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RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER TRUST, SATISFACTION AND LOYALTY IN E-RETAILING

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ABSTRACT

In order to retain loyal consumer, E-service quality is an important tool to adopt and utilize while doing business online via Internet. Initially, present work verified validity and reliability of the instrument used through factorability procedures (exploratory and confirmatory factor analysis) along with model fit statistics. Through this procedure few items were eliminated from the instrument and were extracted while carrying further analysis. After that dependency effects were examined resulting significant positive effects between e-service quality, customer trust, customer satisfaction and customer loyalty. Further, from fifteen identified correlations, six were found to be correlated at higher level and remaining were found to be correlated either at medium or lower levels with each other. However, outcome quality and customer loyalty are not found to be correlated with each other. Limitations of the present study were also discussed in the conclusion portion with scope for future work.

KEYWORDS

service quality, e-retailing, customer trust, satisfaction & loyalty.

INTRODUCTION

E-SERVICE QUALITY

According to Zeithaml et al. (2002), e-services quality can be believed as how efficiently and proficiently a service provider will facilitates advantageous purchase and delivery of goods or services to online buyers. It can be pragmatic that the key to success of e-Retailers does not simply include low price strategy, but rather level of quality service offered online (e-Service Quality). So, it can be understood that service quality is most important concern that e-Retailers should focus on priority basis in order to satisfy and retain loyal customer (Zeithaml et al., 2000).

CUSTOMER TRUST

Customer trust in online is viewed as a belief of customer that service provider will conduct fair and secure e-transaction up to the expectation of the customer (Romadhoni et al., 2015). Moreover, customer feels secure and is eager to depend or plan to depend on the service provider. Trust is a belief of customer that e-Retailer will carry out e-transaction related formalities according to the expectations of the customers.

CUSTOMER SATISFACTION

The summation of the overall process right from buying of goods or services and other coupled features of the e-Retailers results in customer satisfaction. Some scholars believe that customer satisfaction is the straight result of the overall service quality adopted by e-Retailers (Caruana, 2002). Moreover, most of the researcher views customer dissatisfaction as shortfall of performance in comparison with expectation. So, customer satisfaction is understood as when performance matches or exceeds their expectations (Brillant and Achyar, 2013).

CUSTOMER LOYALTY

Customer loyalty can be viewed as retention of existing customer or making purchase again in future from the existing e-Retailer. It can also be considered as financial contribution of customer by making re-purchase (Roostika, 2011). In other words, loyalty can be defined as "a deeply held commitment to re-buy or re-patronize a preferred product/service from the existing e-Retailer consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences".

RELATED STUDIES

The effects of e-service quality on e-trust and e-satisfaction were identified and reported by *Ghalandari (2012)* through a survey by collecting data from 382 online buyers. He performed linear regression model and identified that customer loyalty to e-shops is directly influenced by e-trust and e-satisfaction with e-shops which in turn are determined by e-service quality. Further, the study mentions that situational variables can moderate relationship between e-trust and/or e-satisfaction and e-loyalty. To know the Impact of service quality, trust and customer satisfaction on customer loyalty, *Akbar and Parvez (2009)* made an attempt to probe into it, based on the analysis of the collected data from 304 customers in Bangladesh, study reveals that trust and customer satisfaction are significantly and positively related to customer loyalty. Also it has been found that customer satisfaction plays a mediator role between perceived service quality and customer loyalty. Hence, study encourages the service providers to find out suitable path of action to gain customers trust by providing better quality in their service to retain existing customers.

Kim and Jackson (2009), explores e-Service Quality and its effects on e-satisfaction and e-loyalty in online shopping. The result of work reveals that the factor, system availability was found to have direct and positive effect on e-loyalty, whereas factor, efficiency had a negative effect on e-loyalty for online shopping. This indicates that service quality dimension system availability was likely to increases customer satisfaction. However, variables compensation and responsiveness were found to be having significant effect indirectly on e-loyalty. Further, the above study mentions that for retaining loyal customers, recovery services or post purchase services plays an essential role for consumers purchasing online. Also, for getting competitive edge is to provide enhanced service quality, increase customer satisfaction and motivate consumers to re-purchase. So in this regard Behjati et al, (2012) while trying to find out the relation between e-service quality, e-satisfaction and e-loyalty investigates reliability and validity tests of the scale for the measurement of e-loyalty and satisfaction. Further, the study reveals that nine factors such as trustworthiness, reliability, ease of use, security, personalization, responsiveness, accessibility/convenience, aesthetic and utilitarian are found to be having positive effect on customer loyalty and satisfaction.

METHODOLOGY

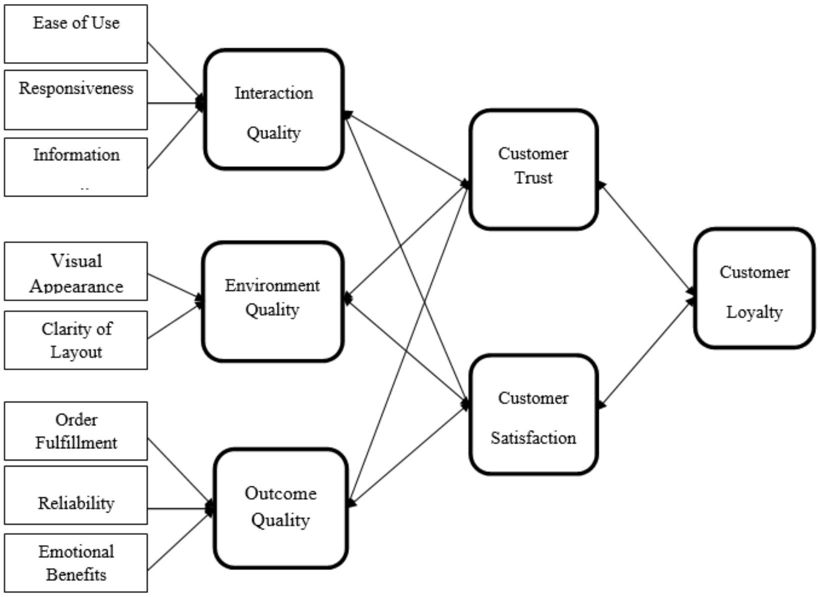
To test the conceptual framework (Fig. 1) of the present work, descriptive research design and self-administered questionnaire were used to collect data from online buyers, who were identified on random basis from Chandigarh state by contacting different logistic partners (Courier companies) of different e-Retailing shops. Out of total 500 questionnaires distributed, 233 were collected successfully after eliminating incomplete and non usable data.

