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# The Mediation Role of E-Trust Towards Websites Quality and Satisfaction of E-Customers

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#### Abstract

Online purchasing is a valuable opportunity for the new generation in Pakistan. The use of the internet and smartphones is rapidly increasing day by day due to several reasons one of them is emergencies in COVID-19. However, recently the majority of consumers prefer the traditional way of purchasing goods and services instead of online shopping. Hence, numerous studies identified that there is a lack of trust and security in online shopping in the perception of customers. Therefore, the scholar aims to investigate the role of e-trust in the relationship between website quality and e-customer satisfaction in online shopping. The quantitative research technique, the judgmental sampling technique, and the adopted questionnaire are used for the data collection from e-consumer. The findings of the study indicated that through the mediating effect of e-trust, website quality has a significant impact on e-customer satisfaction. Besides, e-trust serves as a primary mediating factor between website quality and e-customer satisfaction. To satisfy the shopper in online purchasing through websites, the development of trust is the crucial factor because of cybercrimes that harm the e- consumers.

**Keywords:** Website Quality, E-customer Trust, E-customer Satisfaction.

#### Introduction

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# **Background / History**

The advancement in technology is increasing day by day that supporting businesses. In the present era, the internet is the medium of providing a virtual business network to enhance and connect businesses with a single click. As per Das, Saini & Mishra (2019) e-commerce is providing opportunities to the business community to connect and provide cost-effective solutions to their users. In this regard, the Internet and website improvement is playing a vital role in day-to-day advancements and innovations. The Internet is reshaping the way people living and has changed the lifestyle of individuals in contemporary society that is why the dependence of individuals is escalating on the internet. Hence, with the development of the internet, the utilization of online business is increasing nationally and internationally because of its appealing features (Park et al., 2012). According to Alyoubi, (2015) e-commerce has developed tremendous changes in different e-businesses and e-organizations through the designing of different

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websites. A lot of customers switched from manual to online shopping which is why numerous websites used for online shopping are emerging around us. Moreover, Sharma & Lijuan, (2015) while designing the websites for the business purpose web developer keep the customer's requirements in their mind. As per Khandelwal, (2018) a customer experience is meaningful for e-business success hence improving the design and organization's websites can easily attract customers. The good quality of websites provides attractive features and good themes to the customers (Cho & Kim, 2004) that offer a rich user experience for online shopping. Consumers use websites for online shopping which are not considering as an information source but also as a purchasing place (Clemons et al., 2016). In online shopping consumer participation and business activities has great potential for growth (Singh, 2017). The progressive growth of business-to-consumer is based on the advancement of new technology. Hence, the internet and web development have become the most exciting developments in the area of information and communication technology (Mangiaracina, 2019).

Well-known online shopping websites such as Daraz. pk, Goto.com.pk, Aliexpress.com, Telemart. pk has evolved into a sophisticated form of personal purchase moreover the wireless Internet further accelerates this trend (Heng, 2018). However, due to the user-friendly nature of online shopping, the uncertainty of online transactions such as disclosure of personal information and products that may not meet the expectations of the consumer has decreased consumer loyalty. Therefore, managing e- customer satisfaction and e-trust is very important to build a long-term relationship with the consumer. Web designers need to promote the art of website design by inspiring customer engagement and promoting customer excitement and focus, including engaging customers with attractive website features and helping them repeatedly visit these sites (King et al., 2016). However, using the Internet to search for product information and using the Internet as a buying channel is completely different. The focus is on the choice between the various websites that compete for customers. These studies have potential assumptions about physical channel competition and focus on competition between network providers, using information features in the electronic channel to facilitate consumer evaluation of products completed online. With the internationalization of business and commerce and the better use of e-commerce and e-commerce, it is important to ensure that these systems are used effectively throughout the world (Dinh, 2018).

