



# RELATIONSHIP BETWEEN DIFFERENT ATTRIBUTES OF E-SERVICE QUALITY AND TECHNOLOGY READINESS WITH E-SHOPPING BEHAVIOUR

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## ABSTRACT

Online buying attitudes and cross-cultural variations in the evaluation of the quality of electronic services were the primary foci of this study's research design. In addition to building on prior work in the online shopping context, this study shows that customers are more likely to feel positive about their experience if they have a high opinion of the service they received, and that this is in turn influenced by their perception of the risks involved in making purchases online. The quality of e-services was evaluated by both cultures using a t-test, and the relationships between service quality, risk, trust, and attitude were analyzed using correlation and hierarchical regression. The study concludes that trust has a substantial impact on how people feel about internet buying.

**KEYWORDS** culture, e-service quality, trust, risk, attitude toward online shopping

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## INTRODUCTION

E-commerce is seen as one of the most crucial uses of computing and communication technology due to the ever-increasing number of Internet users and the fast development of network technologies. "E-commerce is a relatively new term describing commercial transactions conducted entirely via electronic systems, such as the Internet," it has been defined. Just as the telephone, television, fax machine, and email have altered the manner in which companies and customers interact, so too is e-commerce, through the Internet, radically altering the institutions, processes, goods, and services that we have known up until now. Via e-commerce, businesses and consumers are able to more freely share information and transact business in a more dynamic and accessible online setting. Moreover, e-commerce enables information to reach more people without compromising the

depth of the contents, and it allows transaction costs to be greatly reduced by both consumers and providers. Last but not least, e-commerce facilitates better coordination between enterprises in a value chain and provides an integrated business model that allows businesses to adapt quickly to changes in the marketplace and the needs of their consumers. As companies in the 1880s understood that a great product alone wasn't enough to ensure they'd keep their competitive edge, they began a global trend toward improving the quality of their services. Incongruent service recipients are more likely to spread the word to more than three others, according to studies. Thus, the low quality of service will result in a loss of prospective customers.

The Internet is rapidly becoming a significant new channel for enterprises across a wide range of industries, making e-services the new standard for doing business in the industrialized



world. Clearly, the Internet's impact on the development of e-services has been game-changing for service providers and consumers alike. Businesses were able to create new models for service design strategies and new service improvements thanks to the advent of e-services, as stated in the aforementioned source. Secondly, there are more channels for service delivery to choose from, which benefits both offline and online service providers equally. The most savvy and successful online retailers today are coming to understand that providing a high-quality e-service is just as important as having a visible presence on the web or offering cheap prices.

As the reach of the Internet has grown, so too has its importance as a promotional tool. Researchers and professionals in the area of e-commerce may learn a lot by analyzing online shoppers' feedback and comments. The navigations, searches for information, online purchases, and customer interactions are all parts of the larger whole that is online shopping."

#### LITERATURE REVIEW

**Suhail Ahmad Bhat et.al (2021)** The explosive expansion of e-commerce, especially in emerging markets like India, presents a lucrative potential for the retail sector. As a consequence, the internet retail area is now rather congested, and competition for consumers is fierce. Customers are now more able to make the transition from competing online stores with only a few mouse clicks. E-commerce sites now have to contend with competition from both traditional businesses and other online marketplaces. Retailers in the digital space set themselves apart from the competition by providing superior web service features. This research looks at how different aspects of an online store's operation affect customers' confidence in its reliability and their satisfaction with their purchases. Perceived usefulness as a mediator between e-service predictors and outcome factors is also explored. The research uses a stimulus-organism-response paradigm as its theoretical foundation in order to understand consumer behavior while purchasing online. Confirmatory factor analysis was used to empirically verify a

questionnaire used in a consumer survey (CFA). Non-probabilistically, we selected 660 Jammu and Kashmiri internet users as our sample. Perceived usefulness was shown to have a mediating influence on e-trust, and results showed that online service quality factors also had direct effects on e-trust. Website designers and online merchants may leverage the study's results to create trustworthy and user-friendly interfaces. By constructing a revised trust-based consumer online purchasing model, the research contributes to our knowledge of e-commerce by describing the elements that affect consumers' attitudes about online shopping and how consumers' perceptions of value mediate the link among the variables.