The detail of items (**check Appendix-1**) with 5-point Likert scale, employed for measuring e-Service Quality dimensions, customer trust, customer satisfaction and customer loyalty were taken from previous studies. More specifically, three factors such as ease of use (with three items), responsiveness (with three items) and information quality (with three items) were employed for measuring service quality dimension interaction quality. Also, two factors such as visual appearance (with three items) and clarity of layout (with three items) were used for measuring service quality dimension environment quality and service quality dimension outcome quality was measured with three factors such as order fulfillment (with three items), reliability (with three items) and emotional benefits (with three items). Further, customer perceived trust, satisfaction and loyalty were measured with four items each.

OBJECTIVES AND HYPOTHESIS

Objective	S no.	Hypothesis
To identify the effects of service quality dimensions on customer trust in e-Retailing.	1	Customer trust does not depend on service quality dimensions such as interaction quality, environment quality and outcome quality.
To identify the effects of service quality dimensions on customer satisfaction in e-Retailing.	2	Customer satisfaction does not depend on service quality dimensions such as interaction quality, environment quality and outcome quality.
To identify the effects of customer trust and satisfaction on customer loyalty in e-Retailing.	3	Customer loyalty does not depend on customer trust and satisfaction.
To find out the kind of inter relationship existing between different study variables.	4	Study variables in e-Retailing are not related with each other.

FIGURE 1: CONCEPTUAL FRAMEWORK



ESTABLISHING CONSTRUCT VALIDITY OF THE STUDY VARIABLES

To establish construct validity for the study variables, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted and results are as follows:

Exploratory Factor Analysis on the scale for measuring customer trust

Four items were used for measuring customer trust with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the **Exhibit-1**. The factorability of these four items was examined through several well-recognized criteria on the basis of item correlations. Three of the four items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.693obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 174.032 as shown in table-1. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5(Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-1. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all four items originally considered.

EXHIBIT - 1: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING CUSTOMER TRUST

Item no.	Assigned Item Name	Item Detail	Measurement Scale	References
1	CT1	E-product/service provider is trustworthy and honest.	5 point Likert scale	Moorman, 1993; Kolsaker & Payne, 2002; Merrilees & Fry, 2003; Eid, 2011
2	CT2	E-product/service provider instills the confidence in his customers.	5 point Likert scale	
3	CT 3	E-product/service provider does not usually fulfill the promises and commitments he assumes.	5 point Likert scale	
4	CT 4	It is a problem to give the private information and the credit card number to the E-product/service provider.	5 point Likert scale	

In order to compute scores for the factors underlying customer trust, principle components analysis was used and the initial Eigen values showed that the factor explained 61 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 61 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-1.

TABLE 1: RESULTS OF THE EFA FOR MEASURING CUSTOMER TRUST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.693		
Bartlett's Test of Sphericity		Approx. Chi-Square	174.032		
		df	16		
		Sig.	0.000		
Variance Explained			61%		
Item no.	**Assigned Item Name**	**Item Detail**	**Component Extracted**	**Communalities**	**Alpha**
			Factor 1		
1	CT2	E-product/service provider instills the confidence in his customers.	0.665	0.640	0.807
2	CT 3	E-product/service provider does not usually fulfill the promises and commitments he assumes.	0.719	0.731	
3	CT 4	It is a problem to give the private information and the credit card number to the E-product/service provider.	0.790	0.601	
4	CT1	E-product/service provider is trustworthy and honest.	0.611	0.664	

Extraction Method: Principal Component Analysis.
Item Excluded: None

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-1. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.807 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978).

Exploratory Factor Analysis on the scale for measuring customer satisfaction

Four items were used for measuring customer satisfaction with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the Exhibit-2. The factorability of these four items was examined through several well-recognized criteria on the basis of item correlations. All items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.677 obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 120.110 as shown in table-2. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5(Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-2. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all four items originally considered.

EXHIBIT - 2: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING CUSTOMER SATISFACTION

Item no.	**Assigned Item Name**	**Item Detail**	**Measurement Scale**	**References**
1	CS 1	The performance of Web site meets my expectation.	5 point Likert scale	Oliver, 1997; Giese & Cote, 2000; Eid, 2001
2	CS 2	The Web site does not have sufficient experience in the marketing of the products and service that it offers.	5 point Likert scale	
3	CS 3	The Web site knows its users well enough to offer them products and services adapted to their needs.	5 point Likert scale	
4	CS 4	The Web site does not have the necessary resources to carry out its activities successfully.	5 point Likert scale	

In order to compute scores for the factors underlying customer satisfaction, principle components analysis was used and the initial Eigen values showed that the factor explained 66 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 66 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-2.

TABLE 2: RESULTS OF THE EFA FOR MEASURING CUSTOMER SATISFACTION

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.677		
Bartlett's Test of Sphericity		Approx. Chi-Square	120.110		
		df	15		
		Sig.	0.000		
Variance Explained			66%		
Item no.	**Assigned Item Name**	**Item Detail**	**Component Extracted**	**Communalities**	**Alpha**
			Factor 1		
1	CS 3	The Web site knows its users well enough to offer them products and services adapted to their needs.	0.772	0.543	0.890
2	CS 4	The Web site does not have the necessary resources to carry out its activities successfully.	0.600	0.781	
3	CS 1	The performance of Web site meets my expectation.	0.733	0.662	
4	CS 2	The Web site does not have sufficient experience in the marketing of the products and service that it offers.	0.759	0.713	

Extraction Method: Principal Component Analysis.
Item Excluded: None

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-2. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.890 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978).

