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e-SQ Systematic literature review: A model proposal for Mexico as an effect of the Covid-19 contingency

Diana Faviola Olea-Flores ^{1,*}, Alejandra Aldrette-Malacara ² Luis Cuautle-Gutiérrez ³ and Marisol Reyes-Alcantar ⁴

¹ PhD Student, Universidad Popular Autónoma Del Estado de Puebla (National Autonomous Popular University of Puebla) México.

² Engineering Deanship, Universidad Popular Autónoma Del Estado de Puebla (National Autonomous Popular University of Puebla) México.

³ Faculty of Industrial and Automotive Engineering, Universidad Popular Autónoma del Estado de Puebla (National Autonomous Popular University of Puebla), México.

⁴ Faculty of Industrial Engineering, Universidad Tecnológica de Puebla (Technological University of Puebla), México.

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Abstract

The situation we are currently experiencing, such as the health crisis, by COVID-19 has generated an increase in online purchases; factors such as the Quality of Electronic Service (e-SQ) are considered determining in this process since it allows us to evaluate and know the perception of consumers. The purpose of this article is to classify the knowledge generated about e-SQ and the diverse contexts in which it has been studied. For the review process, the Kitchenham and Charters method is used, with which diverse definitions and applications of service quality were obtained, and although there is no single concept that is accepted by the scientific community, it has been adapted by diverse authors. In the review, it was found as part of the results that five of the dimensions of quality of service had greater impact and relevance, which have been used in various contexts, leading to the creation of other models. Finally, a model is proposed for Mexico that starts from the five dimensions that had greatest impact and relevance in the studies for the consumer, which are Efficiency, Privacy, Compliance, Responsiveness and Contact; a dimension is added to the model that is "guaranty" considering some factors of the geographical area. This model could present important contributions for the measurement of service quality in a new context such as Mexico.

Keywords: e-SQ; Dimensions of electronic service quality; Systematic literature review; Electronic quality scales; Mexico

1. Introduction

The global world in which we live and the rapid growth in TIC has allowed that in emergency situations for the world as the one we currently have because of the health crisis and that was declared as a pandemic by the World Health Organization (WHO), has increased the purchases and sales by Internet of people in the world, which has become an important means to be able to supply us with necessary inputs and in which articles of daily use become an opportunity of acquisition for the client and of sale for the brands having as channel the online sales. Factors such as e-SQ are considered relevant in this process and moment since having to make purchases online and being one of the main means of acquisition, the consumer's expectations are higher having as a main goal that the product obtained fulfills what was promised.

* Corresponding author: Diana Faviola Olea Flores

PhD Student, Universidad Popular Autónoma Del Estado de Puebla (National Autonomous Popular University of Puebla) México .
Bronce #44B, Fracc Hacienda El Cobre CP 72590 Puebla, México +52 2226688850.

With the above we can highlight that Mexico, being a market with great potential in ecommerce and with the increase in online consumption, does not have a model that allows the measurement of e-SQ. Little attention has been paid to research on how consumers perceive, evaluate the quality of electronic services (e-SQ) and on the most important dimensions for the consumer, in a new context such as Mexico; therefore, it is considered relevant to carry out a systematic review of the literature on e-SQ, which allows reviewing concepts, existing models and the key dimensions that have been most applied to measure the value perceived by users on the Quality of electronic service in various contexts; with the results we hope to propose a theoretical model, for a new context such as Mexico. This systematic review of e-SQ will contribute to the literature a brief summary of recent research (last 5 years), which is developed under the approach of two research questions: What are the dimensions of e-SQ that have been most used in the last 5 years? What dimensions have had the greatest effect-importance for the buyer-consumer?

Likewise, this research is divided into two parts: 1) a systematic review of the literature (concepts, dimensions, models) generated by e-SQ; 2) a proposal to integrate the key dimensions of e-SQ into a theoretical model for a new context such as Mexico, for this geographical area.

1.1. Literature review/reference framework

1.1.1. Quality in electronic services

With the growth of e-commerce worldwide, companies around the world understood the importance of having a web presence that would allow them to stay current and gain competitiveness in the technological era dominated by markets and marketing, according to Zeithaml et al., 2005 [1] these companies tried to have a greater presence on the web, making use of electronic channels for the delivery of their products and services, as well as, to increase communication with their customers. Initially, in the first stages of implementation of the electronic channels for service delivery, it was thought that the low cost and the presence on the web were enough to achieve competitive advantage, but in a short time they realized that the quality of the service was decisive to survive and succeed in this channel, thus being able to retain and gain customers in the virtual space, since they could not have the physical meeting with them [2].

Several proposals for definitions of the concept of electronic service quality (e-SQ) have been generated, but there is no single concept for the definition accepted by researchers in general [3]. Therefore, there are variations in the use and replacement of the term e-SQ from the approach or point of view of each author and the sector of study, which has led to the lack of an exact definition of the concept as such, and these proposals and relationships are not clear [4].

Among the definitions found of quality in electronic services (e-SQ), one of the first is that provided by Zeithaml, Parasuraman and Malhotra (2002) [5], in which they indicate that e-SQ is "the extent to which a Web site provides efficiency and effectiveness in purchasing, procurement and delivery. Santos (2003) [6] mentions that, from the standpoint of Internet and marketing and considering the traditional literature on service quality, he defines service quality in e-commerce as "a global evaluation of consumers and a judgment of the excellence and quality of the electronic services offered in virtual markets. Likewise, Roshan (2015) [8] indicates that the quality of electronic service could be defined as the way in which a website synthesizes the purchase and delivery of products and services in an efficient and secure manner [9]. Similarly, Cronin & Taylor (1992) [10] state that the quality of the service supported by the website is a method that makes it possible to measure the quality of the services provided with the support of web technology, both as a line of communication and for the purchase and delivery of products and services [8].

