1080/10599231.2012.690682>
- Puriwat, W., & Triopsakul, S. (2017). The impact of e-service quality on customer satisfaction and loyalty in mobile banking usage : case study of Thailand. *Polish Journal of Management Studies*, 15(2), 183–193. <https://doi.org/10.17512/pjms.2017.15.2.17>
- Quintero, J. M. M., Echeverría, O. R., & Rodríguez, F. O. (2022). Trust and information quality for the customer satisfaction and loyalty in e-Banking with the use of the mobile phone. *Contaduria y Administración*, 67(1), 283–304. <https://doi.org/10.22201/fca.24488410e.2022.2965>
- Rahman, M. S., Hossain, M. A., Zaman, M. H., & Mannan, M. (2020). E-service quality and trust on customer’s patronage intention: Moderation effect of adoption of advanced technologies. *Journal of Global Information Management*, 28(1), 39–55. <https://doi.org/10.4018/JGIM.2020010103>
- Rasheed, F. A., & Abadi, M. F. (2014). Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries. *Procedia - Social and Behavioral Sciences*, 164(August), 298–304. <https://doi.org/10.1016/j.sbspro.2014.11.080>
- Rehman, A. U., Bashir, S., Mahmood, A., Karim, H., & Nawaz, Z. (2022). Does e-shopping service quality enhance customers’ e-shopping adoption? An extended perspective of unified theory of acceptance and use of technology. *PLOS ONE*, 17(2), e0263652. <https://doi.org/10.1371/JOURNAL.PONE.0263652>
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690. <https://doi.org/10.1016/j.heliyon.2019.e02690>
- Sadeh, E., Mousavi, L., Garkaz, M., & Sadeh, S. (2011). The structural model of E-service quality, Ecustomer satisfaction, trust, customer perceived value and E-loyalty. *Australian Journal of Basic and Applied Sciences*, 5(3), 532–538. (Disponibile en <http://www.ajbasweb.com/old/ajbas/2011/532-538.pdf>). (Consultado en 25/11/2021)
- Salehnia, M., Saki, M., Eshaghi, A., & Salehnia, N. (2014). A model of E-Loyalty and word-of-mouth based on e-trust in E-banking services (case study: Mellat Bank). 8th International Conference

- on E-Commerce in Developing Countries: With Focus on e-Trust, ECDC 2014, April.
<https://doi.org/10.1109/ECDC.2014.6836764>
- Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, 13(3), 233–246.
<https://doi.org/10.1108/09604520310476490>
- Santouridis, I., Trivellas, P., & Tsimonis, G. (2012). Using E-S-QUAL to measure internet service quality of e-commerce web sites in Greece. *International Journal of Quality and Service Sciences*, 4(1), 86–98. <https://doi.org/10.1108/17566691211219751>
- Sarstedt, M., Hair, J. F., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- 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), 153–175.
[https://doi.org/10.1016/S0167-8116\(03\)00016-8](https://doi.org/10.1016/S0167-8116(03)00016-8)
- Sheng, T., & Liu, C. (2010). An empirical study on the effect of e-service quality on online customer satisfaction and loyalty. *Nankai Business Review International*, 1(3), 273–283.
<https://doi.org/10.1108/20408741011069205>
- Singh, J., & Sirdeshmukh, D. (2000). Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of Marketing Science*, 28(1), 150–167.
<https://doi.org/10.1177/0092070300281014>
- Srinivasan, S. S., Anderson, R., & Ponnayolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41–50.
[https://doi.org/10.1016/S0022-4359\(01\)00065-3](https://doi.org/10.1016/S0022-4359(01)00065-3)
- Stone, M. (1974). Cross-Validatory Choice and Assessment of Statistical Predictions. *Journal of the Royal Statistical Society: Series B (Methodological)*, 36(2), 111–133. <https://doi.org/10.1111/j.2517-6161.1974.tb00994.x>
- Szymanski, D. M., & Hise, R. T. (2000). E-satisfaction: An initial examination. *Journal of Retailing*, 76(3), 309–322. [https://doi.org/10.1016/S0022-4359\(00\)00035-X](https://doi.org/10.1016/S0022-4359(00)00035-X)
- Ting, O. S., Ariff, M. S., Zakuan, N., & Sulaiman, Z. (2016). Relationship Between e-Service Quality, eSatisfaction and e-Loyalty in B2C e-Commerce. *Advanced Science, Engineering and Medicine*, 8(10), 819–825. <https://doi.org/10.1166/ase.2016.1935>
- Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, 30(6), 481–492.
<https://doi.org/10.1016/j.ijinfomgt.2010.03.005>

- Urban, G. L., Sultan, F., & Qualls, W. J. (2001). Placing trust at the center of your internet strategy. *MIT Sloan Management Review*, 42(1), 39–48. Available in: <https://sloanreview.mit.edu/article/placing-trust-at-the-center-of-your-internetstrategy/>, last accessed (15/11/2021)
- Vaiciukynaite, E., & Gatautis, R. (2013). Website atmosphere: towards revisited taxonomy of website elements. *Economics and Management*, 18(3), 537–544. <https://doi.org/10.5755/J01.EM.18.3.5285>
- Valvi, A. C., & West, D. C. (2013). E-loyalty is not all about trust, price also matters: Extending expectation-confirmation theory in bookselling websites. *Journal of Electronic Commerce Research*, 14(1), 99–123. Available in: <http://www.csulb.edu/journals/jecr/issues/20131/paper7.pdf>, last accessed (20/04/2021)
- Wang, X. (2011). The effect of inconsistent word-of-mouth during the service encounter. *Journal of Services Marketing*, 25(4), 252–259. <https://doi.org/10.1108/08876041111143087>
- Wangenheim, F. V. (2005). Postswitching negative word of mouth. *Journal of Service Research*, 8(1), 67–78. <https://doi.org/10.1177/1094670505276684>
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: Dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183–198. [https://doi.org/10.1016/S0022-4359\(03\)00034-4](https://doi.org/10.1016/S0022-4359(03)00034-4)
- Yang, H. (2007). Assessing the effects of e-quality and e-satisfaction on website loyalty. *International Journal of Mathematics and Computers in Simulation*, 1(3), 288–294. Available in: <https://www.naun.org/main/NAUN/mcs/mcs-45.pdf>, last accessed (20/03/2021)
- Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management*, 15(3), 302–326. <https://doi.org/10.1108/09564230410540953>
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1–14. [https://doi.org/10.1016/S0148-2963\(99\)00098-3](https://doi.org/10.1016/S0148-2963(99)00098-3)
- Yoo, C. W., Sanders, G. L., & Moon, J. (2013). Exploring the effect of e-WOM participation on e-Loyalty in e-commerce. *Decision Support Systems*, 55(3), 669–678. <https://doi.org/10.1016/j.dss.2013.02.001>
- Zehir, C., & Narcıkara, E. (2016). E-Service Quality and E-Recovery Service Quality: Effects on Value Perceptions and Loyalty Intentions. *Procedia - Social and Behavioral Sciences*, 229, 427–443. <https://doi.org/10.1016/j.sbspro.2016.07.153>

- Zeithaml, V. A., 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), 362–375. <https://doi.org/10.1177/009207002236911>
- Zia, S., Rafique, R., Rehman, H. U., & Chudhery, M. A. Z. (2022). A comparison between E-TailQ and ES-Qual for measuring e-service quality in the retail industry: an emerging economy case. *TQM Journal*. <https://doi.org/10.1108/TQM-02-2022-0052>