Exploratory Factor Analysis on the scale for measuring customer loyalty

Four items were used for measuring customer loyalty with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the Exhibit-3. The factorability of these four items was examined through several well-recognized criteria on the basis of item correlations. All items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.809 obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 221.003 as shown in table-3. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5 (Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-3. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all four items originally considered.

EXHIBIT 3: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING CUSTOMER LOYALTY

Item no.	Assigned Item Name	Item Detail	Measurement Scale	References
1	CL1	I will continuously purchase from the Web site in the near future.	5 point Likert scale	Oliver, 1997; Barroso & Martin, 1999; Asuncioet al., 2004;Eid, 2011
2	CL 2	I do recommend that others use the Electronic Commerce services.	5 point Likert scale	
3	CL 3	My preference for the Electronic Commerce would not willingly change.	5 point Likert scale	
4	CL 4	Changing my preference from the Electronic Commerce requires major rethinking.	5 point Likert scale	

In order to compute scores for the factors underlying customer loyalty, principle components analysis was used and the initial Eigen values showed that the factor explained 59 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 59 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-3.

TABLE-3: RESULTS OF THE EFA FOR MEASURING CUSTOMER LOYALTY

<table>
<tr><td colspan="3">Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td><td colspan="3">0.809</td></tr>
<tr><td colspan="2" rowspan="3">Bartlett's Test of Sphericity</td><td>Approx. Chi-Square</td><td colspan="3">221.003</td></tr>
<tr><td>df</td><td colspan="3">17</td></tr>
<tr><td>Sig.</td><td colspan="3">0.000</td></tr>
<tr><td colspan="3">Variance Explained</td><td colspan="3">59%</td></tr>
<tr><th rowspan="2">Item no.</th><th rowspan="2">Assigned Item Name</th><th rowspan="2">Item Detail</th><th>Component Extracted</th><th rowspan="2">Communalities</th><th rowspan="2">Alpha</th></tr>
<tr><th>Factor 1</th></tr>
<tr><td>1</td><td>CL 4</td><td>Changing my preference from the Electronic Commerce requires major rethinking.</td><td>0.663</td><td>0.609</td><td rowspan="4">0.796</td></tr>
<tr><td>2</td><td>CL1</td><td>I will continuously purchase from the Web site in the near future.</td><td>0.825</td><td>0.604</td></tr>
<tr><td>3</td><td>CL 2</td><td>I do recommend that others use the Electronic Commerce services.</td><td>0.643</td><td>0.601</td></tr>
<tr><td>4</td><td>CL 3</td><td>My preference for the Electronic Commerce would not willingly change.</td><td>0.705</td><td>0.717</td></tr>
</table>

Extraction Method: Principal Component Analysis.
Item Excluded: None

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-3. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.796 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978).

Confirmatory Factor Analysis on the scale for measuring customer trust, satisfaction and loyalty

The details of the model fit for the factors customer trust, satisfaction and customer loyalty is shown in the table-1, table-2 and table-3 and the corresponding metrics of the model fit is provided in table-4. From the model fit diagram shown in Figure-2, it can be observed that all the items taken up in the model fit process have the loading in the range between 0.62 and 0.97 well above the recommended value of 0.5 (Nunnally and Bernstein, 1994).The value of CMIN/DF obtained for this model is 1.230 and this value is well below the suggested maximum value of 5.0 for a good model fit (Bagozzi and Yi, 1988). Further, the CFI value of 0.981 and the AGFI value of 0.973 are well above the suggested value of 0.95.

TABLE 4: MODEL FIT SUMMARY ON THE SCALE FOR MEASURING CUSTOMER TRUST, SATISFACTION AND LOYALTY

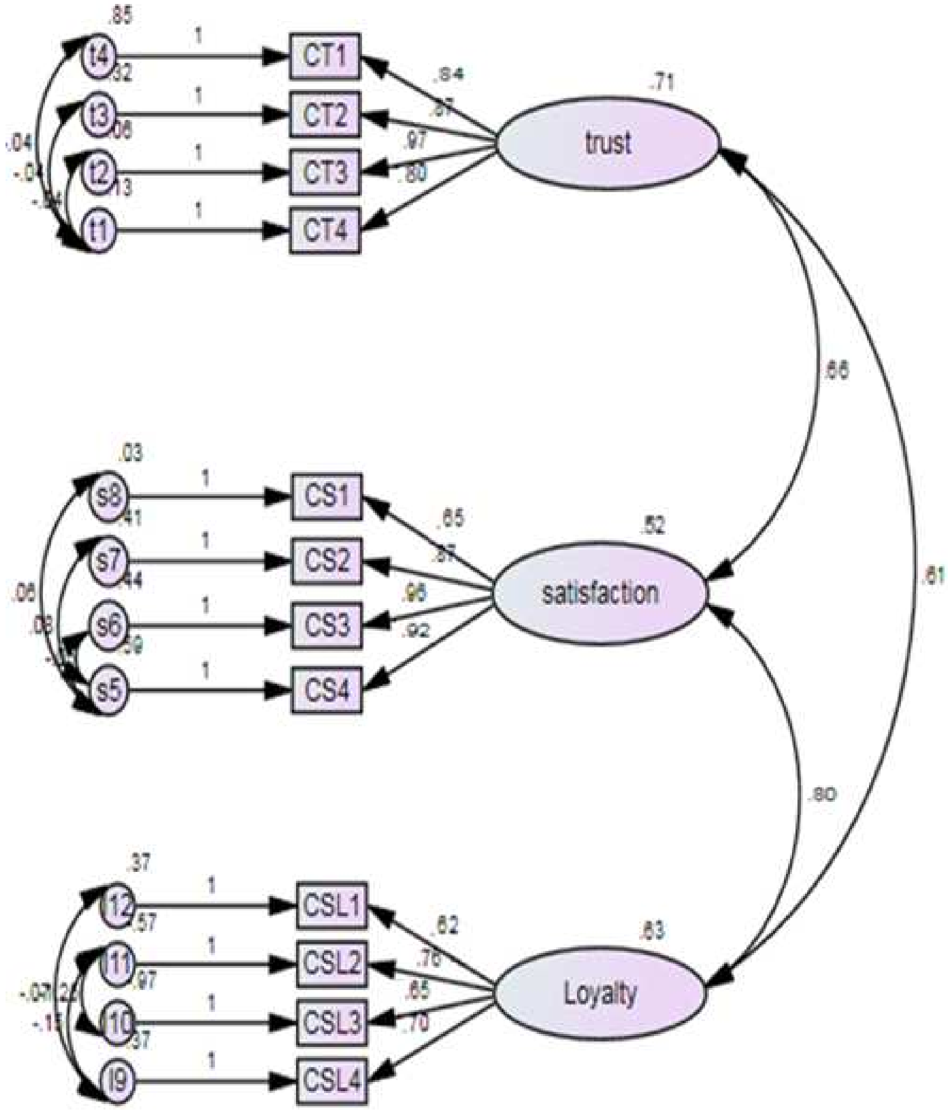
S.no	Goodness-of-Fit Statistics	Model
1	CMIN/DF	1.230
2	CFI(Comparative Fit Index)	0.981
3	AGFI(Adjusted Goodness-of-Fit-Index)	0.973
4	RMSEA(Root Mean Square Error of Approximation)	0.042