Whereas [11] they affirm that the Quality of the electronic service, is defined as exceeding the attention to the client in all the process in which the purchase is made, same that includes from the beginning of the process(contact) up to the delivery or grant of the service [12]. Zemblyté (2015) [13] maintains that the quality of electronic service was initially developed by Zeithaml, Parasuraman and Malhotra (2000) [14] who defined it as "the extent to which a website facilitates efficient and effective purchases and deliveries. Therefore, a review of the definition of this concept indicates that it would cover from the pre-purchase phase to the post-purchase stage. Similarly, Rasool, & Rajmohan (2017) [15] state that the quality of electronic services encompasses and includes all forms of communication between the client and the website required by the electronic service providers and the operations generated by those communications. The same is true of Alanezi & Sellami (2019), [16] who indicate that the quality of the electronic service is defined as the consumer's evaluation and opinion of the excellent electronic service obtained in the virtual marketplace, and without human intervention.

1.2. e-SQ and its Dimensions

Some authors, such as John (2015) [8], indicate in their review that one of the scales derived from e-SQ is the e-SERVQUAL scale, which allows the study of how clients perceive the quality of electronic services. This scale contains

seven dimensions: efficiency, reliability, compliance, privacy, responsiveness, compensation and contact. Having in the first four dimensions the classification of basic services scale and the last three considered as recovery scales since they are used when the client has questions or problems. The main content of the e-SERVQUAL scale can be detailed as follows: Efficiency which has been defined as the ease of access and use of the site. Compliance defined as how the promises of the site are fulfilled in terms of delivery of orders and availability of items. Reliability which refers to the guarantee to the consumer that the purchase transaction and data are not open and the credit or debit card used is secure. Regarding the scale of e-SERVQUAL recovery services, which encompasses the responsiveness dimensions involved in enabling electronic retailers or suppliers to provide the appropriate data and information to customers when a problem arises, have the mechanisms to make returns and provide the necessary guarantees online. Compensation that implies the return of the money that was charged to the customer for the product or service, as well the return of shipping and handling costs. Contact, which is defined as counting and having available the means by which customers speak with a personalized agent, either online or by phone [8]. Table 1 shows the main scales of e-SQ and the dimensions that integrate them.

Table 1 Main scales or models of E-SQ.

| Author | Scale | Dimensions |
|---|------------------------------------|---|
| [14] [2] | e-SQ and e-SERVQUAL | Information availability and content, ease of use or usability, privacy-security, graphic style, and reliability-fulfillment |
| [18] [2] | SITEQUAL | Ease of use, aesthetic design, processing speed, and security |
| [20] [2] | WebQual | Informational fit to task, interaction, trust response time, design intuitiveness, visual appeal, innovativeness, flow-emotional appeal, integrated communication, business processes, and substitutability |
| [21] [2] | WEB-QUAL | Usability, Design, Information, Trust, Empathy |
| [23] [22] | PIRQUAL | Website; Transaction System; Delivery; Customer Service, Security |
| [19] [22] | eTailQ | Web site design, reliability-fulfillment, privacy-security, customer service |
| [1] [22] | E-S-QUAL AND E-RecS-QUAL | Efficiency, fulfillment, system availability, responsiveness, compensation and contact. |
| [24] [22] | NetQual | Information; Ease of Use; Reliability; Website Design; Security-Privacy; Customization-Interactivity. |
| [25] [22] | eTransQual | Functionality-design, enjoyment, process, reliability, and responsiveness. |
| [26] [22] | PeSQ | Customer Service; Security; Website Design; Order Management. |
| [27] [22] | SERVCON | Decision, Access, Benefit, Transaction, Post-Benefit. |
| [28] [29] [30] [31] [32] [33] [34] [22] | ESQ and Online Customer Experience | Sensorial and Emotional (Hedonic), Pragmatic, Cognitive, Relational, Social, Interactivity, Usability, Customization. |
| [35] [22] | ESQ and Co-Creation | Firm Resources (ESQ): Process Quality (Efficiency, System Available, Design, Information); Outcome Quality; Privacy; Enjoyment; Payment. Customer Resources: Social Expertise, Innovativeness; Customer Expertise (Cognitive, Effort, Analysis, Elaboration, Memory). Value Co-creation |
| [36] [37] [22] | Service Dominant Logic | Service ecosystem. Service platform, value co-creation |

Source: Own preparation with information of [2] [22]

Similarly, Jyoti, & Kesharwani, S. (2020) [17], indicate that authors such as Parasuraman, Zeithaml & Malhotra (2005) [1], in proposing the e-Servqual scale, subdivided it into E-S-QUAL and E-RecS-QUAL, which are composed of 4 dimensions (Efficiency, Compliance, System Availability, Privacy) and which in turn have 22 items. E-S-QUAL has been considered as the basic scale and therefore relevant for all customers or users of a website. As E-RecS-QUAL is for sporadic users of the sites and is not part of their routine, this subscale is made up of 3 dimensions (capacity of response, compensation, contact) and is made up of 11 items that are directed to the solution and consultation of the service [17].