According to Wang & Jeong, (2018) to understand how customers use and buy their products through their websites and how multiple factors influenced customer satisfaction and trust for the transaction, organizations give this responsibility to the third party. Previous scholars focused on comparing user perceptions about websites however, no one investigated the customers' perceptions about the ease of use of these websites. Websites are becoming more common know days and continue to gain market share in online purchases, it is necessary to improve the quality of the website to satisfy customers. An analysis of the quality of the website helps to determine whether the quality of the website is driven by the same mechanism proposed, or whether it is reflected by a conceptually different measurement that needs to be handled separately by the researcher(Wong & Law, 2005). However, more research is needed to understand the role of e-trust between website quality and e-customer satisfaction relationships (K.hanna & Wahi, 2018). Therefore, in this study scholars found out the impact of Website quality and its effects on e-customer satisfaction while purchasing products online.

Previous studies have highlighted that e-trust in the sense of e-commerce is very important and without having trust in the website and its content no one will use websites for purchasing products and their transaction. (Kundu & Datta, 2015) studied the direct impact of website quality on the customer but no statistical tests were conducted to determine whether these structures truly reflected the customer's subjective judgment on the overall quality of the website. To solve this problem, the scholars aimed to identify the dimensions of website quality and its impact on e-customer satisfaction. Hence, scholars aim to find the answers to the following questions. What is the role of website quality in e- customer satisfaction? what are the key factors of website Quality? and what is the role of e- Trust between website quality and customer satisfaction? Heng, (2018) described that individuals' preference regarding shopping is changed from manual shopping to online shopping. As per Lee & Lee, (2019) as online shopping is growing day by

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day hence website quality and security is a big challenge to gain e-trust and e-customer satisfaction for transactions. On the other hand, website hackers are also increasing day-by-day involving frauds, web attacks, and cyber-crimes. These criminals are threats to e-commerce. In this connection, improvement in website quality is significant for gaining the confidence of the customer. Only a few studies have found the effect of website quality on e-customer satisfaction (Tandon, 2020). The objectives of the study are;

- To assess the impact of website quality (user interface quality, information quality, privacy risks, and security risks) on e-customer satisfaction
- > To examine the mediating role of e-trust between website quality and e-customer satisfaction.

In the next section scholar first examined the existing literature on a relevant topic and provides the basis for the proposed research model. Second, it discusses in detail e-customer satisfaction, the hypothetical relationship between website quality and e-customer satisfaction as well as e –trust. Then in the third section, the research methodology and data analysis, and results section. In the last section the conclusion of the paper with a discussion of the main findings and their implications for future research directions, and recommendations are presented.

# **Literature Review**

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As per Soto-Acosta and Popa (2016), Manufacturing and service organizations need to adjust their processes of manufacturing to the new substances and to adopt new methods of selling products according to the demand of the era. With the emergence of the economy as a perfect market, e-commerce activities increased customer loyalty worldwide. Online shopping changes the purchase intentions of the customer and makes the customer loyal. Loyal customers visit their favorite websites frequently (Ozkara, 2017) that's why the design of the website also be attractive and appealing for the customers. According to (Wu et al., 2011) the Consumer perceptions of the different stores and their features are used to define the conventional concept of retail store image. Store images are considered an important component in consumer decision-making (Palmer, 2015). Besides, the store image has various features such as the physical environment of the store, the level of service, and the quality of the goods (Baker et al., 1994). Virtual store image and physical retail store characteristics are different from each other in an e-commerce environment (Jahng et al., 2000). The information must be of high quality to be valuable to its users(H.-W. Kim et al., 2002).

