

Service Quality Dimensions, Satisfaction and Loyalty in e-retailing : An Empirical Study

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Abstract

Digital commerce is altering the way of doing business, pace of operations and providing advance platforms to interact with customers. Because of the online platform, it has become much easier for the customers to compare the products than traditional offline retail settings not only on the basis of product features but also on the basis of e-service quality. It is quite evident that companies have realized the importance and quality of online portals for running their businesses, but they are also facing problems in understanding the customers' perceptions of the service quality. Therefore, the present study scales the perceptions of the consumers regarding e-service quality dimensions and also examines its impact on loyalty. Additionally, the effect of gender as a moderator, in particular, is also studied on the relationships among the variables. For the study, data was collected from 265 respondents and the results revealed that information quality and privacy are the important dimensions of e-service quality affecting loyalty. The study further established that gender does not moderate the relationships among variables. The study has also discussed the practical implications of the proposed model.

Keywords: *Satisfaction, Loyalty, Service Quality, Gender, India.*

INTRODUCTION

After the replacement of the barter system of payment with currency, Internet revolution has been considered as the next biggest change to hit the businesses (Reichheld et al., 2000). The exponential growth in the internet users has poked companies to use online channels for running the business along with the traditional channels. Literature provides enough evidences about the

success of vendors using e-commerce platforms with high class customer interface quality (Kim & Moon, 1998; Kumar et al., 2004). Hence, e-retailers are under constant pressure to provide unbeatable online service quality not only to uphold their existing customer base but also to convert customers into advocates (Gurau, 2003). Additionally, a global survey conducted by PwC (2014) suggested that online shoppers need reasons for sticking with a particular retailer. Various studies reported statistically significant impact of online service

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quality on satisfaction, loyalty, and word of mouth (Dai et al. 2011), but disagreement among these studies have been found with respect to direction and the magnitude of the measurement constructs of e-service quality (Carrillat et al., 2009; Roberts et al., 2003). Additionally, some studies have found the impact of socio-demographic factors on e-loyalty (Mittal & Kamakura, 2001). Against this backdrop, it becomes of paramount importance to study the relationship of service quality dimensions of e-retailing and loyalty. Therefore, the present study has two-fold objectives:

- a) to examine, the mediation of satisfaction on the relations of service quality dimensions and loyalty in e-retailing and
- b) to study the effect of gender on the relations of e-retailing service quality dimensions and loyalty via e-satisfaction.

CONCEPTUAL FRAMEWORK OF THE STUDY

e-retailing Service Quality

Previous studies defined service quality in e-retailing context as meeting customer's expectation without having any human to human interaction (Aladwani & Palvia, 2002; Francis, 2007). Cronin & Taylor (1992) established that in e-retailing, service quality affects satisfaction, repurchase intentions, and shopping experience. Service quality in e-retailing context may be assessed through number of dimensions such as easiness of navigation, information search, level of security/privacy for the customers, and customer interactions (Lee & Lin, 2005). Information quality (IQ) in e-retailing context, refers to accuracy, completeness, timeliness, and effective presentation of information (Nelson et al., 2005; Wolfinbarger & Gilly, 2003). The websites with high level of IQ enable its customers to retrieve adequate, updated and authenticated information. Functionality (FUN) in e-retailing websites is one of the vital dimensions of e-service quality. It helps in attracting and retaining the traffic on the website. Availability of website for business, ease of navigation, quick loading of pages, smoothness in

navigation are some of the e-retailing websites' features which improves the online shopping experience, satisfaction, and loyalty (Ranganathan and Ganapathy, 2002). While making any transaction using online platform, privacy is considered as one of the main concerns of the shoppers. Privacy (PRI) has been defined as customer's perception of keeping his/her information confidential by the website/e-retailer and not to be shared with third party without permission (Zeithaml, 2002). In the absence of privacy, people may not use online platforms for shopping (Miyazaki & Fernandez, 2001; Ranganathan & Ganapathy, 2002) and to instill their confidence in online shopping visual signals on the website can be helpful (Yang and Fang, 2004). On the basis of above arguments, the study considers IQ, FUN, and PRI are the important dimensions of service quality in e-retailing context.