Other scales were developed and derived from e-SQ, as indicated by Firdous & Farooqi (2019) [2], among which we find SITEQUAL, developed by Yoo & Donthu (2001) [18], which, when a study was carried out, resulted in an instrument for measuring the quality of the electronic service and which is integrated by four dimensions: ease of use, aesthetic design, processing speed and security. The eTailQ scale developed by Wolfinbarger and Gilly (2003) [19], in which the items or dimensions were classified into four factors that are website design, reliability/compliance, privacy/security and customer service. Likewise, the WebQual scale developed by the researchers Lociacano, Watson & Goodhue (2000) [20], generated to evaluate websites and that consists of 12 dimensions: information appropriate to the task, interaction, trust, response time, design, intuition, visual appeal, innovation, emotional flow appeal, integrated communication, business processes and substitutability. This last scale is considered more to measure the websites than the quality of the service [2]. Table 1 shows the main scales of e-SQ and the dimensions that integrate them.

2. Methodology

The Systematic Literature Review (RSL) allows for an in-depth study to determine the answer to a research question [38]. The present research was developed based on the protocol of the guide generated by Kitchenham & Charters [39] in which through three main phases a deep and reliable RSL can be performed, which consists of:

- 1) Planning the review, 2) Executing the review, and 3) Reporting the results

2.1. Planning the review

In this planning phase (Protocol), which is the foundation of the research, the research questions are defined and specified, it is required to generate the search chains as well as the selected research sources to finally define inclusion and exclusion criteria.

Table 2 Research questions

| Question | Purpose |
|---|--|
| What are the dimensions of e-SQ that have been most used/applied in the last 5 years? | Know which dimensions of e-SQ have been mostly applied in various studies and sectors and in which they had difficulties |
| What dimensions have been most relevant in the investigations for the buyer-consumer? | Know the dimensions that stood out in the various studies conducted and that for the consumer were more relevant and therefore were adopted-proposed in models |

2.1.1. Primary studies/search chain

This implies first determining the keywords considering the research questions and that will serve as a search engine in the various databases, to then continue with the creation of the search strings, in which the keywords were combined with the BOOLEAN, "AND" and "OR" operators to speed up and facilitate the search for this one obtaining the following search string: "e-SQ" or "Electronic quality scales" or "dimensions of quality electronic".

The searches were carried out from September 2020 to November 24, 2020. The databases and platforms consulted were: Emerald, Ebsco, Scopus, Mendeley and Google Scholar

2.1.2. Inclusion and exclusion criteria

For the selection criteria [39] it indicates that they are intended to identify the primary studies which generate direct evidence for the research question. Therefore, for the research under study, it was determined that the studies should

comply with the following parameters: studies related to the research question, studies in English and Spanish, studies with a maximum of 5 years of age, and studies whose methodology helps to answer the research questions,

Exclusion criteria: Articles that were repeated, studies where the abstract is not related to the application of the theme e-service quality, scientific articles without availability of the full text, scientific articles that consider the theme of e-SQ but with implications different from the theme, studies whose title does not contain at least one keyword.

2.2. Execution of the review

In the search, 515 publications or studies were found, leaving 345 by eliminating the duplicated studies; of which 140 studies were those derived from the search with the key words, which were reduced to 94 by applying the criteria of inclusion-exclusion, and which were for reading, having as final result 22 that meet the established criteria of quality and that form the group of primary studies (Figure 1).



Figure 1. Publications Review

2.2.1. Quality assessment

In quality assessment (QA) it is vital to evaluate primary studies, which provides guidance for understanding the findings and generating future recommendations [39].

For the quality assessment (QA) of the selected primary studies, and in order to validate their compliance with one or more of the established quality criteria (QC), the following questions were applied:

(EA1) Does the primary study show the literature review and the survey application?

(EA2) Does the study present a clear specification of objectives?

(EA3) Does the study focus on the application of the e-SQ measurement scale and its dimensions in the context of online sales?

(EA4) Was the data analysis rigorous?

(EA5) Does the study present a clear description of the dimensions obtained as results?

2.2.2. Data synthesis

The primary studies selected and mentioned above were evaluated according to the established quality criteria, so, to ensure that the information extracted meets the established quality criteria, a test-retest process was used, recommended by Kitchenham & Charters [39], in which it is suggested that the researcher perform a second extraction by means of a random selection of primary studies to verify the consistency of the data obtained and to ensure the information recorded. Therefore, the 22 primary articles were evaluated according to this phase and later 4 randomly

selected articles were subjected to the second extraction, confirming the adequate collection of information. The 22 obtained articles were categorized according to the year of publication and to the context in which they were researched-developed, in order to summarize the obtained information and to be able to better analyze the results. Figure 2 shows the number of selected primary articles that were published in the period 2015-2020. To record data from the 22 studies analyzed, an Excel spreadsheet was used to collect the summary information, considering the category assigned (year of publication, dimensions applied in the study and dimensions found).

Articles published by year

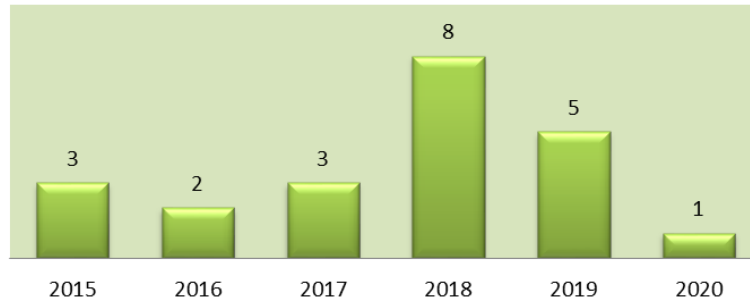


Figure 2 Articles published by year

3. Results and discussion of the review

Derived from the review, the results obtained from the primary studies were found that the greatest number of publications were generated in 2018, equaling the number of publications that were generated in the three previous years, which were centered in the middle of the period under review and covered by this research (Figure 2). According to the study research context (e-SQ), 23% of the primary articles were identified as online retail (e-retail), 18% as literature review, 14% as financial institutions (banks), 14% as e-commerce, 14% as e-shop and the remaining 17% among others, which can be seen in Figure 3.