Like retailer-customer relationships in physical retail environments, websites are the primary interface between e- customer and e-retailer. Therefore, the features such as perceived quality, perceived security, user interface, and service information quality represent the website quality that is essential to fascinate ecustomer and, more importantly, retaining them as loyal customers (Schäfer & Kummer, 2013). According to (Kim, Jin, & Swinney, 2009) e-retailers are providing their customers direct access to product information and sales through websites. Therefore, website and their information quality are considered as a marketing tool to ensure the smooth execution of online transactions (Padukkage, 2014). Therefore, to improve the effectiveness and appropriateness of the website, changes, and modifications to the system are required. One of the advantages of e-retailers is the ability to communicate accurate information to their customers. This study explores the recurring purchasing intentions of experienced online shoppers, and thus E-customer satisfaction, by emphasizing online stores. Previous research has found that despite the recent growth of B2C e-commerce, e-retailers still have difficulty maintaining e- trusts (Chiu, 2014). As the information available on websites promotes awareness of the product to the consumers, on the other hand, consumer feedback about the product is very important in online purchasing. With the internationalization of business, the importance of e-commerce is also increasing to ensure that websites (interface between shopper and e-seller) are providing relevant and accurate information as they described. Hence, many aspects of website quality for consumer awareness are important, in the e-market and e-business.

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## Websites and Websites Quality

According to Dragulanescu, (2002) quality of the Website is a vital concept in e-commerce, as website quality is the direct driving force of customers' perceptions. The understanding of website quality is described by Hsu, Chen, & Kumar (2018) as user assessment of site features to meet user demands and represent the overall excellence of the website." Consequently, in analyzing the website goods of a business, the company has become a priority in pursuing a competitive electronic approach to recognize the most critical aspects of website users. In other words, online travel agencies must consider online customers' perceptions of Website quality, from the perspective of service marketing (Kim, & Gupta, 2012). Several previous researchers have suggested incredible methods to calculate the quality of their website by taking the dimensions of website quality. For instance, to capture these aspects of the website, Kim & Lennon (2013) established the four dimensions of website quality (technical adequacy, content quality, specific content, and appearance). Furthermore, website quality is a multi-dimensional framework that includes information quality, system quality, and service quality. This type of three-dimensional website quality may be the most important factor in determining website users' standards and perceptions of quality (Liang &Chen 2009). That is in line with the findings of Tandon, Aakash, &Aggarwal (2020) The quality of the content, systems, and services supplied by companies through their websites are significant factors in designing commercial websites based on the analysis of the related literature on website quality between 1992 and 2007. The quality of knowledge refers to a measurement of the value the consumer perceives as being the product of the website, according to Lee (2019) the system quality is a manifestation of the overall performance of the website system, which can be determined by its usability. The overall evaluation and evaluation by the customer on the efficiency of the online service provision is service quality. The three-dimensional quality factor has been suggested by DeLone and McLean (2003) to help boost their purchasing intentions a crucial part of online customer satisfaction (Bai et al., 2008). In short, the website quality (including content, framework, and quality of service) as a stimulus is used for this analysis, as mentioned above. Quality of service reflects the general assessment and evaluation of the quality of online service delivery by the customer. The three-dimensional quality factor has been suggested by DeLone and Kundu, & Datta, (2015) to help increase their purchasing intentions. In short, as noted above, the quality of the website (including content, framework, and quality of service) is used to stimulate the purchaser towards shopping. Shoppers purchase items from the same website are very important for device quality. In the same way, the accuracy of information is also very critical for consumers who buy travel goods. The total satisfaction of customers is based on five dimensions of service quality, which reflect different service attributes. These five dimensions include practicality, reliability, security, reactivity, and empathy (Peckover, 2018). Transactions between buyers and sellers in e-commerce are frequently conducted on a website therefore, website quality is an important factor in electronic commerce because consumers' expectations of website quality influence their intent to use a website and directly influence purchase intentions (Chen, 2017). Consequently, website quality is a multifaceted construct that includes information quality, system quality, and service quality. This multi-dimensional website quality may be one of the most important factors in determining website users' preferences and perceptions of website quality (Kim & Lennon, 2013).