Satisfaction and Loyalty in e-retailing

For any business customer satisfaction is very important (Shankar et al., 2000) and in literature it has been defined as a cumulative construct. Customer satisfaction is measured by comparing perceived performance of the product with user's expectations regarding that product at any point of time and it also get affected by prior purchase experiences (Anderson & Srinivasan, 2003). Whereas, few studies have reported loyalty as the outcome construct of the e-satisfaction (Dick & Basu, 1994; Fornell, 1992). Loyalty is seen as customer's favourable attitude towards a company or a product, followed by repurchase behaviour (Anderson & Srinivasan, 2003). Valvi & Fragkos (2012) observed that the loyalty can be affected by e-service quality directly (Bansal & Taylor, 1997) or indirectly (Gotlieb et al. 1994). However, in e-retailing context, it has been found that, customer satisfaction directly impact loyalty (Dabholkar, 1995). Therefore, the study hypothesize the following

H1a. SAT significantly mediates IQ and LOY.

H1b. SAT significantly mediates FUN and LOY.

H1c. SAT significantly mediates PRI and LOY.

Gender as Moderator

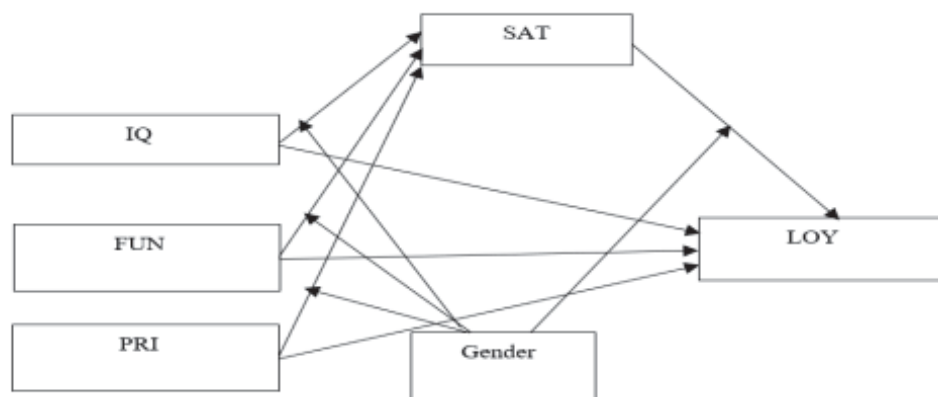
Based on the previous studies, the present study includes gender as a moderator variable. Because of the individual differences, not every customer is prone to be loyal. Thus, it raises a question regarding influence of perceived e-service quality dimensions on LOY for male and female. In literature, there is lack of explicit research studies which address the gender difference in online shopping (Dittmar et al., 2004; Cyr and Bonanni, 2005). However, few studies established the gender differences for e-shopping regarding compatibility, intricacy, and result demonstrability (Van Slyke et al., 2002).

Furthermore, studies showed gender differences in beliefs related to design, trust, satisfaction, and loyalty of a website (Cyr and Bonanni, 2005).

On the basis of above mentioned discussion the following battery of hypotheses are framed:

- H 2a.** There is moderating effect of gender between IQ and LOY through SAT.
- H 2b.** There is significant moderating effect of gender between FUN and LOY through SAT.
- H 2c.** There is significant moderating effect of gender between PRI and LOY through SAT.

Figure 1 : The Research Model



Source: Author's Own work

MATERIALS AND METHODS

Research Design

The present study proposes various hypotheses to test the relationships among IQ, FUN, PRI, and LOY. Additionally, the mediating role of SAT and the moderating role of gender on the relationships of the variables has been studied. Figure 1 exhibits the relationships among variables.

Measures

The scales used to quantify the constructs, borrowed from the existing scales with minor modifications to

benefit the context of the study. IQ reflects the consumers' concerns about the information shared on the website, which shoppers believe should be clear, complete, and updated (Wolfenbarger and Gilly, 2003) scale. The items to study FUN consists of website quality features such as fast loading of pages, easy navigation, proper working of website, speed of navigation etc. adapted from Yoo and Donthu (2001). Various aspects of PRI, like sharing information with third party, collecting irrelevant information while completing transaction, control over unauthorised access are based on the scale suggested by Collier & Bienstock (2006). The SAT and LOY scales are derived from the relevant literature (Parasuraman et al., 2005; Janda et al.,

2002). 5-point scale is used to record the responses. The second part of the questionnaire solicited demographic information, frequency and experience of e-retailing of the respondents.

Participants and Procedure

To test the relationships among variables, data was collected through self-administered survey method among the young population (18-24 years) of Delhi and National Capital Region of India. Before collecting the final data, a pilot study on 40 online shoppers was done. The questionnaire was fine-tuned on the basis of the respondents' suggestions. A total of 300 participants filled the questionnaire, and 248 (82.66 percent) were found to be usable. Given the fact that by 2020, India is expected to have 34.33 percent share of youth (15-24) in total population (MOSPI, 2017), and they are regular online shoppers (Statista, 2015), viewed as an appropriate segment for the study. The sample consists of 59 percent

male; age ranging between 20-24 (90 percent), and undergraduate students (78 percent). Additionally, 65 percent respondents are highly experienced e-shoppers with more than 2 years of online shopping and 61 percent respondents complete at least one transaction monthly.

