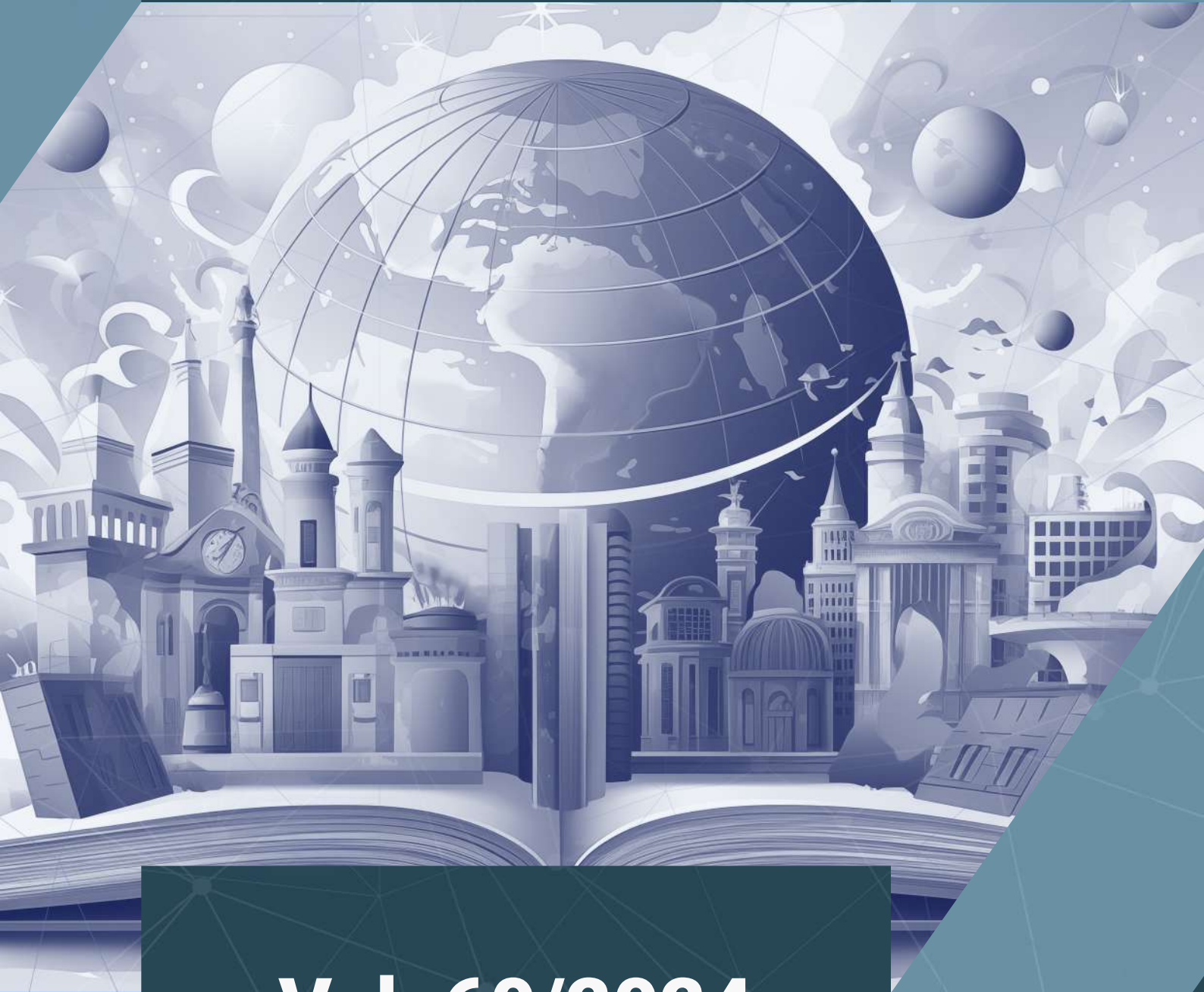




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## The impact of e-service quality on e-loyalty through the mediating effects of e-satisfaction and e-trust in Lebanon