Published by sector

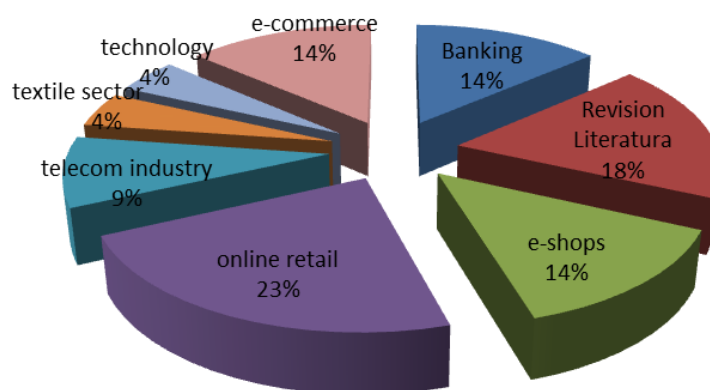


Figure 3 Articles published by sector

The answer to the research questions, and as part of the results of the systematic review, answers are given:

E-SQ dimensions that have been used / applied the most in the last 5 years**Table 3** Review of Applied e-SQ Dimensions

| Author | E-SQ dimensions applied | Author | E-SQ dimensions applied |
|--------|--|--------|--|
| [17] | Reliability, Delivery, Ease of use, Efficiency, Fulfillment, Privacy, Responsiveness, Compensation, Security, Communication, Information, Trust, . Content, Graphic style, System availability, incentive. | [46] | Efficiency, system availability, privacy, responsiveness, fulfillment |
| [16] | System functionality, content, manageability, customer support and procedures. | [47] | Efficiency, fulfillment, system availability and privacy |
| [40] | Design, website information, technological support, customer service | [48] | Perceived control, convenience and customer service |
| [41] | Efficiency, fulfillment, system availability and privacy | [49] | Security on ePayment, Actual Online Buying, Understanding levels of e-Shopping, Perceived Security on e-Payment, Preference for Physical payment and Intensity of Internet usage. |
| [2] | Information availability and content, ease of use or usability, privacy/security, graphic style, and reliability/fulfillment | [50] | Efficiency, system availability, privacy, responsiveness and contrast, Contact, compensation, fulfillment, |
| [22] | Information and Design, guaranty, payment management, security, privacy and trust. | [51] | Efficiency, system availability, privacy, responsiveness and contrast, Contact, compensation, fulfillment, |
| [42] | Web design, customer service, guaranty and reliability | [52] | Efficiency, system availability, fulfillment and privacy |
| [43] | Efficiency, fulfillment, system availability and privacy | [53] | Reliability/quick response promised, Access/ease of contact and information, Ease of use, Dimension of customer will consist of personalized services, Security, credibility/reliability |
| [44] | Information availability/content, ease of use, privacy/security, graphic style, and reliability/fulfillment | [8] | Information, ease of use, efficiency, fulfillment, contact, website design, reliability and security |
| [45] | Information, Security, Information, Responsiveness, Compensation, Contact | [54] | Ease of use, trust, design, reliability, structure and navigation, privacy policies, customer service, and overall service satisfaction |
| [15] | Efficiency, system availability, fulfillment, privacy, responsiveness, compensation and contact. | [55] | Efficiency, system availability, privacy, responsiveness, compensation, fulfillment and contact. |

Of the dimensions of e-SQ proposed by Parasuraman, Zeithaml, Malhotra [1] we can see in Table 3, that of the 22 articles reviewed, the most used dimension was Privacy, which was applied in 18 of the 22 articles under study, followed by Fulfillment which was applied in 16 articles, Efficiency in 13 articles, Contact in 10 articles, Availability and Responsiveness was applied in 8 articles and finally Compensation was applied in 5 articles.

If we consider that in the diverse economies and industries the clients demand and possess unique requirements this as for the topic of quality of the required service. The dimensions that have been identified as: reliability, efficiency, response capacity, security/privacy, ease of use, fulfillment, etc. are considered significant and impact the satisfaction of clients in industries such as banking, and have therefore been the subject of several studies in this context [17].

However [40], the author of the study on electronic channels in the field of telecommunications indicates that factors such as website design, information, technological support and customer service are considered as important attributes for improving the quality of electronic services, focusing mainly on efficiency and punctuality and creating an evaluation index with an original scale.

Likewise, [44] they identify the correlation between the dimensions Availability of information/content, ease of use, privacy/security, graphic style, Reliability/Fulfillment with the dependent variable (purchase intent) through the use of the smartphone.

Similarly, [45] indicate that some critical factors or dimensions that can influence customers to choose an online store and that can affect purchase intentions are aesthetics and ease of use, as well as trust (security).

In their research, [49] analyzes the perceived quality of the online shopper in e-commerce, i.e., the overall perceived service, focusing on characteristics such as perceived security in electronic payment and considering the function of seven dimensions of electronic service quality such as efficiency, system availability, fulfillment, privacy, responsiveness, compensation and contact.