RESULTS

Reliability and Validity of the Instrument

Table 1 shows CR, AVE, MSV and ASV values achieved for all the variables measured through instrument. All the variables have CR value more than 0.7 which ensures the reliability of the instrument (Hair et al., 2015). Similarly, AVE values of all the variables are greater than the threshold value of 0.5 suggesting the convergent validity of the instrument. Since all the variables have higher value of AVE than MSV and ASV values, the instrument proves to achieve discriminant validity.

Table 1: Measures of Reliability and Validity

	CR	AVE	MSV	ASV	SAT	FUN	IQ	PRI	LOY
SAT	0.892	0.637	0.471	0.271	0.723				
FUN	0.712	0.534	0.379	0.282	0.528	0.669			
IQ	0.787	0.579	0.398	0.225	0.546	0.526	0.785		
PRI	0.783	0.572	0.265	0.153	0.190	0.226	0.242	0.650	
LOY	0.894	0.525	0.461	0.321	0.686	0.351	0.474	0.254	0.721

Source: Author's Own Work

Also, the measurement model achieved reasonably good fit as all the parameters such as Chi-square/d.f. = 1.734, GFI = .894, AGFI = .872, CFI = .896 and RMSEA = .054 meet the threshold value (Hair et al., 2015).

The Structural Model

On the basis of hypothesized relationship, the structural model was built. Figure 2 demonstrates the results of the model assessed through path diagram. The model indices exhibit improved model fit (Chi-square /d.f. = 2.993, GFI = .897, AGFI = .895,

CFI = .921 and RMSEA = .048) as compared to structural model and also found within the recommended levels (Bagozzi, Yi, & Phillips, 1991). However, slight difference was found between the theoretical model and the measurement model.

e-satisfaction, e-service Quality Dimensions, and e-loyalty

To assess the mediation of SAT, first, the direct effects of e-service quality dimensions on LOY are measured. All the three dimensions of e-service quality i.e. IQ, FUN, and PRI are found to have

significant positive direct relationship with the LOY (Table 2). Further, in the presence of SAT, the relationships are again examined and results exhibit that all three dimensions reported significant relationships with LOY while having SAT as

mediator variable, suggesting partial mediation effect of SAT on the relationships of the variables. Thus, results of this study support the theory underneath the model, hence leads to acceptance of H1a, H1b, and H1c.

Table 2: Results of Hypotheses Developed for the Study

Hypothesis	Total effects	Direct Effects	Indirect Effects	Mediation Type	Result
H1a	.426**	.145 **	.281***	Partial Mediation	Accepted
H1b.	.126 **	.128**	.288***	Partial Mediation	Accepted
H1c.	.138**	.131**	.007***	Partial Mediation	Accepted
Significance at: .05**, .001***					

Source: Author’s own work

Gender and Relationships of Variables

Table 3 summarizes the influencing role of gender on the relationships of the variables under study. Results indicate for IQ dimension, there is significant moderating role of gender i.e. male perceive

mediating role of SAT on the relationship of IQ and LOY differently than their female counterparts resulting in acceptance to H2a. However, for FUN and PRI dimensions, both male and female perceive same level of mediation effect of SAT thus, leading to non-acceptance of 2b and 2c.

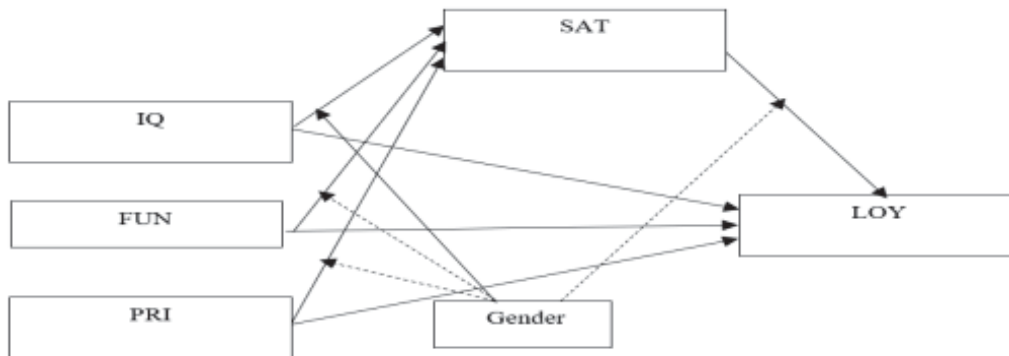
Table 3: Results of Hypotheses Developed for the Study

Hypotheses	Total effects		Direct Effects		Indirect Effects		Result
	Male	Female	Male	Female	Male	Female	
H2a.	.383**	.441***	.057#	.196**	.326**	.245**	Accepted
H2b.	.138#	.127#	-.149#	-.161#	.288**	.278**	Not accepted
H2c.	.089 #	.159#	.086#	.152#	.003#	.008	Not accepted

Source: Author’s compilation

Notes: Significance at: .05**, .001***, # = N.S.