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**Abstract.** Businesses to reach customers. E-service quality is an online company's customer service. It includes website design, navigation, responsiveness, security, dependability, and customer support. E-commerce has grown due to its convenience, speed, and accessibility. Online businesses' success depends on e-service quality. When e-services are good, customers return. Poor e-service quality can occur. Poor e-service quality can turn customers away. Online businesses must offer high-quality e-services to satisfy customers and stay competitive. E-service quality affected e-loyalty. Website efficiency—ease of use, organization, and quick access—and website information quality—accuracy, frequency, clarity, and relevance—measure e-service quality. E-service quality dimensions affect e-satisfaction and e-trust, which are necessary for e-loyalty. The research model's variables' influencing factors were also examined. The quantitative study surveyed Lebanon's online shoppers using a validated questionnaire. 2378 Lebanese from various backgrounds participated in the study. T-test, ANOVA, and SEM were used to analyse SPSS data. This study is important because the pandemic and lockdowns have changed consumer purchasing behaviour. Customers are more critical of e-commerce platforms and more comfortable using multiple devices to access online stores and apps as they shop more online. This study is timely and relevant for businesses trying to stay competitive in the changing e-commerce landscape due to consumer behaviour changes. Both e-service quality dimensions are positively correlated with e-loyalty determinants e-trust and e-satisfaction. E-trust and e-satisfaction both have positive and significant relationships with e-loyalty, but e-satisfaction had a stronger effect. Through e-satisfaction and e-trust, e-service quality dimensions indirectly affect e-loyalty.

**Keywords.** Online Shopping, E-commerce, Website Efficiency, Information Quality, E-trust, E-satisfaction, E-loyalty, COVID-19, Pandemic, Economic Crisis, Lebanon

### Introduction

In the previous decade, several companies ran their businesses offline and online, generating cash from both sources. Businesses now use technology to reach and service customers. Businesses could not thrive without online client engagement or a presence. Many people prefer to purchase online at their convenience rather than in stores since they think it takes more time and effort. Internet, technical advancement, and the availability of many tools throughout the day helped customers shop online. Since smartphones can reach clients anytime, e-commerce has grown rapidly. Many studies examined how dimensions and characteristics

affect e-loyalty. E-commerce is an important business model in today's business environment, so it's crucial to understand customers' online behaviour to create a successful online shop that meets customers' needs and keeps them coming back. Literature reveals that website convenience and efficiency and information quality are the major characteristics of e-service quality, which directly or indirectly affect loyalty through two verified indicators, trust, and satisfaction. This study examined how e-service quality affects online shoppers in Lebanon's trust and satisfaction, as well as loyalty. Businesses have moved toward multi-channel customer service in the past decade. Online platforms and e-commerce tools have caused this change. Due to the convenience and accessibility of Internet shopping, businesses cannot exist without an online presence. Businesses must therefore understand online client behavior and preferences. Smartphones and internet connectivity have accelerated e-commerce growth. Online purchasing has grown in recent years and is projected to continue. Thus, firms must grasp the elements that affect e-loyalty and create customer-focused initiatives. E-loyalty dimensions and variables have been studied extensively. However, knowing e-service quality criteria is crucial to creating a successful online business model. E-service quality depends on website convenience, efficiency, and information quality, according to research. Trust and satisfaction affect loyalty directly or indirectly. This study examines Lebanon's online shoppers' trust and satisfaction with e-service quality parameters. Trust and satisfaction are also investigated as mediating elements in e-loyalty. This study will help Lebanon-based businesses establish customer-focused strategies. This research aims to create an e-commerce business model that builds client loyalty and repeat business.

Customers are purchasing online more after the COVID-19 pandemic and lockdowns. Online buying is new to many Lebanese, especially since trust has long been a barrier. After COVID-19, people became familiar with online shopping, but some businesses that established an online presence and delivery system did not fully understand the main factors that would make their online business more profitable or the perceptions of customers about their online shopping experience. As online shopping grows in Lebanon, there are numerous options and competitors in the same field and industry, and many firms are unable to identify the aspects that will help them retain and avoid customer switching. Many researchers have evaluated customer trust and loyalty in online buying before COVID-19. This study sheds light on online customers' behavior after COVID-19 and throughout the worst economic crisis, which altered their purchase patterns and planning. Understanding the characteristics and views of Lebanese online consumers may assist online businesses attract and keep customers by altering marketing techniques and improving the buying experience. This study examined how personal and demographic variables of online consumers in Lebanon affected their perceived trust and happiness, emphasizing that the latter are determinants of loyalty to provide insights into how to retain customers. This study also sheds light on online shopping during an economic downturn.