Meanwhile, [53] they apply the scale of Jun et al. (2004) [56] used to measure perceived quality in online retailing, using the dimensions of reliability/response, Access/contact, Ease of use, Security, credibility/reliability as applied to online retailers.

Dimensions that have been the most relevant in the investigations for the buyer-consumer

In the review we found that the dimensions that had greater impact and relevance in the studies conducted by the authors (figure 4) and reviewed for this research are: first order Privacy and security that had outstanding importance for the consumer in the 22 studies reviewed as well as Efficiency, second order Fulfillment had 11 important participations in the studies, third order Responsiveness and Contact with 6 outstanding mentions in the articles as well as Contact, fourth order of importance Availability of the system with 4 participations and finally fifth order Compensation with 3 three relevant mentions (Table 4).

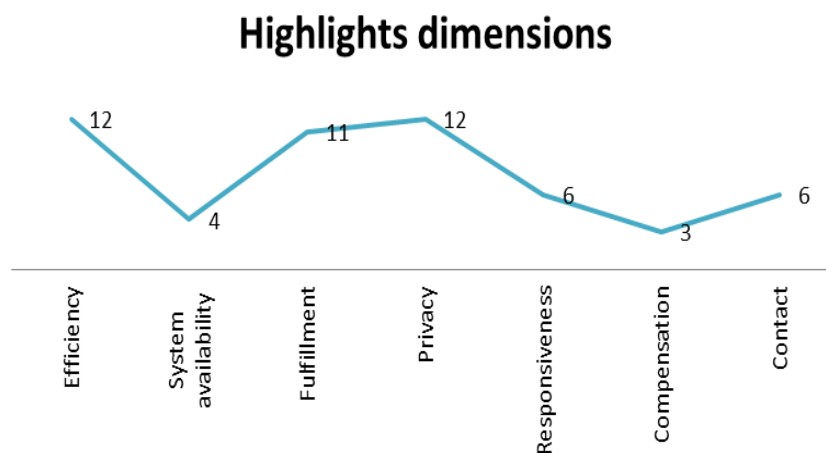


Figure 4 Most important dimensions

Table 4 Dimensions with the greatest relevance for each author

| Dimension | References |
|-------------------------|--|
| Efficiency | [2] [16] [17] [42] [44] [47] [49] [50] [51] [52] [53] [54] |
| System availability | [2] [43] [50] [52] |
| Reliability/Fulfillment | [2] [17] [43] [44] [46] [47] [49] [51] [52] [54] [55] |
| Privacy/Security | [2] [22] [43] [44] [15] [45] [46] [49] [50] [51] [52] [53] |
| Responsiveness | [17] [42] [45] [48] [49] [54] |
| Compensation | [45] [50] [55] |
| Contact | [2] [16] [41] [45] [50] [55] |

Likewise, in the review (Table 4), we found that for some authors, such as [2] who argue that e-SQ is based on technology, which is constantly changing, so what is really needed is to have a regular control so that the new aspects obtained are included in the quality of electronic service. The dimensions proposed in the study: Efficiency, Compliance, System Availability, Privacy, Responsibility, Web Design and Contact.

In turn, [16] their study provides a new framework or roadmap that can be used as a model to measure the quality of electronic service focused on the perception of users, as well as to measure the impact of changes and improve the service delivered, suggesting the inclusion for empirical research models to the functionality of the system, procedures, content, user support and management.

Similarly, [17] indicate that the dimensions of e-SQ that were highlighted in the impact of customer satisfaction are: reliability, efficiency, responsiveness, ease of use, security, aesthetics, credibility and customization of the website in the context of the banking industry.

However, [41] they identify some avenues for future research, where they synthesize the proposals of existing studies on the subject, and propose a new paradigm "sustainability of service quality" which encompasses constructs related to how to maintain quality. The model it presents is formed by three domains, the internal domain, the sustainable quality domain, and the external domain

Likewise, [42] adds that factors such as performance expectations and effort, website design, customer service, service guarantee, and reliability are determining factors in the influence of the user to adopt an institution that provides the required service, so it is required to give more importance to these factors to meet customer expectations.

Whereas, [43] in the involvement of his study, he considers Effectiveness as the activity to improve the effect of service quality and customer loyalty. The efficient delivery to achieve electronic customer loyalty and states that the dimensions of privacy and compliance are 95% significant for customer loyalty.

However, [45] they claim that it is necessary for online merchants to find ways to keep customers satisfied and loyal. Factors such as information security and functioning of systems and websites are vital and influence the quality of service effectively and directly. Likewise, responsiveness, compensation and contact generate customer loyalty, which is essential in the times we live in.

Meanwhile, [46] emphasizes that in their study, elements such as compliance have a significant influence on satisfaction, while privacy has important relevance to customer impact and loyalty; they suggest that their research can be significant for companies seeking to improve e-commerce without losing sight of the fact that satisfaction and loyalty are related to e-SQ specifically for mobile commerce.

Instead [55], they suggest that the dimensions of efficiency, compliance, compensation and contact affect the customers' openness to participate in the co-creation experience which would allow them to know the customer's expectations and the intention of the use of the website.

The quality of the electronic service and its dimensions are causing important effects among online buyers and online service providers. The results show that the seven dimensions of e-SQ that have been applied in various contexts.