**Natalia Vatolkina et.al (2020)** Our study's overarching objective is to provide a framework for evaluating the quality of e-services that takes into account users' actual experiences and a variety of quality metrics, and then to examine how well this framework applies to various types of e-services. Moreover, we want to evaluate the components of hybrid and digital e-service quality dimensions. The research was based on an online poll given to Russian nationals and international residents in the months of July and September 2019. In order to get an accurate picture of how people really use e-services, we had them answer questions about a certain brand. Spearman correlation was used to evaluate data from 365 surveys to establish a link between variables. The extent to which a consumer enjoys an e-service and is inclined to use it again is an acceptable outcome variable in the e-service model. It was determined that the idea could be used equally effectively to both hybrid and digital e-services. Digital and hybrid e-services differ primarily in how they distribute e-service characteristics among several quality metrics. The usability and perceived value of a product have the greatest impact on its sales. The results demonstrate the need for cross-sector diffusion of best practices in e-services and provide a window of opportunity for the widespread dissemination of research results across a variety of e-service industries.

**Zoltán Krajcsák (2019)** Since consumers play an integral role in the open innovation process, it



helps businesses better serve their clients. Building an ISO 9004:2018 system on top of an existing total quality management (TQM) culture is a proven method for successfully introducing open innovation into a business. Stakeholders' mentalities are the most crucial factor in a quality management system's performance; infrastructure, resources, and other factors play a secondary role. Similarly, to how the goal of building a successful TQM philosophy is to generate and keep the commitment of the leadership and the employees, the success of ISO 9004:2018 hinges on creating and sustaining the commitment of both the workers and the consumers. The case study presented in this article demonstrates the importance of increasing the affective and normative commitment of leaders and employees in TQM, and of increasing the employees' continued commitment and customer loyalty in ISO 9004:2018 after its implementation, for the success of quality management systems and open innovation.

**Kaylasson Maistry et.al (2017)**The focus of this work is to show how total quality management (TQM) and innovation are intertwined, and how this affects the productivity of agricultural R&D institutions. The 25 most often reported TQM practices and two categories of innovation were examined for inclusion in a gap score survey instrument based on the balanced scorecard methodology. We analyzed the correlations between the survey measures using structural equation modeling. TQM was shown to have a beneficial effect on creativity and productivity. A proposed model was created to represent the intricate connections between the variables of interest. Implications in the Real World The model's ability to forecast the aggregate impacts of different organizational practices on performance creates space for the cultivation of a Total Quality Management (TQM)-innovative performance framework in agricultural R&D institutions. The gap scores determined by the survey are an innovative method for evaluating R&D policies and procedures.

**Venkatapparao Mummalaneni et.al (2016)** In 2014, Chinese consumers spent \$427 billion

shopping online, and by 2018, that number is predicted to exceed \$1 trillion. In addition, the rise of China's e-commerce sector has been meteoric. Based on prior research on technological readiness and e-service quality, this study presents a model and puts it to the test among Chinese customers. According to the data, the degree to which Chinese online buyers are tech-savvy has a positive effect on their opinions of the efficiency, system availability, fulfillment, and privacy of e-services. Perceived e-service quality mediates the relationship between technological preparedness and future online purchasing intent. We also address possible follow-up studies and their implications.

#### **METHODOLOGY**

In this research, we looked at how different cultural groups felt about the safety, convenience, and reliability of online buying. For instance, it's important to address issues like "if trust impacts attitude toward online purchasing." As a result, the kind of relationships between the study's variables was best developed using a correlational connection.

#### **Sample Size**

A total of 377 individuals were used (an approximated number) across the two cities of Delhi and Mumbai to ensure reliable findings. The proposed sample size was influenced by those who argued that it should be at least twice as large as the number of survey questions in order to reliably detect trends or outlying opinions.

#### **Data Collection Method**

The selection of survey approaches is often influenced by a number of factors, such as the kind of data required, the available budget, the completion timeline, and the need for quality data. Given the goals of the research and its setting, a quantitative survey sample looked like the best option for gathering information on customers' attitudes.

#### **DATA ANALYSIS**

In Table 1, you can see how the respondents from Delhi and Mumbai break down in terms of gender, marital status, age, income, Internet provider, number of credit cards, and preferred mode of online payment.