# The Dimension of Websites Quality

#### **User Interface Quality**

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According to Khanna and Wahi (2018), the quality of the user interface (websites) has a significant impact on customer satisfaction because it offers physical evidence of the service provider's experience and makes the service convenient to use to improve customer satisfaction in this connection, Khanna & Wahi, (2018).

Identified numerous factors in developing an effective B2C e-commerce website. Furthermore, Cheng (2018) suggested that the quality of a user interface should directly influence customer trust. Similarly, Basson (2015) found that easy navigation, interface design, and user guidance can affect consumer

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confidence. Furthermore, It has been indicated that the interactivity factor is highly interrelated to customer satisfaction (Kim & Gupta, 2012). In the information system, the interests of the organization have been recognized by the productivity model of customer satisfaction (Walsham, 2015). Different research scholars have developed various approaches for measuring system quality. For example, Swanson (1974) described in his study on MIS appreciation that several factors encourage users to repeatedly use websites for different purposes. The computer system functionality, the time for online response, the ease of use of the terminal, and certain other factors are part of the quality of the user interface. Similarly, Emery (1971) suggests several features consider when measuring user interface quality some of them is the content of the database, human factors, response time, and system accuracy. Therefore, Hamilton and Chervany (1981) recommended that a "formative evaluation" methodology would be used to test the accuracy of data on user interface quality, response time, turnaround time, the accuracy of data, credibility, flexibility, and usability of systems.

#### **Service Information Quality**

According to (Padukkage et al., 2014) e-commerce is an information system. Many studies have identified that web-based e-commerce applications have different design features. Information accuracy, service quality, entertainment, system design quality, and user interface are some of the website's features (Kim & Stoel, 2004). Dragulanescu (2002) described in his research that customers recall and recognized the website by its appealing features and designed. The quality of website information is also important to consumers because they use these websites as a transportation medium in online purchasing (Hsu et al., 2018). Information systems and marketing approaches are the design of a store's website. According to and McLean (1992), factors influencing information systems include service quality, information quality, user satisfaction, and its organizational influence, which is a strategic component of the intelligence system (Muirhead, 2018).

#### **Perceived Security**

Earlier, different studies took advantage of the uniqueness of information systems. These include user satisfaction, enterprise profitability, improved decision quality and efficiency, perceived information system security, system usage levels, and perceived security. Because personal and financial information may be intercepted and used for fraudulent purposes, online investment involves higher security issues than traditional transactions. The e-customer needs to develop a sense of security when making financial transactions that are essential for the growth of e-commerce (Flavián & Guinalíu, 2006). Perceived security is defined as a risk that grounds conditions, or situations that can cause monetary difficulties or system assets to become disruptive, exposed, rejected, wasted, and abused (Casalo, 2007). Security, including the use of cryptography, computerized trademarks, and certificates to protect customers from false statements, hacking, or "phishing", has a positive impact on online purchases (Shin, 2010). However, the e-business is not the target security of the e-channel as the exchange medium but the abstract danger impression of the customer (Flavián & Guinalíu, 2006). In this manner, when online sellers have executed security systems, in general, e-customer trust that web-based buying is protected. Hence, Van Schaik, Jansen, Onibokun, Camp, & Kusev (2018) claimed that security is the most critical factor in convincing e-buyers.

# **Perceived Privacy**

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Privacy is the prospect that organizations during online shopping gather information about people and use them improperly(van Schaik et al., 2018). In protecting personal data and its unintended work, there is a growing focus on security issues and the obtainability of data available online. When a destination requests, e-customers are hesitant to enter their data because they are concerned about the capture and misuse of data sent over the network. in addition, their information may be misused. Hence, e-shoppers are insecure during online shopping and can delay the shopping. Furthermore, e-customer supposed that e-organizations may use their confidential and financial data for unauthorized use or to publish to different associations. In

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this connection (Carlos Roca et al., 2009) assessed the two-way nature of network privacy issues. The first measurement is identified by worrying about the information collection process itself, while the second measurement implies that the online organization is fully utilized this data. In addition, perceived privacy is associated with the buyer's thinking framework for online shopping. These framework also included the privacy and subsequent use of customer data by the seller (Casalo et al., 2007). Therefore, when security and privacy policies are clearly announced e-shoppers increased their trust, thus enhanced their ability to communicate online (Peckover, 2018). Other experimental investigations suggested that perceived privacy is a fundamental factor for e-buyers to confirm online management (van Schaik, 2018).