This study examines how e-service quality affects e-loyalty in Lebanon. Other goals that helped answer the main question are: a. Assessing Lebanese website efficiency and information quality. b. Understanding how e-service quality affects e-trust. c. Determining how e-service quality dimensions affect e-satisfaction. d. Studying e-satisfaction and e-loyalty in Lebanon. e. E-trust's effect on Lebanon's e-loyalty. f. Investigating how e-trust and e-satisfaction mediate e-service quality dimensions and e-loyalty in Lebanon.

This research adds to the literature by examining the dimensions of e-service and its effect on e-loyalty in Lebanon through mediating factors like e-trust and e-satisfaction. The study also examines these linkages and relationships with online shoppers during a terrible

economic crisis and after COVID-19 lockdowns, when many firms created e-commerce or apps. As many Lebanese buyers are new to online buying, it is crucial to investigate their attitudes and perspectives about using this new channel to meet their needs. This study identifies the characteristics of online shoppers and examines trust and satisfaction because most Lebanese businesses are still based in physical locations. This study examined the effects of trust and satisfaction on e-loyalty and the characteristics of Lebanon's online shoppers, confirming theoretically and practically the importance of customer satisfaction and trust in online shopping. This study compares the effects of website efficiency and information quality on e-loyalty in Lebanon to prior studies.

### **Literature Review**

The section theoretically reviews the research issue by discussing pertinent theories and variable relationships. It also reviews empirical studies and their findings to identify different perspectives on the research topic, which helped build a solid understanding of the topic and the gap that helped form this study's conceptual framework.

*2.1 Online shopping and e-commerce.* Rapid technology advancement and the ongoing innovation of new ways to perform business processes and daily activities pushed firms to find new ways to expand and improve their enterprises efficiently and cheaply. Online shopping, which was easy for both businesses and consumers, rose after the COVID-19 epidemic and lockdowns [1]. Online shopping is using a computer, tablet, smartphone, or other device to buy something. E-commerce platforms like websites or mobile apps enable buyers and sellers to deal online [1]. Online purchasing helped consumers meet their needs independent of location and time while minimizing their search expenses [2]. This and other benefits of shopping online have encouraged people to use E-commerce and businesses to consider building an online presence as a key business model that will increase sales and customer base without increasing production or expansion costs [3]. Online shopping includes limitations, such as the inability to personally inspect or try on things before buying and potential quality and delivery concerns [4]. Online shoppers may worry about their personal and financial data [5]. Many factors affect internet shopping behavior. Website design, usability, pricing and value perception, trust and credibility, and social influence [5]. Online shoppers look for trustworthy payment methods, privacy policies, and customer service. Word-of-mouth recommendations and internet reviews can also influence online purchase behavior [6]. As businesses saw the rapid growth of online shopping, especially in developed countries where almost all stores have websites and social media [6], they focused more on ways to attract and retain customers. Merchants first want to convert consumers into leads by offering discounts, notifications, and emails, then improve customer experience and satisfaction by improving efficiency [3]. Online shopping is easier than in-store sales [6].

In 1995, Netscape.com pioneered the idea of using the web for sales and advertising, which tripled sales [7]. E-commerce is a marketplace where vendors display their goods and services to customers who utilize electronic media to acquire or learn about products and services [1]. E-commerce is a platform for online transactions between customers and sellers. E-commerce is a combination of applications, business processes, and technology that allows other businesses and consumers to connect and access displayed goods, proposed services, and provided information [8], resulting in online commercial transactions that create value for both sellers and buyers [7]. The internet and technological advancements have helped E-commerce grow quickly. Technology made E-commerce a key business model [1]. E-commerce allows consumers to shop at their own pace and from anywhere at any time. The eight E-commerce

traits include universality [2]. E-commerce variables include multiple. Web design is one. Website design can influence client behavior like purchasing [9]. Easy-to-navigate, visually appealing websites with clear product and service information are more likely to attract and retain clients. Brand trust also affects e-commerce. Product quality, customer service, and brand reputation can build customer trust, which increases the likelihood of a purchase [10]. E-commerce and social media are linked. Social media can influence customer behavior, including purchase likelihood [10]. Social media lets customers share their thoughts and experiences, which can impact their purchases. E-commerce has increased business reach, customer happiness, and cost reduction. Website design, brand trust, and social media all affect e-commerce. Understanding these linkages can help organizations create effective e-commerce strategies that match client expectations and boost competitiveness.

