Effects of e-Payment Security and Understanding Levels of e-Shopping on Service Quality

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Abstract

Debating e-Service Quality deeply in connection with the previous work namely online Buyer characteristics effecting e-Service Quality, the results reveal that Understanding level of e-Shopping among Online Buyers has significant dependency on Service Quality dimensions. Out of eight Service Quality dimensions four Service Quality dimensions are found to be causing significant levels of dependency effects on Understanding level of e-Shopping. Also, Perceived Security on e-Payment has significant dependency on Service Quality dimensions. Out of eight Service Quality dimensions four Service Quality dimensions are found to be causing significant levels of dependency effects on Perceived Security on e-Payment among Online Buyers. Further, three out of four Service Quality dimensions are positively related with Perceived Security on e-Payment, the Service Quality dimension Compensations is identified as Inversely Related with Perceived Security on e-Payment among Online Buyers.

Keywords: *Service Quality, E-Service Quality Online buying.*

Introduction

Service Quality

Service is one of the important tools and provides benefits to the service providers as well as to the consumers. During delivery, service provides benefit to both parties by interchanging the value between them (Caro and Garcia, 2007). The choice of service firm from the customer is based on various factors such as exact service need, brand image of the provider, cost of service and word of mouth on the provider (Parasuraman et al., 1985). While these factors contribute to the choice of the service firm, the customer retention strategies among the service providers mostly revolving on the aspects of establishing personal bond and by ensuring higher quality levels of the services offered (Parasuraman et al., 1993). However, it's a challenging task to measure the quality of the service due to its characteristics of being intangible and heterogeneity. Further, production and consumption of the service take place at the same time and hence, its Quality judgment is instantaneous resulting either in retention or loss of a customer (Choi et al., 2013).

E-Service Quality

From the perspective of Service Quality measurements in e-Services, the Quality levels of the communication between customer and e-Service providers' website constitute a major consideration in the measurement scheme. The inclusion of the resultant operations initiated due to such communications in e-Service Quality measurement is something that warrants understanding of the nature and attributes

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constituting the service (Dolatabadi and Gharibpoor, 2012). More specifically, some of the services sold online are consumed at the different physical facilities like hotels, transportation services, amusement centers and personal care centers; for these services if e-Service facility is offered, the corresponding e-Service Quality measurement include the communication levels between customer and e-Service providers' website without considerations for the resultant operations initiated due to such communications.

E-Service Quality Dimensions

The complexities in understanding the nature and the attributes of service necessitate thorough understanding of Service Quality dimensions that are unique to e-Services. While the concept of Service Quality is extended and presented in the conceptual underpin on e-Service Quality, the difference in the contextual nature of e-Services from Services result separate set of Service Quality dimensions that are unique toe-Services alone. Thus, the e-Service Quality dimensions that reflect the e-Services framework are Efficiency, System Availability, Fulfillment, Privacy, Responsiveness, Compensation and Contact (Parasuraman et al., 2005). The details of the aspects constituting these 7 e-Service Quality dimensions are as follows;

1. Efficiency

Efficiency in e-Services deals with the facilities to access the e-Servicing portal with high speed enabling ease of use. Understandably these facilities come in the form of website design, which should ensure efficient handling of the online customer. While services are distinguished with product mostly on the basis of intangibility, Website design constituting an e-Service facility is the major tangible aspect of e-Service Quality. In this regard, the works of Zeithaml et al. (2002) provides the strong basis to compare website of e-Servicing portal with that of storefront of a servicing counter in equivalent physical model.

2. System Availability

System availability in e-Services deals with the technicalities constituting correct functioning of the website of the e-Servicing portal. The importance of correct functioning of the website of e-Servicing portals could be noted through the works of Aladwani and Palvia (2002) that reports on the Online Shoppers abandoning a website when they encountered difficulties in finding required information. Thus, the aspects related to System availability should ensure correct functioning of the website with search options for products or services offered through the specific e-Servicing portal.

3. Fulfillment

Fulfillment in e-Services deals with the ability of the e-Servicing portals to fulfill promises related to order delivery and item availability. However, fulfillment component of e-Services takes up different methods based on the parameters of the service components such as intangibility, heterogeneity, perishability, inseparability of production and consumption (Lovelock and Gummesson, 2004). Also, the e-Servicing portal that deals with product selling have to adopt efficient physical delivery options for ensuring Fulfillment component of the e-Services.

4. Privacy

Privacy in e-Services deals with the ability of the e-Servicing portals to ensure safe transactions and protecting customer information. While existing web technologies ensure Secured Electronic Transactions (SET), the possibility of misuse and intrusion into the systems cannot be ruled out (Rajmohan and Sayel, 2011). Hence, it becomes very important for e-Servicing portals to operate with superior technologies devised with control mechanisms to prevent misuse through human elements.

5. Responsiveness

Responsiveness in e-Services deals with the ability of the e-Servicing portals on effective handling of problems encountered online and online provisions to ensure hassle free returns. Some of the effective functioning of e-Servicing portals on theses aspects include answering online shoppers' queries, providing FAQ (Frequently Asked Questions) section in the web site, Providing click to call and click to chat features in the website (Standing, 2009).