Source: Computed from primary data

Also, the RMSEA value of 0.042is below the suggested maximum value of 0.07 (Baumgartner and Homburg, 1996). Thus, the Confirmatory Factor Analysis procedure through a Model fit Process establishes a strong construct validity and reliability for the scale to measure customer trust, satisfaction and customer loyalty.

MODEL FIT FOR CUSTOMER TRUST, SATISFACTION AND LOYALTY

FIGURE-2



Exploratory Factor Analysis on the scale for measuring Service Quality dimension Interaction Quality

Nine items were used for measuring overall interaction quality with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the Exhibit-4. The factorability of these nine items was examined through several well-recognized criteria on the basis of item correlations. Seven of the nine items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.807 obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 134.054 as shown in table-5. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5(Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-5. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all nine items originally considered.

EXHIBIT 4: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING SQ INTERACTION QUALITY

Item no.	Assigned Item Name	Item Detail	Measurement Scale	References
1	EU1	It is easy to get access to this e-Retailer's Web site.	5 point Likert scale	Ribbink et al., 2004; Lee & Lin, 2005; Yang et al., 2003; Fassnacht & Koese, 2006 and Chen et al., 2013
2	EU2	This site is user friendly.	5 point Likert scale	
3	EU3	Navigation on this site is easy.	5 point Likert scale	
4	RS1	This e-Retailer is willing to quickly solve problems for me.	5 point Likert scale	
5	RS2	I think this e-Retailer gives prompt service.	5 point Likert scale	
6	RS3	I believe this e-Retailer is always willing to help customers.	5 point Likert scale	
7	IQ1	This e-Retailer provides up-to-date information.	5 point Likert scale	
8	IQ2	This e-Retailer presents information that is easy to understand.	5 point Likert scale	
9	IQ3	This e-Retailer provides all the information necessary.	5 point Likert scale	

In order to compute scores for the service quality dimension interaction quality, principle components analysis was used and the initial Eigen values showed that the factor explained 68 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 68 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-5.

TABLE 5: RESULTS OF THE EFA FOR MEASURING SQ INTERACTION QUALITY

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.807		
Bartlett's Test of Sphericity		Approx. Chi-Square	134.054		
		df	16		
		Sig.	0.000		
Variance Explained			68%		
Item no.	**Assigned Item Name**	**Item Detail**	**Component Extracted**	**Communalities**	**Alpha**
			Factor 1		
1	EU1	It is easy to get access to this e-Retailer's Web site.	0.773	0.517	0.789
2	RS1	This e-Retailer is willing to quickly solve problems for me.	0.835	0.681	
3	EU3	Internet Usage Experience	0.657	0.513	
4	IQ1	Navigation on this site is easy.	0.668	0.603	
5	RS3	I believe this e-Retailer is always willing to help customers.	0.665	0.702	
6	RS2	I think this e-Retailer gives prompt service.	0.664	0.590	
7	IQ2	This e-Retailer presents information that is easy to understand.	0.665	0.568	
8	IQ3	This e-Retailer provides all the information necessary.	0.672	0.599	

Extraction Method: Principal Component Analysis.

Item Excluded: Item 2 Shown in Exhibit-4 named as EU2

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-5. During such procedures an item with a factor loading value of below 0.5 was eliminated following the standard guidelines. So, further analysis was carried out with eight items only. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.789 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978). The item EU2 that got listed in Exhibit-4 are eliminated in the process and hence, not contributing to the measurement of the factor extracted in table-5.

Exploratory Factor Analysis on the scale for measuring Service Quality Dimension Environment Quality

Six items were used for measuring overall environment quality with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the Exhibit-5. The factorability of these six items was examined through several well-recognized criteria on the basis of item correlations. Five of the six items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.698 obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 294.770 as shown in table-6. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5(Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-1. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all six items originally considered.

EXHIBIT 5: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING SQ ENVIRONMENT QUALITY

Item no.	Assigned Item Name	Item Detail	Measurement Scale	References
1	VA1	This e-Retailer's site is aesthetically appealing.	5 point Likert scale	Lee & Overby, 2004; Fassnacht & Koese, 2006; and Chen et al., 2013
2	VA2	The "look" of this Web site is appealing.	5 point Likert scale	
3	VA3	This e-Retailer's site is visually appealing.	5 point Likert scale	
4	CL1	The layout of the Web site enables the user to find important things at first sight.	5 point Likert scale	
5	CL2	Everything on this Web site is clearly arranged.	5 point Likert scale	
6	CL3	The layout of this Web site provides a clear structure.	5 point Likert scale	

In order to compute scores for the service quality dimension environment quality, principle components analysis was used and the initial Eigen values showed that the factor explained 57 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 57 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-6.