*2.2 E-Shopping in Lebanon:* Some of the few research on Lebanon's online purchasing status provide insight into how Lebanese shoppers behaved before and during the COVID-19 outbreak. Najjar et al. [11] examined companies' early online shopping experiences in Lebanon. Lebanese enterprises were interested in internet selling, but more for product promotion and advertising. Low online shoppers, inadequate delivery methods, poor online payment alternatives, and insufficient internet infrastructure are to blame. After the COVID-19 outbreak and government lockdowns, Lebanon's companies needed new ways to reach customers, especially during an economic and gasoline crisis, thus they went online. Despite preferring to purchase in stores, Lebanese buyers ordered food online to stay healthy [12]. Another study identified the primary elements affecting client trust in the Lebanese business-to-consumer industry [13]. The study found three elements that directly boost trust and indirectly decrease perceived risk. Customized products and services, website repute, and perceived technical security. Zaiter et al. [14] explored how demographic groups view internet delivery applications. Due to internet infrastructure upgrades, Lebanese online customers increased from 1.3 million to 2.1 million from 2014 to 2015. E-commerce is helping many enterprises flourish, which boosts Lebanon's economy. The study found that respondents utilize mobile apps to learn about new arrivals and trends tailored to their buying habits. The study found no correlation between delivery convenience, monthly income, number of family members, or educational degrees. Demographic characteristics do not affect delivery convenience. The relevance of mobile application delivery services is unrelated to these demographic characteristics, indicating that all respondents value them and use them to manage their spending. The study also found no significant association between demographic factors and delivery satisfaction, suggesting that mobile applications satisfy all populations.

### **3. Theoretical framework**

The theoretical framework reviews studies on customer loyalty and satisfaction/trust interactions. The theoretical review covers satisfaction, trust, and loyalty ideas and their relationships. This survey only examines customer happiness, primarily online consumer satisfaction. E-commerce has become increasingly important to the global economy. Thus, interest in e-commerce website performance factors is rising. E-commerce websites need efficiency and reliable information. Website efficiency is the ease with which users can navigate and use a website, whereas information quality is the accuracy and relevance of the material. In this section, website efficiency, information quality, e-trust, and e-satisfaction are linked. E-trust, contentment, and loyalty are examined. Efficiency and information quality are the most important aspects of E-commerce, according to previously studied studies and research. Many

internet buying influences fall into these two groups, according to the literature. Website design, performance, and convenience—which combine simplicity of use and time-saving—make up efficiency. E-commerce website quality variables include product and website information quality. Other elements affecting e-shopping are customers' opinions and feelings about the quality of E-commerce or shopping website features. Customer pleasure comes from the perception of E-commerce's usefulness and efficiency, while trust comes from consumers' concerns about privacy and security. Customers' loyalty to an E-commerce or e-shop makes them return to buy more. This section analyzes loyalty as a reaction to other circumstances. This part analyzed factor and effect relationships and associations to create this research's conceptual model.

Website efficiency and information quality predict e-trust. Information quality—including the seller, brand, and policy information—affects trust [20]. Information quality improves e-trust [14]. Kuo et al. [15] found that information quality increased consumer trust in online travel websites. They also found that information quality strongly predicted e-trust in online commerce [15]. Information quality and e-trust were positively correlated in Li and Zhang [16]. High-quality information reduces uncertainty and increases perceived control, which increases e-trust [15]. Wang and Emurian [17] found that e-commerce website efficiency increased consumer satisfaction. Website efficiency strongly predicted online buying pleasure, according to Mustafa et al. [18]. Website efficiency increases e-satisfaction through perceived ease of use and utility, according to Lu et al. [19]. Website efficiency increases e-satisfaction for various reasons. Website efficiency can improve user satisfaction [14]. Users are more likely to do their jobs quickly and without errors on an efficient and simple website. This improves website and e-commerce satisfaction. Website efficiency can also show consumers that the firm behind the website values their time and effort, increasing e-satisfaction [15].