6. Compensation

Compensation in e-Services deals with the ability of the e-Servicing portals to compensate for the problems encountered by the online Shoppers. However, the methodology of the compensation is based on the parameters of the service components such as intangibility, heterogeneity,

perishability, inseparability of production and consumption (Lovelock and Gummesson, 2004). Also, the e-Servicing portal that deals with product selling have to adopt efficient product return procedure under the circumstance of Online Buyer encountering dissatisfaction and product defects.

7. Contact

Contact in e-Services deals with the ability of the e-Servicing portals to ensure assistance through systems features, telephone and online representatives. Some of the effective functioning of e-Servicing portals on theses aspects include System provisions to send instantaneous e-mails on order confirmation and provisions to inform customers through Short Messaging Service (Standing, 2009).

Review of Literature

E-Service Quality in e-Retailing

The importance of e-Service Quality aspects in e-Retailing is emphasized in the earlier studies from the perspectives of channel partners, customer intentions, customers' choice of the channel and Overall quality realizations in e-Retailing process. Also, the e-Service Quality aspects in e-Retailing found in the previous studies provide foundation for e-Service Quality framework in e-Retailing context. Many earlier studies have deployed e-Service Quality framework to understand customers' satisfaction, loyalty, trust and value related aspects in e-Retailing context.

To understand the difference between the perceptions of service provider and customer towards e-Service Quality, Stiakakis and Georgiadis (2009) have conducted a study among respondents of e-business in Greece and identified a few important dimensions and attributes of e-Service Quality. Based on the survey data collected the results of the above study shows that service providers perceptions are in contrast with customers' perceptions in e-Service Quality dimensions. While establishing validity of the items constituting the e-Service Quality scale, the above study reveals the shortcomings on the part of the service providers towards differentiating e-Service Quality criteria in between B2B and B2C e-transactions. Thus, the above study proves the applicability of e-Services dimension framework more towards the customer centric aspects than that of the other constituent of the value chain. Further outcomes of the above study suggest the need to develop separate set of e-Service Quality

dimension and measurement scale adoptable to B2B model.

Towards understanding the influence of service recovery and perceived justice on recovery satisfaction and consumer loyalty, Fan et al. (2010) found through an experiment that perceived distributive justice positively affects recovery satisfaction and positive word-of-mouth and also procedural justice has a positive impact on recovery satisfaction and repatronage intention. The above study compares online and offline service failure recovery and find some different effects of consumers' perceived justice under online and offline setting. While contributing to the knowledge of e-Retailing service recovery aspects, the above study provides several suggestions for online retailers to improve current service recovery policies and procedures.

The importance of services marketing mix such as physical environment, people and process on delivering the retail Service Quality was examined by Yarimoglu (2014), in which the implications to the retailers were provided. The above study advises the retailers to improvise more on services marketing tools and services marketing mix (7P) to establish Service Quality on retail operations. Further, the above study questions the validity of standard Service Quality models on e-Retailing format as they were derived on the outcomes established through physical retailing activity. This confirms the requirement for separate Service Quality models to assess Service Quality aspects in e-Retailing.

Towards identifying the factors constituting e-Service Quality in e-Retailing, Yang et al. (2003) conducted a study among 1078 consumers experienced in online shopping and identified fourteen factors such as responsiveness, credibility, ease of use, reliability, convenience, communication, access, competence, courtesy, personalization, continuous improvement, collaboration, security/privacy and aesthetics contributing to e-Service Quality framework. Among the identified factors, the above study finds that the factors responsiveness, credibility, ease of use, reliability and convenience are significantly contributing to the satisfaction of Online Buyers.

To find out the factors related to e-Service Quality, Long and McMellon (2004) conducted a study towards developing a multidimensional measure of e-Service Quality on the basis of customer experience and compared it with SERVQUAL scale. The result of the above study shows that, the new

measures turn out to be less dependent on interpersonal interactions and more dependent on technologically related aspects. Further, the above study observes that the differences found between consumers' expectations and perceptions have effects on e-Retailers due to lower switching cost in online environment and ease of shifting loyalty.

To get awareness about the perception of consumers towards e-Service Quality and their satisfaction, Yang et al. (2004) identified six important dimensions of e-Service Quality such as reliable/prompt responses, access, ease of use, attentiveness, security and credibility resulting customer satisfaction. The findings of the above study reveal that out of six identified factors, three factors such as reliable/prompt responses, attentiveness and ease of use, have significant impacts on both customers' perceived overall Service Quality and their satisfaction. While causing significant effect on overall Service Quality the factor access has insignificant effects on customer satisfaction in e-Retailing.

To understand how customers judge Service Quality in e-Retailing, Collier and Bienstock (2006) conducted a study and developed a conceptual framework of Service Quality including the process, outcome and recovery dimensions. The result of the above study shows that the factor process has positive effect on outcome quality of the transaction and the quality of the transaction's outcome subsequently affects satisfaction evaluations. Further, the above study finds that the method of handling the service recovery under the circumstance of the problem is identified with positive impact on satisfaction which has mediation effects on behavioral intentions.

In an effort to identify the problems faced by the Online Buyers in e-Retailing, Canarslan (2013) conducted a study on the basis of e-Service Quality dimensions and identified that the dimensions such as privacy and system availability were not the sources contributing to the problems. However, the above study points to the e-Service Quality dimensions fulfillment and certain shortcomings in website layout as the major sources of problems encountered by the Online Buyers.