Among the findings found a dimension that has been applied in the reviewed articles and that are not part of the main e-SQ scale that is the reason for this study, we find the guarantee dimension, mentioned by Samar Rahi, Mazuri Abd.Ghani (2019) [42], which is considered important, if we take into account factors such as the current situation we have due to the health crisis, and having to make purchases online as one of the main means of acquisition, consumer expectations are higher. Likewise, considering some characteristics of the Mexican consumer and that are part of the customs and culture of this geographical area, these dimensions are considered to generate important contributions in the results for this geographical area. Authors such as Zhang, M., Huang, L., He, Z., & Wang, A. G. (2015) [57], argue the important role culture plays in consumer behavior and expectations about the quality of electronic service and how it can affect it. With the above, it is necessary to continually reinterpret and reorganize the dimensions through an analysis of the industry and the country where it takes place, since clients in each economy or industry have their own requirements for the quality they expect to receive. [17]

With the previous thing in the Table 5. a comparison between the dimensions of the main scale of e-SQ and the dimensions proposed for the theoretical model of e-SQM is presented which includes the dimensions that were emphasized in the study including those that are proposed as complement for this model and that as common factor, the dimensions that both contain can be seen.

Table 5 Comparison between the proposed dimensions of e-SQ and e-SQM

| Dimensions e-SQ | Dimensions Common | Dimensions for e-SQM |
|-------------------------|-------------------------|-------------------------|
| Efficiency | Efficiency | Efficiency |
| Sistem availability | | |
| Fulfillment/reliability | Fulfillment/reliability | Fulfillment/reliability |
| Privacy/Security | Privacy/Security | Privacy/Security |
| Responsiveness | Responsiveness | Responsiveness |
| Compensation | | |
| Contact | Contact | Contact |
| | | Guaranty |

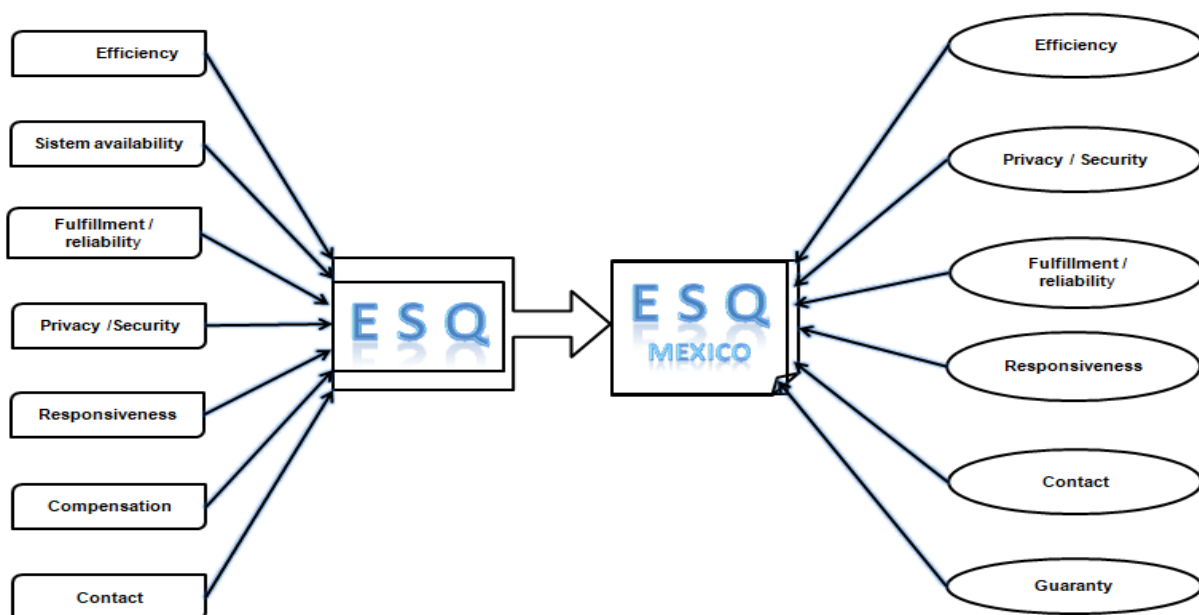


Figure 5 Theoretical model of e-SQ for Mexico

Thus, as derived from the analysis of e-SQ and with the information reviewed which allowed us to determine the main dimensions in several studies, in which e-SQ has allowed us to evaluate the Quality of the electronic service in several contexts, we propose a model (Fig. 5) with the dimensions considered of greater importance and which contains the theoretical model of e-SQ for Mexico according to the information of the RSL carried out, which should contain factors such as Efficiency, Privacy, Compliance, Response Capacity and Contact and Guaranty.

4. Conclusion

Of the seven dimensions of e-SQ that have been applied in various contexts, the five dimensions that had the greatest impact and relevance in the studies according to the order of importance and according to the effect-importance for the buyer-consumer are: Efficiency, Privacy, compliance, responsiveness and Contact, which are considered as the main dimensions for the theoretical model proposed for Mexico, which will allow knowing how consumers perceive, evaluate the quality of electronic services (e-SQ) in this new context. This model can serve as a guide for researchers who need to have a background for future research and for companies that need to measure the quality of electronic services they are providing.