Information quality also predicts e-satisfaction. Information quality improves e-satisfaction [20]. Kim and Moon [21] found that information quality strongly predicted e-commerce website user pleasure. Information quality increased e-satisfaction, which Lu et al. [20] believed was mediated through perceived usefulness. Information quality may increase e-satisfaction by improving user experience and enjoyment [20]. Customers are happier with the website and e-commerce experience if they can find the information they need promptly. High-quality information can enhance e-satisfaction by increasing the company's knowledge and reputation [20]. Mustafa [18] noted that website efficiency and information quality affect consumer e-satisfaction.

E-satisfaction and e-loyalty have been extensively studied. E-satisfaction is customers' contentment with their online shopping experience, while e-loyalty is their inclination to shop with a single merchant online. Online merchants need e-loyalty to forecast client behavior and profitability. E-satisfaction and e-loyalty are generally linked, but some studies contradict this. Cultural, demographic, and other factors may influence customer behavior and preferences. Abu-Alhaija et al. [23] divide loyalty determinants into behavioral and perceptual. Perceptual elements affect trust and satisfaction, while behavioral factors affect product quantity.

#### **4. Research Gap**

Reviewing the literature helps investigate how merchants' website efficiency and information quality affect customer trust and happiness. Customer loyalty is linked to trust and satisfaction. Since the study is in Lebanon, it is crucial to examine whether Lebanese internet stores were able to deliver website efficiency and information quality. This study is important because it examines customer loyalty, which business owners value for business survival and

growth. A recent study on Lebanese internet customers' motivations and faith in e-commerce businesses, especially following the COVID-19 epidemic, is lacking. The study also investigates if Lebanese online shopping is a profitable area that should be invested in, particularly in consumer satisfaction and trust to encourage more online purchasing. This study also illuminates an alternative business model that Lebanese merchants could use during a severe economic crisis, stagflation, corona pandemic, fuel crisis, and poor electricity and internet services. This study investigates Lebanese retailers' ability to satisfy and trust their clients during internet shopping. Thus, the study examines how two e-commerce characteristics affect customer response in light of several external elements and unique situations in Lebanon that were not before investigated.

### 5. Hypotheses and Research Conceptual Model

Hypotheses are derived from the study's objectives, literature analysis, and research conceptual model.

**Hypothesis Null (H0):** There is no relationship between e-service quality dimensions and e-loyalty in the online shopping industry in Lebanon.

**Hypothesis 1 (H1):** Greater perceived website efficiency leads to greater customer satisfaction with online shopping services.

**Hypothesis 2 (H2):** A better-perceived quality of website information does not lead to higher customer satisfaction with online buying services.

**Hypothesis 3 (H3):** Increased perceived website effectiveness does not lead to increased client trust in online commerce services.

**Hypothesis 4 (H4):** A better-perceived degree of website information quality does not lead to increased client trust in online shopping services.

**Hypothesis 5 (H5):** Increased consumer satisfaction with an online shopping service does not lead to increased customer loyalty to that online shopping service.

**Hypothesis 6 (H6):** consumer trust in an online shopping service is not positively associated with stronger consumer loyalty to that online shopping service.

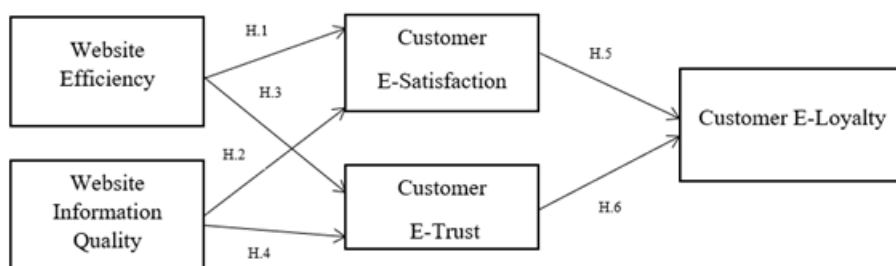


Figure 1. The Research Conceptual Model

### 6. Methodology

This study used a quantitative data approach built on a questionnaire. The purpose of employing survey data is to make quantitative analysis easier and enable the generalization of the findings to the full population under study [39]. Additionally, applying a quantitative methodology aided in determining the cause-and-effect linkages between the variables that were being examined, and the quantitative data that was produced was then used to explain the relationships between the research hypotheses and provide answers to the study's research questions. This study used positivism. Objective data, statistical methodologies, and hypothesis