## E-Trust

Perceived trust is the divergence of the tendency to expose trust that leads to the recognition of the website that introduces e-trust and thus is affected by perceived convenience, perceived security, and perceived protection (Carlos Roca, 2009). Eventually, the purchase goal is controlled by the nature of e-trust. The importance of believing e-government is critical to the exchange because the level of vulnerability in the virtual environment makes customers gradually unprotected. Therefore, the confidence of electronic speculators in online sellers and stockbrokers determined the goal of guiding their stock exchanges. In the web-based business setting, experimental research has demonstrated that e-trust builds individuals' objective to utilize the sellers' site in online shopping (Muzatko & Bansal, 2018). Furthermore, Kundu & Datta (2015) found that trust positively affects a person's ability to lead connections with an online bank in the e-transaction (Kim, Jin, & Swinney, 2009). Flavián & Guinalíu (2006) demonstrated that the more trustworthy people are the more constructive hence; their frames of mind about buying over the web are assured. Similarly, according to Brengman & Karimov, (2012) the security, protection, and convenience of a website build perceived effectiveness and usefulness and has a direct impact on buyer trust in financial management websites. In addition, the e- buyer trust is identified as relationship responsibility, and trust is a key intervention variable to improve network-based relationship responsibilities. The researchers claimed that the success of e-commerce as well as web design needs to be evaluated from the consumer's point of view (Kim, Jin, & Swinney, 2009). In website design, customer satisfaction, user interface quality, and information quality all play a significant role. Besides, e- trust is recognized as the technical factor for econsumer satisfaction.

#### **E- Customer Satisfaction**

According to (Hameed, 2018) Globally, customer loyalty or customer retention is often closely related to a company's profitability and long-term growth. Electronic customer trust can be defined as a set of beliefs that online consumers hold about certain characteristics of electronic suppliers and possible behaviors of future electronic suppliers (Muzatko & Bansal, 2018). The transaction view identifies consumer satisfaction as a key factor in predicting customer loyalty. Similarly, Ullah & Khan(2017) found that ecustomer satisfaction is a significant factor in behavioral intent, and that website quality is very helpful in enhancing customer satisfaction. According to Ismail, (2018) the intention to buy is an element of behavioral intent. The intention of buying was used to anticipate the actual conduct used to analyze trends of consumer behavior. Furthermore, to understand e-customer satisfaction (Yadav & Pathak, 2016) recognizing the customer's purchase intention is necessary because customer behavior can usually be predicted by their intent. E customer loyalty and purchase intention both are considered vital in loyalty construction.

#### **Theoretical Review**

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Theory of reason action (TRA) described the relationship between attitude, intention, and behavior (Mishra, Akman, & Mishra, 2014). In addition, the TRA model assumes that humans make coherent decisions based on available information and the best direct determinant of human behavior is the intention, which is a cognitive representation of human behavior (Montano & Kasprzyk, 2015). Therefore, the quality