**Table 1: Demographic Profile of Delhi and Mumbai Participants**

Variables	Items	Delhi	Mumbai
Gender	Male	122 (61%)	120 (56%)
	Female	77 (39%)	95 (44%)
Marital status	Married	142 (71%)	56 (26%)
	Single	57 (29%)	156 (73%)
Age	21 - 25 years old	86 (43%)	74 (43%)
	26 - 30 years old	51 (25%)	55 (26%)
	31 - 35 years old	40 (20%)	41 (19%)
	35 years +	45 (11%)	44 (21%)
Monthly income	No income	25 (13%)	
	SR 1- SR 2000	18 (9%)	
	SR 2001 - SR 5000	28 (14%)	
	SR 5001- SR 10000	83 (42%)	
	SR 10000 +	45 (23%)	
	No income		23 (11%)
	RM 1- RM 500		65 (30%)
	RM 501 - RM 1000		33 (15%)
	RM 1001- RM 1500		27 (13%)
	RM 1500 +		67 (31%)
Frequency of online shopping (i.e. buying products online on average)		12 (6%)	10 (5%)
	Once a week		
	Once a month.	53 (26%)	33 (15%)
	2-3 times a year	77 (38%)	65 (30%)
	Once a year	33 (16%)	61 (28%)
Primary personal use of Internet Information and product search		77 (38%)	91 (35%)
	Purchasing	8 (4%)	8 (3%)
	E-mail/E-card/other communication	44 (38%)	45 (20%)

Variables	Items	Delhi	Mumbai
	(i.e., chatting)		
	Game/music/ downloading/entertainment	22 (11%)	21 (10%)
	On-line banking/paying bills	48(24%)	50 (22%)
No. of credit cards	None	40 (20%)	99 (47%)
	1 – 2	142 (71%)	106 (49%)
	3 – 4	13 (7%)	9 (4%)
	More than 4	4 (2%)	1 (.5%)
Online payment method	Credit/ debit card	134 (67%)	100 (47%)
	Bank transfer	40 (20%)	99 (46%)
	PayPal	24 (13%)	13 (6%)
Online shopping experience (Have you visited any online shopping website?)	Yes	199(100%)	214(100%)
	No	0(0%)	0(0%)

Table 1 shows that out of the 199 replies received from Delhi, 122 (61%) were from males and 77 (38%) were from females. Among the 215 respondents, 120 (56%) were male and 95 (44%) were female in Mumbai. Among the Saudi participants, 142 (or 71%) were married and 57 (or 28%) were never married. 56 (26%) of the Mumbai sample were married whereas 156 (73%) were not. Age-wise, 43% of the Delhi sample was comprised of those between the ages of 21 and 25, 26% included people in their thirties, 21% were in their twenties, 20% were between the ages of 31 and 35, and 11% were beyond 35. Here's how the ages broke out in the Mumbai sample: Over half (43%) were young adults (aged 21–25), while another 26% were adults (aged 26–30). Just 19% were under the age of 31, while 21% were above the age of 45.

#### Factor Analysis of Attitude toward Online Shopping

Attitude questions were analyzed using the data sets collected from the replies, and the results indicated a two-factor explanation. It

became out that a simple two-factor model could account for 75% of the overall variance. The orthogonal factor dimensions were found using principal component analysis and varimax rotation. Factors were extracted using a latent criterion of 1.0, and items were included if their loadings on those factors were above 0.40.

To establish the internal consistency of indicators that assess the underlying components, we looked at the composite reliability of separate constructs and discovered that a factor is reliable if it has a value more than 0.60. Cronbach's alphas for both measures were high enough to be considered reliable. Cronbach's alpha for the first dimension was 0.966, indicating a good degree of reliability. Very excellent dependability was also shown in the second dimension (0.821). It was determined that the assertions were trustworthy and would provide the same outcomes when tested several times. Table 2 displays the results.



**Table 2: Factor Analysis of Attitude toward Online Shopping**

Factor	Factor Loading	Eigen Variance	Alpha	
<b>Dimension One</b>		9.399	67.137	0.966
I believe that adopting online shopping is	0.898			
I believe that adopting online shopping is	0.888			
I believe that online shopping is	0.867			
I feel ___ toward online shopping	0.860			
I feel ___ while using online shopping	0.849			
I believe that online shopping is	0.841			
I feel ___ toward online shopping	0.812			
I believe that it is ___ to shop online	0.809			
I feel ___ while using online shopping	0.800			
I feel ___ with the online shopping security	0.753			
I believe that it is ___ to shop online	0.737			
I feel ___ with the online shopping security.	0.719			
<b>Dimension Two</b>		1.145	8.180	0.821
I am ___ to shop online	0.944			
I am ___ to shop online	0.800			