TABLE 6: RESULTS OF THE EFA FOR MEASURING SQ INTERACTION QUALITY

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.698		
Bartlett's Test of Sphericity		Approx. Chi-Square	294.770		
		df	15		
		Sig.	0.000		
Variance Explained			57%		
Item no.	**Assigned Item Name**	**Item Detail**	**Component Extracted**	**Communalities**	**Alpha**
			Factor 1		
1	VA2	The "look" of this Web site is appealing.	0.657	0.617	0.801
2	CL2	Everything on this Web site is clearly arranged.	0.720	0.743	
3	VA1	This e-Retailer's site is aesthetically appealing.	0.820	0.661	
4	CL3	The layout of this Web site provides a clear structure.	0.832	0.883	
5	VA3	This e-Retailer's site is visually appealing.	0.730	0.804	
6	CL1	The layout of the Web site enables the user to find important things at first sight.	0.722	0.755	

Extraction Method: Principal Component Analysis.

Item Excluded: None

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-6. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.801 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978).

Exploratory Factor Analysis on the scale for measuring Service Quality Dimension Outcome Quality

Eight items were used for measuring overall environment quality with 5 point likert scale containing quantified values ranging between 1 and 5 is shown in the Exhibit-6. The factorability of these six items was examined through several well-recognized criteria on the basis of item correlations. Six of the eight items were correlated at minimum value 0.3 obtained with the pattern of correlation indicating realistic factorability of the model. Also, Kaiser-Meyer-Olkin value of 0.901 obtained is well above the suggested value of 0.60 (Nunnally and Bernstein, 1994) measures sample adequacy and the test of sphericity was significant at 5 percent level with a Chi-Square Value of 230.001 as shown in table-7. Further, all diagonal values of anti-image correlation matrix obtained were well above the recommended value of 0.5 (Bagozzi and Yi, 1988) indicates inclusion of each item considered in the model. Also, existence of the common variance among the items taken up in the model is confirmed through the values of communalities which are well above the suggested value 0.3 as shown in table-7. Therefore, such obtained details provide explanation for conducting factor analysis and hence, factor analysis was conducted with all eight items originally considered.

EXHIBIT 6: DETAILS OF THE ITEMS CONSIDERED FOR MEASURING SQ OUTCOME QUALITY

Item no.	Assigned Item Name	Item Detail	Measurement Scale	References
1	OF1	This e-Retailer's orders are protectively packaged when shipped.	5 point Likert scale	Collier & Bienstock, 2006; Lee & Lin, 2005; Petrick, 2004 and Chen et al., 2013
2	OF2	My orders from this e-Retailer rarely contain the wrong items.	5 point Likert scale	
3	OF3	The time between placing and receiving an order is short.	5 point Likert scale	
4	RE1	Transactions with this e-Retailer are error-free.	5 point Likert scale	
5	RE2	This e-Retailer has adequate security.	5 point Likert scale	
6	EB1	Making a purchase from this e-Retailer is enjoyable.	5 point Likert scale	
7	EB2	Making a purchase from this e-Retailer makes me feel good.	5 point Likert scale	
8	EB3	Making a purchase from this e-Retailer gives me happiness.	5 point Likert scale	

In order to compute scores for the service quality dimension outcome quality, principle components analysis was used and the initial Eigen values showed that the factor explained 60 percent of the variance. Also, the details of screen plot suggested the existence of only single factor in the solution model. Hence, further examinations with this factor alone were made through varimax and oblimin rotations and little difference were established between these two rotation procedures on this factor model that explained 60 percent variance. However, for the final solution the results corresponding to oblimin rotation was used and provided in table-7.

TABLE-7: RESULTS OF THE EFA FOR MEASURING SQ INTERACTION QUALITY

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.901		
Bartlett's Test of Sphericity		Approx. Chi-Square	230.001		
		df	10		
		Sig.	0.000		
Variance Explained			60%		
Item no.	**Assigned Item Name**	**Item Detail**	**Component Extracted**	**Communalities**	**Alpha**
			Factor 1		
1	OF3	The time between placing and receiving an order is short.	0.801	0.638	0.812
2	RE1	Transactions with this e-Retailer are error-free.	0.834	0.739	
3	RE2	This e-Retailer has adequate security.	0.754	0.832	
4	OF2	My orders from this e-Retailer rarely contain the wrong items.	0.783	0.911	
5	EB2	Making a purchase from this e-Retailer makes me feel good.	0.954	0.746	
6	OF1	This e-Retailer's orders are protectively packaged when shipped.	0.634	0.755	
7	EB1	Making a purchase from this e-Retailer is enjoyable.	0.683	0.767	

Extraction Method: Principal Component Analysis.
Item Excluded: Item 8 Shown in Exhibit-6 named as EB3

Source: Computed from Primary data.

The results of factor loading and factor extraction obtained during repeated procedures on the basis of principal component analysis are shown in table-7. During such procedures an item with a factor loading value of below 0.5 was eliminated following the standard guidelines. So, further analysis was carried out with eight items only. All items got loaded with the value of above 0.5 resulting in single factor extraction for the final solution. The Cronbach Alpha values of 0.812 obtained for the factor confirms the reliability of the Scale (Nunnally, 1978). The item EB3 that got listed in Exhibit-6 are eliminated in the process and hence, not contributing to the measurement of the factor extracted in table-7.

Confirmatory Factor Analysis on the scale for measuring service quality dimensions

The details of the model fit for Service Quality dimensions such as are shown in the table-5, table-6 and table-7 respectively and the corresponding metrics of the model fit is provided in table-8.