To examine the relationship between e-Service Quality, online shopping and buying behavior, Raje and Khanna (2012) identified five important factors such as web site design, reliability, responsiveness, trust and personalization constituting e-Service Quality framework. The results of the above study show that all these factors have significant influence on overall e-Service Quality realized by the Online Buyers. Further, the above study observes the technology readiness of the Online Buyers as the major factor towards realizing e-Service Quality followed by better online shopping behavior.

To explore the possibility of culture as a source of variations in realizing e-Service Quality among Online Buyers, Pejvak et al. (2012) have conducted a survey spanning two different regions comprising Europe and Middle East. The results of the above study indicate less specific aspects on culture affecting the realization of service offered through e-Retailing. However, the above study reveals the variations in the operational aspects of e-Retailing between the two regions. For instance, shortcomings in the perceived security of e-transactions, perceived lack of transparency and Internet infrastructure related aspects have been identified to be causing significant variations between Europe and Middle East.

The variation between the retailers selling luxury products and other types of mass retailing is observed to be significant in the physical aspects of these stores. However, the works of Ikeda (2013) observes insignificant variations between e-Retailers selling luxury and mass products on the basis services, return policies, privacy, contact methods, design and organization of websites. Based on the measurement scales of SERVQUAL and E-S-QUAL, the above study identifies that the luxury segment e-Retailers rely on their product attribute sold in physical facilities towards their positioning strategies in e-Retailing ventures.

In an effort to understand the Service Quality dependency on certain other factors in e-Retailing format, Salehi et al. (2013) have conducted a study among Malaysian e-Retailing consumers and reported factors such as Pragmatic Experience, Sociability Experience, Usability Experience and Hedonic Experience as important contributors to Service Quality. The above study establishes that these four factors contributes 63 percent variations in the Perceived Service Quality on e-Retailing and thus, confirms the strong dependency of Service Quality on those four factors.

To recognize the inter-related factors that lead to the Service Quality of m-commerce, Salameh and Hassan (2015) identified that overall perceived Service Quality in m-Commerce is determined by three groups of dimensions. The first group comprises dimensions such as reliability, responsiveness, trust, personalization, perceived risk and perceived cognitive control. The second

group comprises Information Quality dimensions such as content usefulness and content adequacy and the third group comprise System Quality dimensions such as ease of use, accessibility, interactivity and perceived website innovativeness.

The finding of the above study shows that the overall perceived Service Quality will have an impact on satisfaction and satisfaction will consequently shape the behavior of the customers in mobile commerce environment.

Research Methodology

Methods and Objectives

Objective	Hypothesis
To identify the effects of Service Quality dimensions on Understanding levels of e-Shopping and Perceived Security on e-Payment among Online Buyers.	**H1:** Understanding levels of e-Shopping does not depend on SQ dimensions. **H2:** Perceived Security on e-Payment does not depend on SQ dimensions.

Sampling

On the basis of Social Articulation levels, three segments that are identified as relevant sampling areas for the purpose of this work were located on random basis. They are Metropolitan Cities, Other Cities and Sub Urban places. Among the metropolitan cities in India, the highest levels of Social Articulation were noted in cities like Mumbai and Delhi out of which Delhi as one of the sampling places is finalized on random basis. The next higher levels of Social Articulations were noted in 2nd tier cities which are mostly the State capitals in India. Out of these cities Srinagar which is a capital of Jammu and Kashmir State as one of the sampling places is finalized on random basis. The thresh hold levels of Social Articulation that can sustain the diffusion of innovations like e-Retailing could be located among various suburban places within India. Out of these places, Chidambaram as one of the sampling places is finalized on random basis.

The process of locating Online Buyers in the identified sample areas is done by first identifying the logistics partners of various e-Retailers in India. In this regard 6 courier companies that are operating in all the three identified sample areas were finalized. These 6 companies almost serve 95 percent of the e-Retailers as logistics partners in India. The identified logistics partners of various e-Retailers were contacted through their corporate headquarters and nature and the objectives of this study were well explained to them. Out of these 6 courier companies 5 have come forward to share the details of the Online Buyers they have served in the last one year. These 5 companies were found to have served 8700 Online Buyers in all the three sampling areas in the last one year on repeated as well as on one time basis.

Out of these 8700 shortlisted profiles, 3500 is from Delhi, 2700 is from Srinagar and 2500 is from Chidambaram. On random basis 900 profiles were identified representing 300 each from the above mentioned sampling areas and questionnaires were distributed to those 900 Online Buyers. Subsequently the filled up responses were collected back and used for the Analysis constituting the present study. Total number of valid filled up responses is as follows:

- 200 in Delhi (>5% of the total Profiles in Delhi)
- 271 in Srinagar (>5% of the total Profiles in Srinagar)
- 232 in Chidambaram (>5% of the total Profiles in Chidambaram)

Thus, the total usable sample size is 703 which are well above the five percentages of the total 8700 profiles identified as the prospective samples for the present work.