Compliance with ethical standards

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Disclosure of conflict of interest

There is no conflict of interest declared on this research article

References

- [1] Parasuraman A, Zeithaml VA, Malhotra A. E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*. 2005; 7(3): 213-233.
- [2] Firdous S, Farooqi R. Service Quality To E-Service Quality: A Paradigm Shift. *Proceedings of the International Conference on Industrial Engineering & Operations Management*. 2019; 1656–1666.
- [3] Al-dweeri R. La Calidad de los Servicios Electrónicos como estrategia competitiva. Modelo de análisis de sus componentes y efectos sobre la satisfacción y la lealtad. [Ph.D. disertación]. Málaga, SPICUM. 2011.
- [4] Del Águila-Obra AR, Padilla A, Al-dweeri R. Inputs y Outputs en la calidad de los servicios electrónicos: revisión de la literatura y propuesta de un modelo de relaciones. *INNOVAR. Revista de Ciencias Administrativas y Sociales*. 2013; 23(49): 67-82.
- [5] Zeithaml VA, Parasuraman A, Malhotra A. Service quality delivery through web sites: A critical review of extant knowledge. *Academy of Marketing Science Journal*. 2002; 30(4): 362-375.
- [6] Santos J. E-service quality: a model of virtual service quality dimensions. *Managing Service Quality*. 2003; 13(3): 233-246.
- [7] Janita My, Miranda F. Las Dimensiones De La E-Calidad Como Fuente De Ventaja Competitiva. *Boletín Económico De ICE* N° 2944. 2018.
- [8] Roshan J. Review of Literature for Scale Development: E-Service Quality. *CLEAR International Journal of Research in Commerce & Management*. 2015; 6(7): 77–82.
- [9] Zeithaml VA, Parasuraman A, Berry L. A conceptual framework for understanding e-service quality. *Implications for future research and managerial practice*, Marketing Science Institute Cambridge, Massachusetts. 2000; 1-46.
- [10] Cronin J, Taylor S. Measuring service quality: a re-examination and extension. *Journal of Marketing*. 1992; 56(3): 55-68.
- [11] Del Águila-Obra A, Padilla A, del Al-dweeri R. Factores Determinantes De La Calidad De Los Servicios Electrónicos En El Contexto De Los Operadores Postales. *Universia Business Review*. 2012; ISSN: 1698-5117.

- [12] Rolland S, Freeman I. A new measure of e-service quality in France. *International Journal of Retail & Distribution Management*. 2010; 38(7): 497-517.
- [13] Zemblyté J. The Instrument for Evaluating E-Service Quality. *Procedia - Social and Behavioral Sciences*. 2015; 213: 801 – 806.
- [14] Zeithaml VA, Parasuraman A, Malhotra A. A conceptual framework for understanding e-service quality. Implications for future research and managerial practice, Marketing Science Institute Cambridge, Massachusetts. 2000; 1-46.
- [15] Rasool A, Rajmohan P. Effects of Online Buyer Characteristics on e-Service Quality. *Optimization: Journal of Research in Management*. 2017; 9(2): 33-41.
- [16] Alanezi M, Sellami A. An Unified Framework for Measuring E-Service Quality. *Engineering, Technology & Applied Science Research*. 2019; 9(3): 4249-4254.
- [17] Jyoti, Kesharwani S. E-Service Quality in Banking Industry-A Review. *Global Journal of Enterprise Information System*. 2020; 12(2): 111–118.
- [18] Yoo B, y Donthu N. Developing a Scale to Measure the Perceived Quality of Internet Shopping Sites, *Quarterly Journal of Electronic Commerce*. 2001; 2 (1): 31-47.
- [19] Wolfinbarger M, Gilly M. eTailQ: Dimensionalizing, Measuring and Predicting etail Quality. *Journal of Retailing*. 2003; 79(27): 183-198.
- [20] Lociacono ET, Watson RT, y Goodhue DL. WebQual: a web site quality instrument. Working Paper 2000-126. University of Georgia, Athens. 2000.
- [21] Barnes SJ, Vidgen R. An evaluation of cyber-bookshops: the WebQual method, *International Journal of Electronic Commerce*. 2001; 6(1): 11-30.
- [22] Castro A, Vazquez R, Puente J. How to Manage the Online Experience Concerning Transactional and Experimental Customers: Case of E-Fashion Sector. *Journal of Business Economics & Management*. 2019; 20(3): 595–617.
- [23] Francis J, White L. PIRQUAL: a scale for measuring customer expectations and perceptions of quality in internet retailing. In K. Evans & L. Scheer (Eds.), *Marketing educators' conference: marketing theory and applications*. 2002; 13: 263-270.
- [24] Bressolles G. Electronic service quality: NetQual-Proposition of a measurement scale to commercial web sites and moderating affects. *Research and Applications in Marketing*. 2006; 21(3): 19-45.
- [25] Bauer H, Falk T, Hammerschmidt M. eTransQual: a transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*. 2006; 59: 866-875.
- [26] Cristóbal E, Flavian C, Guinaliu M. Perceived e-service quality (PeSQ): measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*. 2007; 17(3): 317-340.
- [27] Seiders K, Voss G, Godfrey A, Grewal D. SERVCON: development and validation of a multidimensional service convenience scale. *Journal of the Academy of Marketing Science*. 2007; 35: 144-156.
- [28] Nambisan P, Watt J. Managing customer experiences in online product communities. *Journal of Business Research*. 2011; 64(8): 889-895.
- [29] Pentina I, Amialchuk A, Taylor D. Exploring effects of online shopping experiences on browser satisfaction and e-tail performance. *International Journal of Retail and Distribution Management*. 2011; 39(10): 742-758.
- [30] Rose S, Clark M, Samouel P, Hair N. Online customer experience in e-retailing: an empirical model of antecedents and outcomes. *Journal of Retailing*. 2012; 88(2): 308-322.
- [31] Salehi M, Salimi M, Haque A. The impact of online customer experience (OCE) on service quality in Malaysia. *World Applied Sciences Journal*. 2013; 21(11): 1621-1631.
- [32] Zhang H, Lu Y, Gupta S, Zhao L. What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management*. 2014; 51(8): 1017-1030.
- [33] Jain R, Aagia J, Bagdare S. Customer experience: a review and research agenda. *Journal of Service Theory and Practice*. 2017; 27(3): 642-662.