TABLE 8: MODEL FIT SUMMARY ON THE SCALE FOR MEASURING SERVICE QUALITY DIMENSIONS

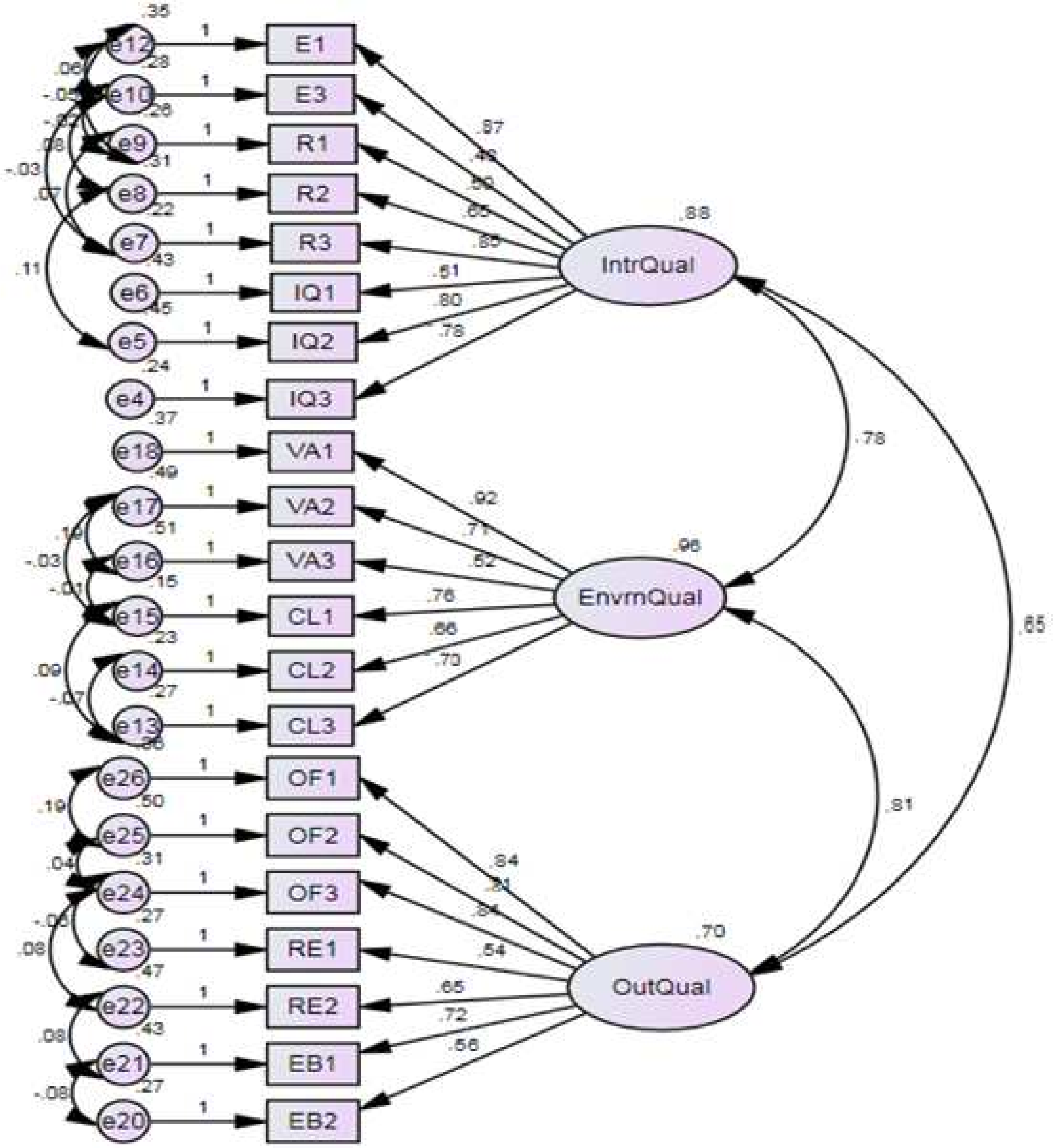
S.no	Goodness-of-Fit Statistics	Good Fitness	Model
1	CMIN/DF	< 5.0	1.765
2	CFI(Comparative Fit Index)	≥0.95	0.982
3	AGFI(Adjusted Goodness-of-Fit-Index)	≥ 0.95	0.977
4	RMSEA(Root Mean Square Error of Approximation)	< 0.07	0.040

Source: Computed from primary data

From the model fit diagram shown in Figure-3, it can be observed that all the items taken up in the model fit process have the loading in the range between 0.51 and 0.92 well above the recommended value of 0.5(Nunnally and Bernstein, 1994). The value of CMIN/DF obtained for this model is 1.765 and this value is well below the suggested maximum value of 5.0 for a good model fit (Bagozzi and Yi, 1988). Further, the CFI value of 0.982 and the AGFI value of 0.977 is well above the suggested value of 0.95. Also, the RMSEA value of 0.040 are below the suggested maximum value of 0.07 (Baumgartner and Homburg, 1996). Thus, the Confirmatory Factor Analysis procedure through a Model fit Process establishes a strong construct validity and reliability for the scale to measure Service Quality dimensions.

MODEL FIT FOR SERVICE QUALITY DIMENSIONS

FIGURE 3


IntrQual
EnvrnQual
OutQual
E1
E3
R1
R2
R3
IQ1
IQ2
IQ3
VA1
VA2
VA3
CL1
CL2
CL3
OF1
OF2
OF3
RE1
RE2
EB1
EB2
e12
e10
e9
e8
e7
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e20
.88
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.70
.78
.65
.81
.87
.48
.50
.65
.80
.51
.80
.78
.92
.71
.52
.76
.66
.70
.84
.84
.54
.65
.72
.56
1

5. FINDINGS & DISCUSSION

5.1 CUSTOMER TRUST DEPENDENCY WITH SERVICE QUALITY DIMENSIONS

TABLE 3: RESULT OF REGRESSION FOR HYPOTHESIS-1

Model	Unstandardized Coefficients		Standardized Coefficients	t	F	Adjusted R square
	B	Std. Error	Beta			
(Constant)	8.259	1.428		5.782*	57.281*	0.690
Interaction Quality	0.082	0.033	0.171	4.113 *		
Environment Quality	0.173	0.042	0.295	2.456*		
Outcome Quality	0.030	0.039	0.049	0.780*		

Dependent Variable: customer trust; *Significant at 5 percent level;

Source: Computed from Primary data

The dependency effects of customer trust on service quality dimensions like interaction quality, environment quality and outcome quality among Online Buyers in e-Retailing is defined in hypothesis-1, taken up and its results are shown in the table-3, as an outcome of multiple regression model conceptualized. From the results, it can be inferred that the F value of 57.281 is found to be significant at 5 percent level and hence, the hypothesis-1 is rejected. These results suggest that customer trust depends on the group of service quality dimensions in e-Retailing. On the other hand, the finding of Ghalandari (2012) mentions that information quality, system quality and web-service quality influences positively on customer trust among online buyers.