The present study is to recognize the existing perceived Service Quality among Online Buyers in e-Retailing based on Online Buyer Characteristics such as Perceived Security on e-Payment and Understanding levels of e-Shopping. More specifically the perceived Overall Service Quality in e-Retailing is viewed as a function of seven Service Quality dimensions such as Efficiency, System Availability, Fulfillment, Privacy, Responsiveness, Compensation and Contact. Hence, a descriptive research design was followed in the present work and survey was conducted using a well structured questionnaire among Online Buyers for the purpose of collecting primary data constituting the present work.
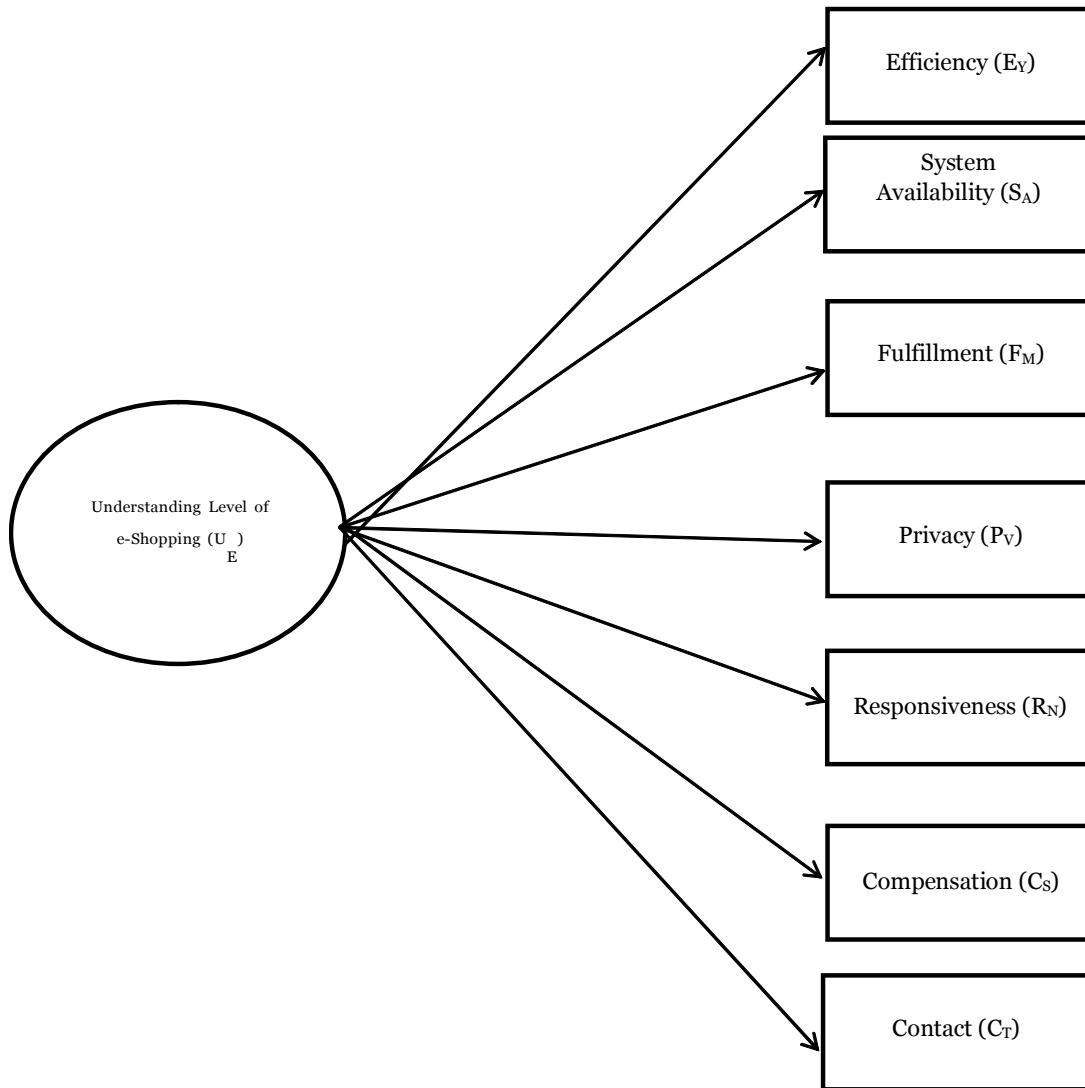
Effects of Service Quality dimensions on Understanding levels of e-Shopping

The research model to find out Effects of Service Quality dimensions on Understanding levels of e-Shopping is shown in Figure-1, where the details

of dependent and independent variables are shown. The mathematical representation of this model is shown in the equation-1 as multiple regression model with necessary symbols assumed on variables constituting the model.