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of the information provided by website content in the context of e-commerce can significantly affect purchase intention. In addition, the reliability and accuracy of the information provided by the website would enhance the loyalty and trust of the Online Consumer, contributing towards the initial purchase. As a result, consumer satisfaction and trust in e-commerce sites can have a positive impact on customer satisfaction. In 1995 Mayer, Davis and Schoorman have prolonged the theory of reasoned action theory(TRA) to support the consumer trust model (Untaru, Ispas, Candrea, Luca, & Epuran, 2016; Hampton, 1994). Furthermore, relying on Davis's (1989) Technology Acceptance Model (TAM) as well as McKnight's (1992) Technology Acceptance Model (TRA), a model of trust for e-customers has been proposed. The decision to adopt or use new technology, according to the Technology Acceptance Model (TAM), is dictated by its perceived usefulness and ease of use. In addition, this model postulates that beliefs of trust and perceptions of website attributes of specific providers lead to the customer towards trust intentions, which in turn influence trust-related behaviors. Oliver (1980) proposed the theory of confirmation expectations (ECT) to study consumer satisfaction and repurchase behavior (Guo et al., 2015). The Expectation confirmation theory (ECT) states that a consumer-first forms an initial expectation before purchase and then generates a perception of the performance of the consumer product or service after the initial phase of consumption. Consumers can assess their satisfaction by evaluating the current performance of the product or service to their initial return expectations, based on their anticipated level of recognition. (Fu et al., 2018). Therefore, satisfied consumers will form a repurchase intention. Similarly, when customers confirm that they want the site to be reliable, they will be more motivated to repurchase from the same site. Based on the literature and theoretical review we developed the following hypothesis.

# **Hypothesis**

- H1: There is a positive correlation between website quality and e-customer satisfaction.
- H2: There is a positive correlation between website quality and e-Trust.
- H3: There is a positive correlation between e-Trust and e-customer satisfaction.
- H4: There is a positive correlation between website quality and e-customer satisfaction, which is regulated by e-Trust.

# Research Methodology

In the present study, a quantitative research approach is adopted to identify the impact of website quality on e-customer satisfaction. The primary data was collected through a structured survey questionnaire. The final questionnaire was consisting of 36 items, which are adapted from previous researches. A five-point Likert scale was used to assess all of the items in this study In which 5 represented strongly disagree and 1 represented strongly agree. The non-probability judgment sampling technique is used to collect the data from the users of the website. In the context of Pakistan, peoples are not willing to provide data due to a lack of awareness of academic research. Initially, the data was collected from 50 respondents for the pilot study, after getting the results of the pilot study 4 items were removed due to the validity issue. After removing the items, the final questionnaire was distributed among 400 respondents when the response has arrived at 385 then after the data cleaning process the final test was run on 330 respondents.

# **Data Analysis**

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For the analysis of data, the Structure Equation Modeling technique was used (Hair, 2017) there are two approaches of SEM, one is covariance-based SEM which is commonly used and the other is Partial least square structural equation modeling (PLS-SEM). In the current study, the PLS-SEM is applied for data analysis. Structural equation modeling is used when the research models are complex and researchers want to identify the simultaneous cause and effect between exogenous and endogenous variables (Ali et al., 2018). The conceptual framework of this study is consists of seven latent variables, in which website quality is the second-order construct and is measured by four latent variables, also called the dimensions of

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website quality, one dependent variable, e-customer satisfaction, and the last mediating variable namely e-trust.

#### **Measurement Model**

The researcher evaluated indicator reliability, internal consistency reliability, convergent validity, and discriminant validity in the measurement model.

# Reliability and Validity

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Table 1 indicates that the present study is based on 28 items of the seven variables. To check the reliability of the items the scholar examines the reliability of the indicators through standardizing loading of the retained item.