testing confirm theories and explanations in this approach. It implies a single reality that can be researched objectively and that research should be free of bias and subjectivity. This study investigated variables' impacts on each other and their relationships. The researcher used positivist data analysis methods to test hypotheses. This study is deductive. Empirical research tests hypotheses or theories. This study used a theoretical framework and assumptions to test variable connections. The researcher used empirical data to test theories deductively. This study used a correlational technique and survey research to determine correlations between variables. The research strategy included phenomenology. Qualitative research method phenomenology tries to comprehend and characterize participant experiences. This study used quantitative research and statistical analysis to examine our hypotheses. The researcher employed phenomenology as a theoretical framework to construct study questions and hypotheses. We developed more sophisticated hypotheses by employing phenomenology to explore variables and their interactions. This study uses cross-sectional time. Cross-sectional studies do not track participants over time. A representative sample of the population was studied in this study. The researcher could detect variable linkages at that time. Due to time constraints, cross-sectional investigations are preferred over longitudinal ones. This study targets all Lebanon online shoppers. In 2016, 2.3 million people shopped online out of 5.593 million persons [24]. There are no recent government statistics, but lockdowns and street protests during the COVID-19 pandemic forced people to satisfy their necessities online. A 95% confidence level and a 2-confidence interval were used to determine the sample size. This research requires 385 samples. 2378 questionnaires were accepted. Data was acquired from Lebanon's districts from internet shoppers. The poll was conducted online using Google Forms and delivered to people without specified characteristics, however, the response rate was low due to the country's crisis and internet issues. Based on it, the survey continued on the ground with paper or face-to-face surveys in several Lebanon locations. SPSS software analyzes data to test the given model and variable relationships. Descriptive statistics explained the data, while inferential statistics showed how demographic features affected the e-service dimensions and the examined variables, e-satisfaction, e-trust, and e-loyalty. T-test compares two means and ANOVA compares more than two means to determine if participant characteristics and replies are affecting the analyzed variables. SEM examines construct-variable connections and significance. SmartPLS version 4 performed SEM.

## **7. Results**

### *7.1 Validity and Reliability*

For the results of this part, SEM was applied to study the relationships between the latent variables in our model. Therefore, SmartPLS was used in order to validate the hypotheses.

Reliability and validity: The conceptual model include 5 latent variables with manifested items. The applied tests to study the reliability and validity demonstrated acceptable values as presented in the below table. The table indicates that the Cronbach's alpha values ranging between 0.807 for E-satisfaction and 0.891 for E-trust. As for composite reliability, the values ranging between 0.809 for E-satisfaction and 0.892 for E-trust. All the values were above the recommended cutoff. The average variances extracted were also acceptable with values ranging between 0.738 for Information quality and 0.859 for E-loyalty, which exceeded the required minimum value of 0.5.

Regarding the discriminant validity at the item level, the results of Fornell-Larcker criterion demonstrate that the values range between 0.616 and 0.927, which exceeded the required minimum threshold 0.5, this implies that the items related to each construct converged

and measured the same construct. Moreover, the discriminant validity at the construct level determined by using Fornell-Larcker criterion confirmed that the square roots of each of the 5 constructs were above the correlation values of each construct and the others, thus indicating the adequate discriminant validity at the construct level.

**Table 1** Validity and Reliability for the constructs using SmartPLS

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	E-loyalty	E-satisfaction	E-trust	Information Quality	Website Efficiency
<b>E-loyalty</b>	0.836	0.838	0.859	0.927				
<b>E-satisfaction</b>	0.807	0.809	0.838	0.813	0.915			
<b>E-trust</b>	0.891	0.892	0.821	0.736	0.731	0.906		
<b>Information Quality</b>	0.882	0.882	0.738	0.702	0.722	0.703	0.859	
<b>Website Efficiency</b>	0.875	0.881	0.800	0.693	0.696	0.616	0.766	0.894