Dependent variable   **Independent variable**
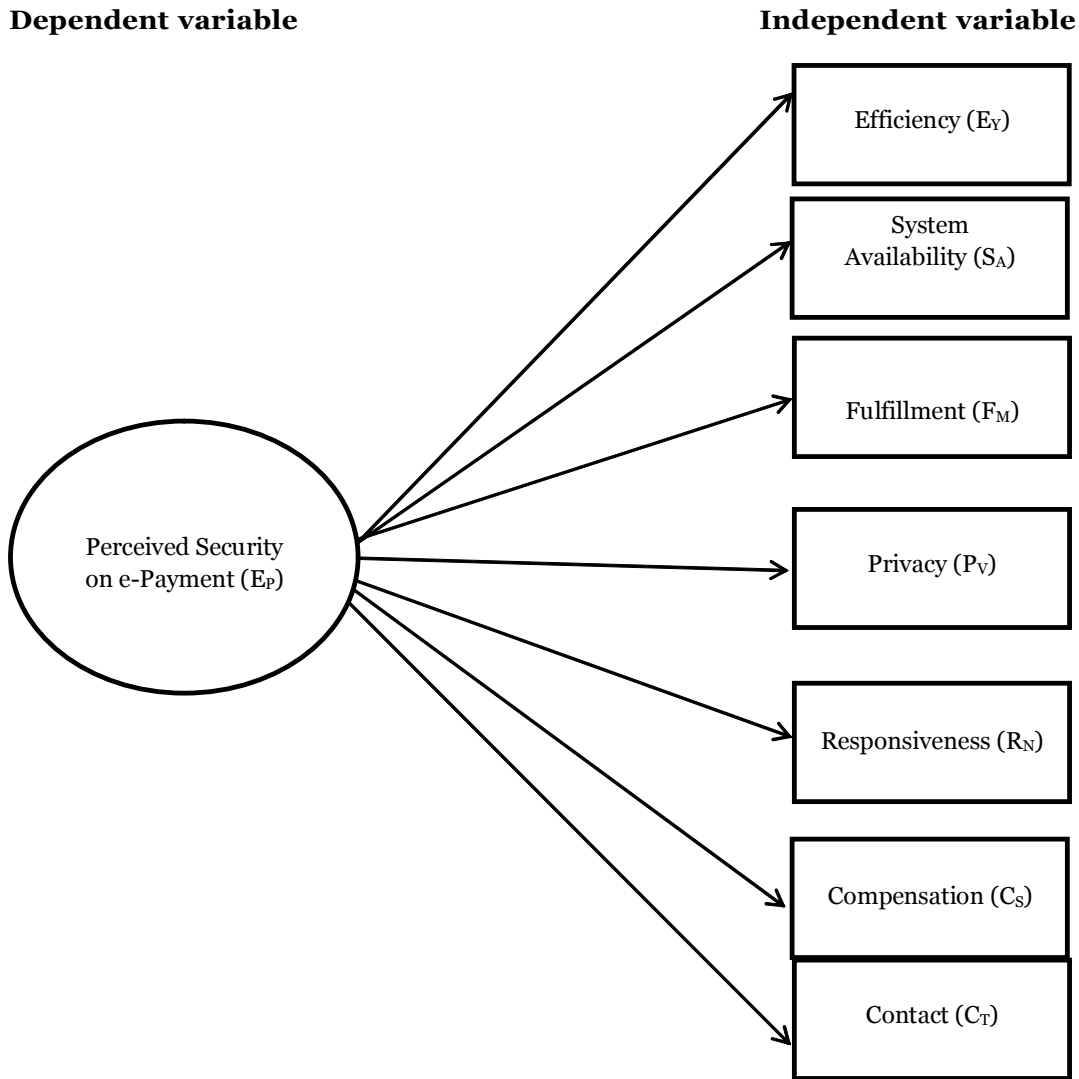

Figure 1: Model to Find out Effects of Service Quality Dimensions on Understanding Levels of e-Shopping

Effects of Service Quality Dimensions on Perceived Security on e-Payment

The research model to find out effects of Service Quality dimensions on Perceived Security on

e-Payment is shown in Figure-2, where the details of dependent and independent variables are shown.

The mathematical representation of this model is shown in the equation-2 as multiple regression model with necessary symbols assumed on

Dependent variable   **Independent variable**

Figure 2: Model to Find Out Effects of Service Quality Dimensions on Perceived Security on e-Payment

variables constituting the model.

$$U_{E} = \beta_o + \beta_1 E_Y + \beta_2 S_A + \beta_3 F_M + \beta_4 P_V + \beta_5 R_N + \beta_6 C_S + \beta_7 C_T + \mu \qquad (1)$$

Where,

U_E :   Understanding levels of e-Shopping

Also,

$$E_{P} = \beta_o + \beta_1 E_Y + \beta_2 S_A + \beta_3 F_M + \beta_4 P_V + \beta_5 R_N + \beta_6 C_S + \beta_7 C_T + \mu \qquad (2)$$

Where,

E_P :   Perceived Security on e-Payment

Further, the other details in equation 1 and 2 are as follows

E_Y : Service Quality dimension Efficiency

S_A : Service Quality dimension System Availability

F_M : Service Quality dimension Fulfillment

P_V : Service Quality dimension Privacy

R_N : Service Quality dimension Responsiveness

C_S : Service Quality dimension Compensation

C_T : Service Quality dimension Contact

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$: Regression coefficient which is dependent normal variable with zero mean and corresponding variance

β_o : Constant

μ : Standard error

Results and Discussions

Construct Validity

The standardized scale for measuring e-Service Quality in e-Retailing was used but the growing technicalities associated with online facilities gives scope further enhancements of the scales with items representing new features of online systems. Also, a few studies have raised construct validity issues on e-Service Quality measurement scale used in the present work (Rossiter, 2009; Cronin and Taylor, 1992). Hence, to establish construct validity for the Service Quality dimensions, Exploratory Factor Analysis (EFA) on the basis of Principal Component Analysis, Kaiser-Meyer-Olkin measure of sampling adequacy and test of sphericity were performed. The result of this factor analysis shows that six out of seven dimensions got extracted and loaded in single factor. The remaining dimension namely Service Quality Contact got extracted and loaded in two factors. After examining the details of the items loaded in each of the factor, the factor 1 was named as 'Service Quality Contact provision' and the factor 2 was named as 'Service Quality Real-time contact'.