Further, the adjusted R square value of 0.690 from the table-3 indicates that 69 percent of customer trust among online buyers significantly depends on this group of service quality dimensions in e-Retailing. Also the ‘t’ values of 4.113, 2.456 and 0.780 corresponding to the factors interaction quality, environment quality and outcome quality are found to be having significant effects on the model conceived.

More specifically service quality dimension interaction Quality among Online Buyers is found to be having significant superior effect on customer trust with highest value of 4.113. This clearly indicates positive effect of e-Retailing websites with manageable and not as much of difficulty to use e-Retailer's web site by means of effortlessness navigation and user friendly display. It also confirms eagerness to help customer and provide prompt service, accentuate in handling customers complaint and problems. Further, this specifies the availability and depth of up-to-date information available at e-Retailers web site. Such features contribute towards enhanced customer loyalty in e-Retailing.

Also, dimension environment quality among Online Buyers causes significantly good effect on customer trust in e-Retailing with the next higher t value of 2.456. This clearly confirms the positive effects of e-Retailing websites by appealing aesthetically and visually. Graphic styles like layout, color, photographs, graphics and perfect arrangement of the e-Retailing websites facilitate the user to find things at the first sight. Such options are contributing towards building customer trust in e-Retailing format.

The service quality dimension outcome quality with 't' value of 0.780 also causes significant substantial effect on customer trust in e-Retailing. This confirms the positive effects of e-Retailing websites with ability to perform the promised service dependably and accurately (Parasuraman et al., 1988) including on time and accurate delivery, perfect product representation, adequate & innovative security, error free e-transactions and mostly order placed from e-Retailers web site rarely contain wrong product. Availability of such facilities results in enjoyable purchase and makes customers feel good, therefore contributing towards enhanced and positive customer trust among online buyers.

Hence, the above result confirms that higher interaction Quality, higher environment quality and higher outcome quality in online web portals contribute to higher customer trust levels in e-Retailing.

5.2 CUSTOMER SATISFACTION DEPENDENCY WITH SERVICE QUALITY DIMENSIONS

TABLE 3: RESULT OF REGRESSION FOR HYPOTHESIS-2

Model	Unstandardized Coefficients		Standardized Coefficients	t	F	Adjusted R square
	B	Std. Error	Beta			
(Constant)	4.931	1.846		2.671*	51.683*	0.713
Interaction Quality	0.174	0.043	0.275	4.051*		
Environment Quality	0.195	0.054	0.251	3.591*		
Outcome Quality	0.033	0.051	0.040	0.652*		

Dependent Variable: customer satisfaction; *Significant at 5 percent level;

Source: Computed from Primary data

The dependency effects of customer satisfaction on service quality dimensions like interaction quality, environment quality and outcome quality among Online Buyers in e-Retailing is defined in hypothesis-2, taken up and its results are shown in the table-3, as an outcome of multiple regression model conceptualized. From the results, it can be inferred that the F value of 51.683 is found to be significant at 5 percent level and hence, the hypothesis-2 is rejected. These results suggest that customer satisfaction depends on these service quality dimensions in e-Retailing. However, Behjati et al. (2012) found that nine dimensions such as trustworthiness, reliability, ease of use, security, personalization, responsiveness, accessibility/convenience, aesthetic and utilitarian shows positive effect on customer satisfaction and loyalty.

Further, the adjusted R square value of 0.713 from the table-3 indicates that 71 percent of customer satisfaction among online buyers significantly depends on these service quality dimensions in e-Retailing. Also the 't' values of 4.051, 3.591 and 0.652 corresponding to the factors interaction quality, environment quality and outcome quality are found to be having significant effects on the model conceived.

More specifically service quality dimension interaction Quality among Online Buyers is found to be having significant superior effect on customer satisfaction with highest value of 4.051. This clearly indicates positive effect of e-Retailing websites with manageable and not as much of difficulty to use e-Retailer's web site by means of effortlessness navigation and user friendly display. It also confirms eagerness to help customer and provide prompt service, accentuate in handling customers complaint and problems. Further, this specifies the availability and depth of up-to-date information available at e-Retailers web site. Such features contribute towards enhanced customer satisfaction in e-Retailing.

Also, dimension environment quality among Online Buyers causes significantly good effect on customer satisfaction in e-Retailing with the next higher t value of 3.591. This clearly confirms the positive effects of e-Retailing websites by appealing aesthetically and visually. Graphic styles like layout, color, photographs, graphics and perfect arrangement of the e-Retailing websites facilitate the user to find things at the first sight. Such options are contributing towards increasing customer satisfaction in e-Retailing format.

The service quality dimension outcome quality with 't' value of 0.652 also causes significant substantial effect on customer satisfaction in e-Retailing. This confirms the positive effects of e-Retailing websites with ability to perform the promised service dependably and accurately (Parasuraman et al., 1988) including on time and accurate delivery, perfect product representation, adequate & innovative e-security, error free e-transactions and mostly order placed from e-Retailers web site rarely contain wrong product. Availability of such facilities results in enjoyable purchase and makes customers feel good, therefore contributing towards enhanced and positive customer satisfaction among online buyers.

Hence, the above result confirms that higher interaction Quality, higher environment quality and higher outcome quality in online web portals contribute to higher customer satisfaction levels in e-Retailing.