Table 1: Reliability and validity

Construct	Indicators	Standardized Loadings	α	CR	AVE
	ECS1	0.838			
	ECS2	0.857	0.895		
E Customer	ECS3	0.836		0.010	0.654
Satisfaction	ECS4	0.693		0.919	0.654
2	ECS5	0.819			
	ECS6	0.798			
C 3	ET1	0.787			
T.T.	ET2	0.674	0.753	0.045	0.570
E Trust	ET3	0.859		0.845	0.579
WIN SHA	ET4	0.710			17/4
-53 L	IQ1	0.806			
Service	IQ2	0.847			1393.)
Information	IQ3	0.773	0.767	0.787	0.541
Quality	IQ4	0.784			
	IQ5	0.358			
	PP1	0.609			
	PP2	0.776			
Perceived Privacy	PP3	0.807	0.835	0.885	0.610
·	PP4	0.890			
	PP5	0.796			
	PRS1	0.732			
Perceived Security	PRS2	0.860	0.712	0.822	0.540
	PRS3	0.702			0.540
	PRS4	0.624			
	UIQ1	0.799			
User Interface Quality	UIQ2	0.709	0.796	0.867	0.621
	UIQ3	0.818	0.790	0.007	0.021
	UIQ4	0.822			
Website Quality	UI	0.687			
	IQ	0.802	0.870	0.892	0.547
	PRS	0.485	0.070 0.092		0.547
	PP	0.916			

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As per the rule described by Hair et al (2013, 2016) items value of 0.5 or greater than 0.5 are considered as reliable. Hence, scholars removed the items that have lower factor loading. The reliability of the proposed model is measured through the values of Cronbach's alpha, According to the rule of thumb for Cronbach's alpha value equal to or greater than 0.7 is considered acceptable as shown in table 1 all values of Cronbach's alpha are > 0.7. To check the internal consistency researcher observe the value of composite reliability (CR) followed the rule described by Bagozzi and Yi, (1988) & Hair et al., (2016) the score of CR of each construct should be equal to 0.7 or greater than 0.7. Similarly, to ensure the convergent validity of the construct, the average variance extract (AVE) of each construct is assessed by following the Fornell and Larcker (1981) criterion that the AVE should be equal to 0.5 or greater than 0.5. Hence, in the present study, all values are up to the benchmark and are presented in Table 1 in detail.

#### **Discriminant Validity**

The scholar used the Fornell and Larcker (1981) criterion to assess the construct's discriminant validity, as per this criterion, each latent variable's square root must be higher than the correlation with other variables, (Chin, 1998). The discriminant validity of the current study is presented in Table 2.

Table 2: Discriminant validity (Fornell-Larcker criterion)

Constructs	1	2	3
E Customer Satisfaction	0.809		
E Trust	0.417	0.761	
<b>User Interface Quality</b>	0.328	0.565	0.788

#### Structural Model

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### **Path Coefficients Assessment**

Referring to the rule described by Hair (2016) and Henseler (2009) to evaluate the significance of path coefficients, the researcher On 5000 bootstrap samples, a typical bootstrapping technique was used to produce direct and indirect path coefficients simultaneously. T-values greater than 1.96 indicate a significant relationship between the variables at the 0.05 significance level, while P values less than 0.05 indicate that the null hypothesis is rejected. At the significance level, a P-value less than the significant value suggests that there is a substantial relationship. The researcher used two primary techniques to obtain empirical evidence in this analysis. The first is the PLS Algorithm, which is used to determine the significance of items/indicators to establish path coefficients, and the second is bootstrapping, which is used to obtain empirical evidence of t-statistics and standard error, which can be used to determine the significance of the path association between the constructs.

Table 3: Path Analysis

Relationship	β	SE	t- value	P- value	
Direct Effect					
H1 Website Quality -> e- customer Satisfaction	0.037	0.127	1.292	0.075	Not Supported
H2 Website Quality -> e- trust	0.737	0.036	2.598	0.003	Supported
H3 e-trust -> e- customer Satisfaction	0.390	0.094	4.152	0.002	Supported
Indirect Effect H4 Website Quality ->e-trust-> e- customer Satisfaction	0.287	0.075	3.836	0.003	Supported

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Hence, to assess the significance of path coefficients scholars performed the standard bootstrapping procedure with several 5,000 bootstrap samples that produce the result of the direct and indirect effect (mediation analysis) simultaneously. The path coefficients results are presented in Table 3.