Understanding Levels of e-Shopping Dependency with Service Quality Dimensions

The dependency effects of Understanding levels of e-Shopping on Service Quality dimensions like Service Quality Efficiency, Service Quality System Availability, Service Quality Fulfillment, Service Quality Privacy, Service Quality Responsiveness, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact among Online Buyers in e-Retailing is defined in hypothesis-1, taken up and its results are shown in the table-1, as an outcome of multiple regression model conceptualized. From the results, it can be inferred that the F value of 94.593 is found to be significant at 5 percent level and hence, the hypothesis-1 is rejected. These results suggest that Understanding levels of e-Shopping depends on the group of 8 Service Quality dimensions in e-Retailing. Further, the adjusted R square value of 0.722 from the table-1 indicate that 72 percent of Understanding levels of e-Shopping among Online Buyers significantly depend on these group of 8 dimensions of Service Quality in e-Retailing. Also the 't' values of 12.035, 4.892, 9.300 and 2.315 corresponding to Service Quality dimensions such as Service Quality Efficiency, Service Quality Fulfillment, Service Quality Privacy and Service Quality Responsiveness are found to be having significant effects on the model conceived.

More specifically Service Quality Efficiency among Online Buyers is found to be having significant superior effect on Understanding levels of e-Shopping with highest value of 12.035. This clearly confirms the positive effects of well-organized e-Retailing websites with features like ease of use and navigation contributing towards enhanced Understanding levels of e-Shopping in e-Retailing format.

Similarly, Service Quality Privacy among Online Buyers causes significantly good effect on Understanding levels of e-Shopping in e-Retailing with the next higher t value of 9.300. This clearly confirms the positive effects of e-Retailing websites built with the features that can ensure Privacy of user web behavior, security of e-transactions and Privacy of user personal details contributing towards enhanced Understanding levels of e-Shopping in e-Retailing format.

The 't' value of 4.892 obtained for the Service Quality Fulfillment significantly causes considerable effect on the Understanding levels of e-Shopping in e-Retailing. This confirms the positive effects of e-Retailing websites with order tracking feature and accurate listing of available and out of stock items contributing towards enhanced Understanding levels of e-Shopping in e-Retailing format. Also, the ability of the e-Retailer to deliver the products within promised and satisfying time frame is found to be crucial in ensuring trust worthiness of the e-Retailer, which can further augment the Understanding levels of e-Shopping in e-Retailing format.

The Service Quality Responsiveness with 't' value of 2.315 also causes significant substantial effect on Understanding levels of e-Shopping in e-Retailing. This confirms the positive effects of e-Retailing websites that provide real time support on managing failed transactions and contingency problems. In addition to these features, the ability of the e-Retailer to ensure hassle free product return procedure contributes towards enhanced Understanding levels of e-Shopping in e-Retailing format.

The remaining 't' values of 0.076, 0.168, 1.382 and 0.709 corresponding to the dimension of Service Quality such as Service Quality System Availability, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact are not found to be significant at 5 percent level. Hence, it can be inferred that the Understanding levels of e-Shopping in e-Retailing does not depend significantly on these Service Quality dimensions.

Table 1: Results of the Regression for Hypothesis-1

Model	Unstandardized Coefficients		Standardized Coefficients	t	F	Adjusted R value
	B	Std. Error	Beta			
(Constant)	0.060	1.339		0.045		
Service Quality Efficiency	0.569	0.047	0.386	12.035*		
Service Quality System Availability	0.003	0.043	0.002	0.076		
Service Quality Fulfillment	0.154	0.032	0.152	4.892*		
Service Quality Privacy	0.712	0.077	0.302	9.300*	94.593*	0.722
Service Quality Responsiveness	0.137	0.059	0.067	2.315*		
Service Quality Compensation	0.006	0.039	0.004	0.168		
Service Quality Contact provision	0.103	0.074	0.045	1.382		
Service Quality Real-time contact	0.059	0.083	0.020	0.709		

Dependent Variable: Understanding Levels of e-Shopping; * Significant at 5 Percent Level;
Source: **Computed from Primary Source**

Perceived Security on e-Payment dependency with Service Quality dimensions

The dependency effects of Perceived Security on e-Payment on Service Quality dimensions like Service Quality Efficiency, Service Quality System Availability, Service Quality Fulfillment, Service Quality Privacy, Service Quality Responsiveness, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact among Online Buyers is defined in hypothesis-2, taken up and its results are shown in the table-2, as an outcome of multiple regression model conceptualized. From the results, it can be inferred that the F value of 14.981is found to be significant at 5 percent level and hence, the hypothesis-2 is rejected. These results suggest that Perceived Security on e-Payment depends on the group of 8 Service Quality dimensions in e-Retailing. While e-Security is identified to be causing significant levels of dependency with acceptance levels of e-Shopping (Lian and Lin, 2008), the finding that Service Quality has dependency with Perceived Security on e-Payment establishes the basis to link Service Quality in e-Retailing with that of acceptance levels of e-Shopping. Further, the adjusted R square value of 0.50 from the table-2 indicates that 50 percent of Perceived Security on e-Payment among Online Buyers significantly depends on these group of 8 dimensions of Service Quality in e-Retailing. Also

the 't' values of 4.699, 2.971, 2.145 and -2.204 corresponding to Service Quality dimensions such as Service Quality Efficiency, Service Quality Fulfillment, Service Quality Privacy and Service Quality Compensation are found to be having significant effects on the model conceived.