Figure 2 : Outcome framework of the Study



Note: Dotted lines show Non-Significant Relationships

Source: Author's Own work

DISCUSSION AND CONCLUSION

With the advent of online retailing, repeat purchases by the customers is the ultimate objective of the online retailers, hence, loyalty gained the importance in academic research as well (Caruana & Malta, 2002). Loyalty is not only is an assurance towards repeat purchase by the customers but it also affects the profitability and growth of a business (Reicheld, 2003). The results state that SAT has mediating role on the relationships of all the constructs of the model. IQ validate the mediating role of SAT (Szymanski & Hise, 2000; McKinney et al., 2002) on its relationship with LOY. Results indicate that sufficient information provided on a website is helpful in comparing and buying the products online. McKinney et al. (2002) established that a website may loose its customer base if it does not present quality information to its customers.

FUN dimension also exhibit the impact on LOY through SAT hence establishing the fact that e-retailers can manifest unique shopping experience by extraordinary website functionality and interactivity. Adequate navigation functionality not only enhance satisfaction but also contribute towards customer loyalty (Akalamkam & Mitra, 2017; Birgelen et al., 2005).

Further, online shoppers are concerned about the data maintained by the websites of their customers and the shoppers want to share their purchase detail with only those e-retailers who show strong security system. Privacy and security aspect of the e-service quality may not be considered as an additional feature of a website rather it is the fundamental feature of a website for doing any transaction on online platform. Few earlier studies also established their findings on similar lines (Ziaullah et al. 2015; Wolfenbarger & Gilly, 2003).

In addition to this, results reveal that male and female perceive mediating effect of SAT on the relationship of IQ and LOY differently. It has been found that male do not believe that IQ directly impacts LOY while female are of contrast view. For them, IQ has both direct and indirect impact on LOY. It has been found that female tend to rely more on information available on website than men before making any decision regarding shopping hence there is more need to present relevant product information in a better way on websites (Cyr and Bonanni, 2005). Furthermore, both genders indicate that they consider mediation of SAT on the relationship of FUN and PRI on LOY. As more and more companies are shifting towards omnichannel strategy, individuals are having more experience with the electronic medium of shopping resulting in

narrowing down the role of gender as a moderator. The findings of the study also get support of Harnandez et al. (2011).

To conclude, the present study establish that consumers have complex buying behaviour and it is influenced by a variety of factors. Consumers see online shopping platforms as an alternative to offline shopping with some added level of convenience. Therefore, websites have to compete not only with each other but also with the offline retailers to attract and retain the customers.

MANAGERIAL IMPLICATIONS

Improving e-service quality is a continuous process. The study suggests that online businesses need to improve more on basic features like in-depth, relevant, and updated information about products on its website. A formal policy of content development should be pronounced. It will also help the online buyers to minimize their doubts about the products because of the inability to physically inspect a product. Furthermore, the perceived lack of security can be a stumbling block in the minds of the consumers. Customers are concerned about websites that do not provide clear privacy and security related statements. Hence, companies can assure customers about the privacy of their data by using encrypted algorithms. A more secure payment method backed with transaction insurance can be provided by the online retailers in order to guarantee the financial security and win the trust of the buyers. If possible, the websites of the retailers should be designed in such as way that number of steps can be reduced for completing a transaction. These basic measures are perhaps be helpful to attract customers and to convert visitors into shoppers.

LIMITATIONS & FUTURE STUDIES

The present study also bears some limitations hence caution is required before generalizing the results of the study. One apparent limitation is the use of only young graduate shoppers represented as online

consumers. However, the practice of using of student/young samples is prevalent in digital commerce (Cyr and Bonanni, 2005; Wolfinbarger and Gilly, 2003). Another potential limitation is that no formal procedures were used to develop the scales for the constructs. Items generation based on literature review hinder the identification of novel dimensions (Collier and Bienstock, 2006). Future studies may consider age, education, income (Clemes et al., 2014), e-retailer and individual distinctiveness features (consumers' life style, attitude) as moderators.

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