The finding of the study indicated that H1, (There is a positive correlation between website quality and ecustomer satisfaction) ( $\beta$ = 0.037, t=1.292, p= 0.075 could not find empirical support. However, in examining the positive correlation between website quality and e-Trust (H2); the result indicated empirical support ( $\beta$ = 0.737, t= 2.598, p=0.003) and the influence of e-trust on e-customer satisfaction (H3) indicated empirical support ( $\beta$ = 0.287, t= 3.836, p=0.002). In addition, the indirect effect (mediation) of e-trust over websites quality and e-customer satisfaction relationship indicated empirical support ( $\beta$ = 0.287, t= 3.836, p=0.003). Therefore, H4 (there is a significant relationship between website quality and e-customer satisfaction, which is regulated by e-Trust) found empirical support.

# R-Square (R2), and (Q2) Predictive Relevance

Model accuracy is estimated using the coefficient of determination or R-square. According to Henseler (2009), a minimum of  $0.10~\rm R^2$  is considered satisfactory in social science study. The higher the value of R-square ( $\rm R^2$ ) interpreted that independent variables are more descriptive. The value of  $\rm R^2$  0.75, 0.50, and 0.25 are reflected as substantial, moderate, and weak (Hair, Ringle, & Sarstedt, 2011). Finally, scholars used blindfolding procedures to test the predictive relevance of the research model. According to Geisser, (1974) & Stone, (1974), the predictive relevance (Q2) value of the model should be greater than zero. In Table 4, the  $\rm R^2$  and  $\rm Q^2$  values are presented.

Table 4: R<sup>2</sup> (Coefficient of determination) and Q<sup>2</sup> (Predictive Relevance)

Construct	$R^2$	$F^2$	$Q^2$
Website Quality	58%	0.321	0.251
e-customer satisfaction	29%	0.723	0.127
e-trust	n/a	0.000	n/a

#### Conclusions

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The objective of the study was to examine the impact of website quality on e-customer satisfaction in the presence of e-trust as a mediating variable. The findings of the study indicated that website quality has a significant impact on e-loyalty that leads to e- customer satisfaction. In the table 3 website, quality is the independent variable, which is measured by four different dimensions, e-Customer satisfaction is the dependent variable, which is directly measures by indicators, and the e-Trust is the mediating variable, which plays the role between the relationship of Website Quality and e-Customer satisfaction. According to the results, presented in table 4 the direct impact of website Quality on e-Customer Satisfaction is not significant because the P-value is then 0.075, which is greater than the significance value of 0.05. The impact of Website Quality on mediating variable e-Trust is significant because P-value is less than 0.05. In indirect effect, there is a significant relationship between Website Quality and e-Customer Satisfaction as P-value is 0.000. This concludes that e-Trust is the full mediator between Website Quality and e-customer Satisfaction. Cyber-attacks are very frequent, even the websites of the branded product are also on the target of hackers. These big brands are also spending a lot of money to improve their security risk and gaining more confidence to build customer trust and loyalty. In the present study scholar concerned, only the limited consumers that can be increased in other sectors. On the other hand, the process of transaction via the website through credit card or credentials to pay for purchases online is also a key factor to increase the validity and generalization of the study. To improve the effectiveness and universality of this study, in future research the sample size can be increase according to the population of Pakistan. In addition, this study only covers a limited number of consumers, which can increase it in more departments. As a result, the findings of this study would be beneficial to a couple of organizations that provide e-commerce

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services. Consumer behavior is statistically related to overall website quality. To ensure that the measurement works equally well, future research should consider a range of product segments and/or other industries. The measurement may need to be changed in other industry settings. Different methodologies including focus groups and interviews may be used in future studies. From a research standpoint, the findings of this study will help to better understand the effect of various factors on Pakistan's e-commerce consumer loyalty as one of the world's largest developing countries. E-retailers should consider the preferences and loyalty of consumers in terms of online shopping to attract new customers as well as keep their existing customers in connection.

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