More specifically Service Quality Efficiency among Online Buyers is found to be having significant superior effect on Perceived Security on e-Payment with highest 't' value of 4.699. This clearly confirms the positive effects of well-organized e-Retailing websites with features like ease of use and navigation contributing towards higher Perceived Security on e-Payment in e-Retailing format.

Similarly, Service Quality Fulfillment among Online Buyers causes significantly good effect on Perceived Security on e-Payment with the next higher t value of 2.971. This confirms the positive effects of e-Retailing websites with order tracking feature and accurate listing of available and out of stock items contributing towards higher Perceived Security on e-Payment in e-Retailing format. Also, the ability of the e-Retailer to deliver the products within promised and satisfying time frame is found to be crucial in ensuring trust worthiness of the e-Retailer, which can further augment the higher Perceived Security on e-Payment in e-Retailing format.

Table 2: Results of the Regression for Hypothesis-2

Model	Unstandardized Coefficients		Standardized Coefficients	t	F	Adjusted R square
	B	Std. Error	Beta			
(Constant)	3.566	0.650		5.483*		
Service Quality Efficiency	0.108	0.023	0.201	4.699*		
Service Quality System Availability	0.039	0.021	0.070	1.875		
Service Quality Fulfillment	0.046	0.015	0.123	2.971*		
Service quality Privacy	0.080	0.037	0.093	2.145*	14.981*	0.50
Service Quality Responsiveness	0.015	0.029	0.019	0.504		
Service Quality Compensation	-0.041	0.019	-0.078	-2.204*		
Service Quality Contact provision	0.020	0.036	0.024	0.548		
Service Quality Real-time contact	0.012	0.040	0.011	0.300		

Dependent Variable: Perceived Security on e-Payment; * Significant at 5 Percent Level;
Source: **Computed from Primary Source**

Also, Service Quality Privacy with 't' value of 2.145 causes significant substantial effect on Perceived Security on e-Payment. This clearly confirms the positive effects of e-Retailing websites built with the features that can ensure privacy of user web behavior, security of e-transactions and privacy of user personal details contributing towards higher Perceived Security on e-Payment in e-Retailing format. This proposition established through this regression model goes in line with the earlier reported finding in this regard (Kim et al., 2010). While trust is an important component that can ensure higher levels of Perceived security on e-Payment, the Service Quality framework in e-Retailing context deals with the trust aspects in the dimension Privacy.

The 't' value of -2.204 obtained for the Service Quality Compensation significantly causes considerable effect on the Perceived Security on e-Payment. The negative 't' value obtained indicates the existence of inverse relationship between Service Quality Compensation and Perceived Security on e-Payment. Specifically, higher the Service Quality Compensation, lesser is Perceived Security on e-Payment. The ability of the e-Retailer to compensate in failed transactions and the ability of the e-Retailer to ensure product pickup from customer's home while returning the product contributes to higher levels of Service Quality Compensation. While these issues arise out of unsuccessful e-transactions, increased such occurrences causes significant negative effects on the Perceived Security on e-Payment and it's confirmed through the negative 't' value obtained for the Service Quality Compensation.

The remaining' values of 1.875, 0.504, 0.548 and 0.300 corresponding to Service Quality System Availability, Service Quality Responsiveness, Service Quality Contact provision and Service Quality Real-time contact are not found to be significant at 5 percent level. Hence, it can be inferred that the Perceived security on e-Payment in Retailing does not depend significantly on these Service Quality dimensions.

Findings

1. Understanding level of e-Shopping among Online Buyers has significant dependency on Service Quality dimensions such as Service Quality Efficiency, Service Quality Availability, Service Quality Fulfillment, Service Quality Privacy, Service Quality Responsiveness, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact. Out of these 8 Service Quality dimensions 4 Service Quality dimensions are found to be causing significant levels of dependency effects on Understanding level of e-Shopping among Online Buyers. These are Service Quality Efficiency, Service Quality Fulfillment, Service Quality Privacy and Responsiveness.

2. Perceived Security on e-Payment has significant dependency on Service Quality dimensions such as Service Quality Efficiency, Service Quality Availability, Service Quality Fulfillment, Service Quality Privacy, Service Quality Responsiveness, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact. Out of these 8 Service Quality dimensions 4 Service Quality dimensions are

found to be causing significant levels of dependency effects on Perceived Security on e-Payment among Online Buyers. These are Service Quality Efficiency, Service Quality Fulfillment, Service Quality Privacy and Service Quality Compensation. While 3 out of 4 of these Service Quality dimensions are positively related with Perceived Security on e-Payment among Online Buyers, the Service Quality dimension Compensations is identified with an Inverse Relationship with Perceived Security on e-Payment among Online Buyers.