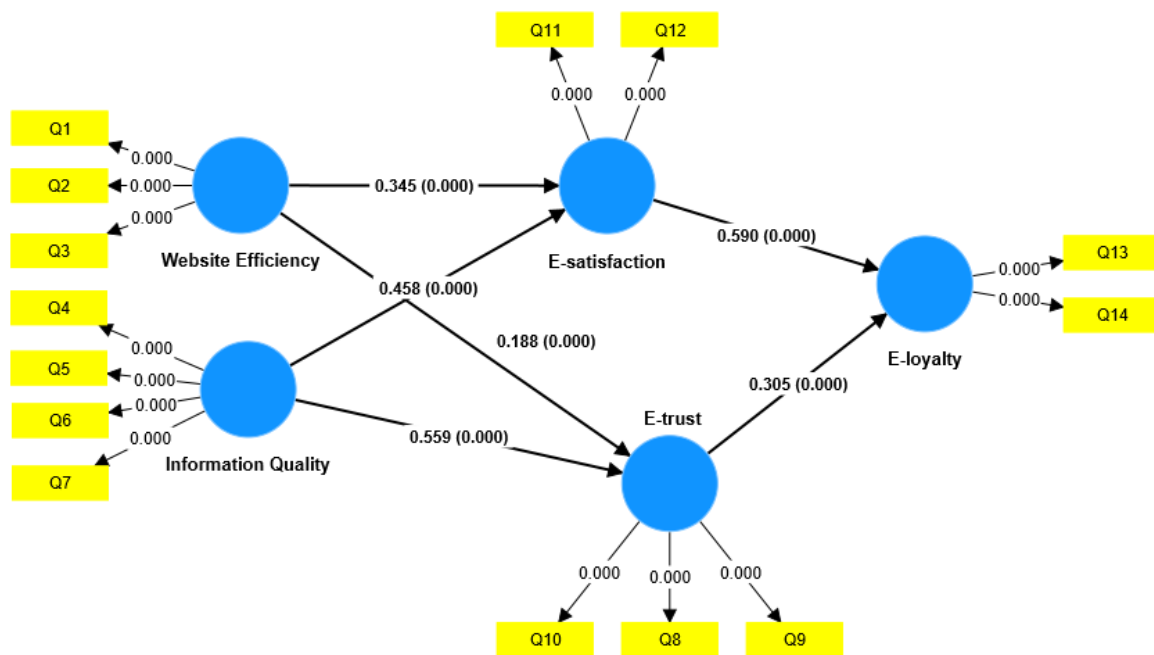


Figure 2 Path analysis model using SmartPLS

### 7.2 Hypothesis testing

For the model fit, the standardized root mean square residual was used as indicator for goodness-of-fit. This value was equal to 0.070 below the recommended 0.08 cutoff, implying adequate overall model fit. The PLS model: To study the relationships between the constructs, the researcher applied path analysis with standardized bootstrapping using 5000 samples to extract reliable estimate for each path in the model.

For the first hypothesis, the path analysis reveals that there was positive and significant relationship between Website efficiency and Customer E-satisfaction ( $B = 0.345, p < 1\%$ ). This result confirms the first hypothesis. Concerning the second hypothesis, the results show that there was positive and significant relationship between Website information quality and Customer E-satisfaction ( $B = 0.458, p < 1\%$ ). This result confirms the second hypothesis. As for the relationship between Website efficiency and Customer E-trust, the results show that there was positive and significant relationship between these two constructs ( $B = 0.188, p < 1\%$ ). This result confirms the third hypothesis.

Regarding the fourth hypothesis, the results show that there was positive and significant relationship between Website information quality and Customer E-trust ( $B = 0.559, p < 1\%$ ). This result confirms the fourth hypothesis. For the relationship between Customer E-satisfaction and Customer E-loyalty, the results show that there was positive and significant relationship ( $B = 0.590, p < 1\%$ ). This result confirms the fifth hypothesis. Finally, for the sixth hypothesis, the results show that there was positive and significant relationship between Customer E-trust and Customer E-loyalty ( $B = 0.305, p < 1\%$ ). This result confirms the sixth hypothesis.