- [34] McLean G. Investigating the online customer experience – A B2B perspective. *Marketing Intelligence and Planning*. 2017; 35(5): 657-672.
- [35] Barrutia J, Gilsanz A. Electronic service quality and value: do consumer knowledge-related resources matter? *Journal of Service Research*. 2013; 1(2): 230-246.
- [36] Lush R, Nambisan S. Service innovation: a service-dominant logic perspective. *Mis Quarterly*. 2015; 39(1): 155-175.
- [37] Vargo S, Lush R. Institutions and axioms: an extension and update of service dominant logic. *Journal of the Academy of Marketing Science*. 2016; 44(1): 5-23.
- [38] Melendez K, Davila A. Problemas en la adopción de modelos de gestión de servicios de tecnologías de información. Una revisión sistemática de la literatura. *DYNA*. 2018; 85(204): 215-222.
- [39] Kitchenham B, Charters S. Guidelines for performing Systematic Literature reviews in Software Engineering. *Engineering*, 45(4ve), 1051. 2007.
- [40] Zhou R, Wang X, Shi Y, Zhang R, Zhang L, Guo H. Measuring e-service quality and its importance to customer satisfaction and loyalty: an empirical study in a telecom setting. *Electronic Commerce Research*. 2019; 19(3): 477–499.
- [41] Stamenkov G, Dika Z. Quo vadis, (e-)service quality? Towards a sustainability paradigm. *Total Quality Management & Business Excellence*. 2019; 30(7/8): 792–807.
- [42] Rahi S, Abd.Ghani M. Investigating the role of UTAUT and e-service quality in internet banking adoption setting", *The TQM Journal*. 2019; 31(3): 491-506.
- [43] Menon B. The influence of e-relationship quality and e-service quality on customer loyalty in the context of Flipkart online retailer services. *Journal of Customer Behaviour*. 2018; 17(1): 121–137.
- [44] Rahmawati Y, Liswandi. Analysis of E-Service Quality Dimensions towards Purchase Intention by Using Smartphone in Tokopedia. *International Journal of Management, Accounting & Economics*. 2018; 5(4): 260–271.
- [45] Shafiee MM, Bazargan NA. Behavioral Customer Loyalty in Online Shopping: The Role of E-Service Quality and E-Recovery. *Journal of Theoretical & Applied Electronic Commerce Research*. 2018; 13(1): 26–38.
- [46] Dastane O, Bin Md Jalal MI, Selvaraj K. Assessment of Extended E-S-Qual Model in an M-Commerce Setting. *International Journal of Management, Accounting & Economics*. 2018; 5(12): 923–954.
- [47] Manimay Ghosh. Measuring electronic service quality in India using E-S-QUAL *International Journal of Quality & Reliability Management*. 2018; 35(2): 430-445.
- [48] Shi S, Mu R, Lin L, Chen Y, Kou G, Chen X.-J. The impact of perceived online service quality on swift guanxi: Implications for customer repurchase intention", *Internet Research*. 2018; 28(2): 432-455.
- [49] Rasool A, Rajmohan P. Effects of e-Payment Security and Understanding Levels of e-Shopping on Service Quality. *Optimization: Journal of Research in Management*. 2018; 10(1): 42–54.
- [50] Goel P. Application of E-S-QUAL: Assessment of Studies Across Globe. *Amity Business Review*. 2017; 18(2): 129–142.
- [51] Boon Liat Cheng, Jee Huei Chai, Gaur SS. Part L: Marketing Strategy and Customer Relationship Management: Marketing in the Digital Era: Antecedents of E-Satisfaction, E-Trust and E-Loyalty: An Understanding of E-Service Quality in Online Retailing. *AMA Summer Educators' Conference Proceedings*. 2017; 28: L-28-L-29.
- [52] Mummalaneni V, Meng J. (Gloria), Elliott KM. Consumer Technology Readiness and E-Service Quality in E-Tailing: What is the Impact on Predicting Online Purchasing? *Journal of Internet Commerce*. 2016; 15(4): 311–331.
- [53] Prateek K, Richa A, Richa A. E-service quality, consumer satisfaction and future purchase intentions in e-retail. *(E-Service Journal)*. 2016; 10(1): 24–41.
- [54] Đkudienė V, Èertokas Đ, McCorkle D, Reardon J. The Effect of E-Shops' Service Quality on Lithuanian Consumers' Purchase Intentions. *International Journal of Business, Marketing, & Decision Science*. 2015; 8(1): 43–59.
- [55] Tamer H. Elsharnouby, Abeer A. Mahrous. Customer participation in online co-creation experience: the role of e-service quality. 2015.
- [56] Jun M, Yang Z, Kim D. Customers' perceptions of online retailing service quality and their satisfaction. *International Journal Qual Reliab Manag*. 2004; 21(8): 817-840.

- [57] Zhang M, Huang L, He Z, Wang AG. E-service quality perceptions: an empirical analysis of the Chinese e-retailing industry. *Total quality management & business excellence*. 2015; 26(12): 1357-1372.
- [58] Asociación Mexicana de Venta Online (AMVO), [Internet]. [consultado el 23 de septiembre de 2020]. Disponible en <https://www.amvo.org.mx/>