3. Since the Service Quality dimension Efficiency causes the significant levels of dependency with Understanding level of e-Shopping and Perceived Security on e-Payment among Online Buyers, the positive effects of well-organized e-Retailing websites with features like ease of use and navigation contributing towards positive Buyer Characteristics in e-Retailing is Confirmed in the present work.

4. Since, the Service Quality dimension Privacy causes the significant levels of dependency with Understanding level of e-Shopping and Perceived Security on e-Payment among Online Buyers, the positive effects of e-Retailing websites built with user privacy and security features contributing towards positive Buyer characteristics in e-Retailing is Confirmed in the present work.

5. Since the Service Quality dimension Fulfillment causes the significant levels of dependency with Understanding level of e-Shopping and Perceived Security on e-Payment among Online Buyers, the importance of e-Retailing websites with order tracking feature and accurate listing of available and out of stock items contributing towards positive Buyer Characteristics in e-Retailing is confirmed in the present work.

6. Since the Service Quality dimension Responsiveness causes the significant levels of dependency with Understanding level of e-Shopping, the importance providing real time support on managing failed transactions and contingency problems contributing towards positive Buyer Characteristics in e-Retailing is confirmed in the present work.

7. The existence of significant inverse relationship between Service Quality Compensation and Perceived Security on e-Payment relates to the fact that lesser is Perceived Security on e-Payment when higher is the Service Quality Compensation among Online Buyers. The ability of the e-Retailer to compensate in failed transactions and the ability of the e-Retailer to ensure product pickup from customer's home while returning the product contributes to higher levels of Service Quality Compensation. While these issues arise out of unsuccessful e-transactions, increased such occurrences causes' negative effects on the Perceived Security on e-Payment among Online Buyers in e-Retailing.

Conclusion and Implications

The major finding made through this work points to the lacuna in the existing levels of Service Quality offered by the various e-Retailers. More specifically, the shortcomings in handling the product return procedure during unsuccessful e-transactions significantly contributes to this lacuna in existing Service Quality levels. As far as the major Service Quality effects among online buyers in e-Retailing process is concerned, the Service Quality dimensions Such as Service Quality Efficiency, Service Quality Availability, Service Quality Fulfillment, Service Quality Privacy, Service Quality Responsiveness, Service Quality Compensation, Service Quality Contact provision and Service Quality Real-time contact significantly contributes to the higher Understanding levels of e-Shopping among the Online Buyers. While these Service Quality dimensions contribute to higher Understanding levels of e-Shopping, they also contribute to higher Perceived Security on e-Payments in exception of Service Quality dimension Compensation, among the Online Buyers. Further, the Service Quality dimension Compensation is identified with inverse relationship with Perceived Security on e-Payments. This confirms the existing levels of inabilities on the part of the e-Retailers to ensure hassle free product return procedure for Online Buyers. Further, the financial issues arising out of unsuccessful e-transactions result in dissatisfaction among Online Buyers who warrants appropriate mediation from the e-Retailers. These results suggest the possibility of enhanced overall Service Quality in e-Retailing from the present existing levels. Also, the characteristics of Online Buyers such as Propensity of Online Buying, Actual Online Buying, Understanding levels of e-Shopping, Perceived Security of e-Payments, Preference for Physical Payments and Intensity of Internet Usage causes' significant dependency effects on the Perceived overall Service Quality in e-Retailing process.

Understanding levels of e-Shopping among Online Buyers has dependency with Service Quality

dimensions in e-Retailing gives scope for enhancements in Service Quality offered in e-Retailing towards contributing higher Understanding levels of e-Shopping. However, this kind of dependency is viewed in three major perspectives such as higher understanding levels contributing realization of higher Service Quality offered, higher understanding levels contributing realization of shortcomings in Service Quality offered and the lower understanding levels causing shortcomings on the part of the Online Buyers towards realizing the offered Service Quality in e-Retailing. While the first perspective is something that is desirable for e-Retailers who offer higher Service Quality levels, the second and third perspectives gives scope for interventions from e-Retailers. The possible interventions on the second perspective would be to ensure higher Service Quality levels in case of existence of any shortcomings on the part of the individual e-Retailers. However, the third perspective is a point of concern for those e-Retailers who are sure of their higher Service Quality offerings that remain unrealized due to shortcomings in Understanding levels of e-Shopping among Online Buyers. Under these circumstances, the intervention needed on the part of the individual e-Retailers is to ensure higher Understanding levels of e-Shopping among Online Buyers. This can be done by incorporating support to the Online Buyers in the forms of downloadable video files and real-time chat systems in e-Retailing Systems on various intricate and complex procedures in Online Buying process.

Perceived Security on e-Payment among Online Buyers has dependency with Service Quality dimensions comprising inverse relationship on the dimension Compensation in e-Retailing gives scope for enhancements in Service Quality offered towards contributing higher Perceived Security on e-Payment. Although, ensuring higher Perceived security on e-Payment is the function of banking enterprises, e-Retailing enterprises can contribute significantly towards this by ensuring seamless product return facility. Further, e-Retailing enterprise should ensure lesser rejection rate of the product purchased online by appropriately delivering the value propositions to the Online Buyers.

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