**Table 1** Hypothesis testing using the path analysis

		Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
<b>E-satisfaction loyalty</b>	-> E-	0.590	0.590	0.022	27.212	0.000
<b>E-trust</b>	-> E-loyalty	0.305	0.305	0.021	14.302	0.000
<b>Information Quality</b>	-> E-satisfaction	0.458	0.457	0.026	17.331	0.000
<b>Information Quality</b>	-> E-trust	0.559	0.559	0.024	23.249	0.000
<b>Website Efficiency</b>	-> E-satisfaction	0.345	0.345	0.025	13.823	0.000
<b>Website Efficiency</b>	-> E-trust	0.188	0.188	0.024	7.683	0.000

## 8. Discussion

The data's results are analyzed and compared to previous findings and theories mentioned in the literature. The research results were used to validate the hypothesis and model. Survey results are compared to previous research to determine the assessment. Six hypotheses were developed after researching the literature and studying prior studies' relationships. These associations helped identify hypotheses in purpose the validate the suggested research model.

Hypothesis examination revealed links between factors and effects. The research found that website efficiency and website information quality both positively affect e-trust and e-satisfaction. E-satisfaction and trust increase with perceived information quality. E-trust and e-satisfaction positively affect e-loyalty, according to the study. These findings suggest that e-service quality aspects indirectly affect e-loyalty through e-trust and e-satisfaction. This research's path model indicated that information quality affects customers' e-satisfaction and e-trust more than website efficiency. Contrary to prior studies, e-satisfaction had a greater impact on e-loyalty than e-trust.

The investigation also looked at client attributes and backgrounds. Appendix B displays the variables' influences where it shows that age affects website efficiency, information quality, e-trust, and e-loyalty, but gender merely affects e-satisfaction. Occupation, monthly income, and online sector affected website efficiency, information quality, e-satisfaction, e-trust, and e-loyalty. Marital status, living situation, education level, location, and kind of area did not affect the factors.

### **9. Recommendation**

The study's findings suggest future research and practical applications. This study suggests that E-commerce and e-retail require website efficiency and information quality. This study found that website efficiency promotes customer trust, satisfaction, and loyalty. Further research might examine the relationship between website efficiency, information quality, and customer loyalty in a more diversified sample of e-retailers, including established and new enterprises. This research could examine the elements that affect website efficiency and information quality and how they affect customer behavior and sentiments. For additional research on how chatbots and artificial intelligence may improve website efficiency and information quality. This research could also examine the pros and cons of these solutions and their costs and resources. This study suggests that e-retailers should prioritize website performance and information quality to attract and keep customers and establish loyalty. E-retailers should optimize their websites for speed, usability, and consumer satisfaction. To help buyers choose, they should include extensive product descriptions, photos, and reviews. Online firms should meet buyers' wants and expectations to satisfy them. Online firms may retain consumers by satisfying customers, as this study and others have shown. Online firms should match client wants to improve satisfaction. Identifying and prioritizing customer satisfaction aspects is crucial since businesses depend on them. Regular surveys or client feedback sessions can help. Businesses can build a client base and reputation by maintaining loyal consumers and benefiting from word-of-mouth marketing. Online businesses should safeguard their e-commerce and improve their service with quality insurance and complaints management to build long-term consumer relationships. Online firms must adopt quality assurance and complaints-handling procedures to build client trust. E-commerce companies should focus on client happiness and trust to establish and keep consumer loyalty. These variables can help firms retain consumers and succeed long-term. This study should be repeated in a context where online businesses have more experience and can invest more in quality, design, and security and where online shoppers are more conformable in their spending as monthly income showed to be a factor in their online shopping behavior.

### **10. Conclusion**

This study aimed to examine the relationships between the e-service quality dimensions and e-loyalty intermediated by e-satisfaction and e-trust in the online shopping industry in Lebanon. The e-service quality dimensions comprised website efficiency and website information quality, whereby the impact of these dimensions is studied on e-loyalty through e-trust and e-satisfaction.

Reviewing the literature, e-service quality determinants include website efficiency and information quality, which online shoppers value. The customer's view of the website's ease of use and navigation determines its efficiency. Well-organized information ensures that consumers can easily find the things they want. Information quality is based on perceived accuracy, clarity, relevance, and quantity. Website efficiency and information quality affect e-

satisfaction and trust. The literature reviews also found a well-established relationship between trust and customer loyalty, where trust significantly affects customers' loyalty. Satisfaction also affects loyalty, with higher satisfaction being associated with higher loyalty, but studies found that trust has a greater impact on loyalty than satisfaction. Based on these findings, a model was created and hypotheses were drawn from associations. Website efficiency and information quality positively correlate with e-trust, e-satisfaction, and e-loyalty. The investigation confirmed the research model and hypothesis.

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