**Factor Analysis of E-service Quality on Online Shopping**

E-service quality indicators were subjected to an explanatory factor analysis. Item analysis done on this dataset revealed the presence of two factors, suggesting the existence of a two-factor solution. The two-factor model adequately accounted for 73% of the overall variance. Orthogonal factor dimensions were calculated using main component and varimax analyses. Factors were extracted using a latent criterion of 1.0, and items were included if their loadings on those factors were above 0.40. To

examine the indicators' internal consistency in assessing the variables, the composite reliability of each element was evaluated. All four dimensions had Cronbach's alphas that were good to excellent. In particular, it was found that the first and second dimensions both have excellent reliability (Cronbach's alpha = 0.984 and 0.941, respectively). It was determined that these assertions had a high degree of dependability and would provide the same outcomes in further testing. Cronbach's alpha coefficients for e-service quality dimensions are shown in Table 3.



**Table 3: Factor Analysis of E-service Quality**

<b>Factor</b>	<b>Factor Loading</b>	<b>Eigen Variance</b>	<b>Variance Explained</b>	<b>Alpha</b>
<b>Dimension One</b>		21.74	65.9	0.984
It makes it easy to get anywhere on the e-retailer website	.908			
The e-retailer website makes it easy to find what I need.	.906			
The e-retailer website is simple to use.	.895			
E-retailer website sends out the items ordered.	.885			
The e-retailer website is always available for business.	.883			
It enables me to complete a transaction quickly on the e-retailer website.	.881			
The e-retailer website enables me to get on to it Quickly.	.880			
The e-retailer website launches and runs right away.	.874			
Information at the e-retailer website is well organized.	.870			
E-retailer website protects information about my Web-shopping behavior.	.796			
E-retailer website is truthful about its offerings.	.776			
E-retailer website makes items available for delivery within a suitable time frame.	.768			
This site is well organized.	.766			
<b>Factor</b>	<b>Factor Loading</b>	<b>Eigen Variance</b>	<b>Variance Explained</b>	<b>Alpha</b>
E-retailer website does not share my personal information with other web sites.	.746			
It loads its pages fast	.744			
E-retailer website makes accurate promises about delivery of products.	.737			
E-retailer website has in stock the items the company claims to have.	.732			
E-retailer website delivers orders when promised.	.729			
e-retailer website quickly delivers what I order	.721			
E-retailer website protects information about my credit card.	.713			
E-retailer website provides a telephone number to reach the company.	.691			
The e-retailer website does not crash.	.689			

Factor	Factor Eigen Loading	Variance Explained	Alpha
E-retailer website tells me what to do if my transaction is not processed.	.684		
Pages at this site do not freeze after I enter my order information.	.626		
<b>Dimension Two</b>	<b>2.582</b>	<b>7.6</b>	<b>0.941</b>
E-retailer website picks up items I want to return from my home or business.	.821		
E-retailer website compensates me when what I ordered doesn't arrive on time.	.812		
E-retailer website handles product returns well.	.808		
E-retailer website provides me with convenient options for returning items.	.785		
E-retailer website compensates me for problems it creates.	.785		
E-retailer website offers a meaningful guarantee.	.708		
E-retailer website takes care of problems promptly	.674		
e-retailer website offers the ability to speak to a live person if there is a problem	.644		
E-retailer website has customer service representatives available online.	.581		

**CONCLUSION**

The primary aim of the study was to examine how different factors affect consumers' perceptions of online shopping experiences in Mumbai and Delhi. The study's secondary objective was to look at how risk affected the connection between eservice quality and customers' confidence in Mumbai and Delhi. The findings corroborated the predicted positive direct effect of service quality on customer trust, demonstrating that customers' perceptions of service quality had a significant impact on their confidence in making purchases online. Customers' trust in online stores was shown to have a significant impact on their attitudes on shopping online as a whole. Thus, it is crucial that those in charge of marketing and management give serious thought to the issues of trust in online transactions. Trust in the reliability of e-services is seen as the optimal setting in which positive customer attitudes regarding online buying might flourish. The association between consumers'

service quality expectations and their use of the Internet to make purchases has also been expanded upon in this research. Cultural influences on consumers' expectations of service quality in Mumbai and Delhi were also analyzed.

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