5.3 CUSTOMER LOYALTY DEPENDENCY WITH TRUST AND SATISFACTION

TABLE 3: RESULT OF REGRESSION FOR HYPOTHESIS-3

Model	Unstandardized Coefficients		Standardized Coefficients	t	F	Adjusted R square
	B	Std. Error	Beta			
(Constant)	8.727	1.030		8.470*	50.695*	0.814
Trust	0.066	0.060	0.064	1.093*		
Satisfaction	0.441	0.045	0.573	9.740*		

Dependent Variable: Customer loyalty; *Significant at 5 percent level;

Source: Computed from Primary data

The dependency effects of customer loyalty on customer trust and satisfaction among online buyers in e-Retailing is defined in hypothesis-3, taken up and its results are shown in the table-3, as an outcome of multiple regression model conceptualized. From the results, it can be inferred that the F value of 50.695 is found to be significant at 5 percent level and hence, the hypothesis-3 is rejected. These results suggest that customer loyalty depends on customer trust and customer satisfaction in e-Retailing. This finding goes in line with Jing and In Seon (2013), who reveal that customer satisfaction significantly influence on customer loyalty. Also, system quality and service quality significantly influence on customer satisfaction.

Further, the adjusted R square value of 0.814 from the table-3 indicates that 81 percent of customer loyalty among online buyers significantly depends on these factors in e-Retailing. Also the 't' values of 9.740 and 1.093 corresponding to the factors customer satisfaction and customer trust are found to be having significant effects on the model conceived.

More specifically, customer satisfaction among online buyers is found to be having significant superior effect on customer loyalty with highest value of 9.740. This undoubtedly proves that performance of e-Retailer web sites meets or exceeds their customer expectations completely, with sufficient experience in marketing of the products and services that it offers. Further, e-Retailing web sites know its users well enough to offer them products and services satisfying their needs and wants. Such condition and presence gives indication and contributing towards retaining loyal customers.

Also, customer trust among Online Buyers causes significantly good effect on customer loyalty in e-Retailing with the next higher t value of 1.093. This proves that e-Retailing websites are trustworthy, honest and usually fulfill their promises, commitments and words. E-retailing websites successfully instills belief and confidence in online customers to conduct e-transactions. Also, online customers feel secure while sharing their information such as personal and credit/debit card during transactions with e-Retailing websites. Such options are contributing towards increasing customer loyalty and their commitment in e-Retailing format. Hence, the above result confirms that higher customer satisfaction and higher customer trust in online web portals contribute to higher customer loyalty in e-Retailing.

6. INTERRELATIONSHIP AMONG STUDY VARIABLES

TABLE 6: DETAILS OF CORRELATIONS BETWEEN STUDY VARIABLES

S. No	Study variable 1	Mean	Study variable 2	Descriptive Statistics		'r' value	Level of Relationship
1	Outcome Quality	81.415	Interaction Quality	Mean	85.221	0.192**	Lower
2	Environment Quality	78.150		Mean rank	1	0.510**	Higher
3	Customer Satisfaction	75.540		Std. Deviation	6.228	0.411**	Higher
4	Customer Trust	72.267		Std. Deviation rank	1	0.331**	Medium
5	Customer Loyalty	65.822				0.206**	Medium
6	Environment Quality	78.150	Outcome Quality	Mean	81.415	0.310**	Medium
7	Customer Satisfaction	75.540		Mean rank	2	0.171**	Lower
8	Customer Trust	72.267		Std. Deviation	6.009	0.173**	Lower
9	Customer Loyalty	65.822		Std. Deviation rank	3	0.082	Not Related
10	Customer Satisfaction	75.540	Environment Quality	Mean	78.150	0.404**	Higher
11	Customer Trust	72.267		Mean rank	3	0.397**	Higher
12	Customer Loyalty	65.822		Std. Deviation	6.110	0.259**	Medium
				Std. Deviation rank	2		
13	Customer Trust	72.267	Customer Satisfaction	Mean	75.540	0.357**	Higher
				Mean rank	4		
14	Customer Loyalty	65.822		Std. Deviation	6.000	0.550**	Higher
				Std. Deviation rank	4		
15	Customer Loyalty	65.822	Customer Trust	Mean	72.267	0.140*	Lower
				Mean rank	5		
				Std. Deviation	5.790		
				Std. Deviation rank	6		
			Customer Loyalty	Mean	71.201		
				Mean rank	6		
				Std. Deviation	5.990		
				Std. Deviation rank	5		

*Significant at 5 Percent level

Source: Computed from Primary Data

The descriptive details comprising mean and Standard Deviation values for each of the study variable in e-Retailing is estimated and provided in the table-6. The study variable interaction quality has highest mean value of 85.221 with highest Standard Deviation value of 6.228, whereas the variable customer loyalty has lowest mean value of 71.201 and variable customer trust has the lowest Standard Deviation value of 5.790.

The highest mean value of 85.221 with highest Standard Deviation value of 6.228 for variable interaction quality confirms highest quality recognition with highest variations among Online Buyers in terms of ease of use, responsiveness and information quality details in e-Retailing. The next higher mean value of 81.415 with third highest Standard Deviation value of 6.009 for variable outcome quality confirms second higher quality recognition with third highest variations among Online Buyers in terms of order fulfillment, reliability and emotional benefits in e-Retailing websites. The next higher mean value of 78.150 with second highest Standard Deviation value of 6.110 for the variable environment quality confirms third higher quality recognition with second highest variations among Online Buyers in terms of visual appearance and clarity of layout.

The next higher mean value of 75.540 with third least Standard Deviation value of 6.000 for the variable customer satisfaction confirms fourth higher quality recognition with third least variations among online buyers in terms of performance of web sites, awareness about the customer needs and wants and sufficient experience in marketing their goods and services

The next higher mean value of 72.267 with least Standard Deviation value of 5.790 for the variable customer trust confirms fifth higher quality recognition with least variations among Online Buyers in terms of trustworthiness and honesty of the e-Retailer. Also, the safety of the personal and credit/debit information with fulfillment of promises and commitment contributes to quality recognition in study variable customer trust.

The lowest mean value of 71.201 with second least Standard Deviation value of 5.990 for the study variable customer loyalty confirms lower levels of quality recognition with second least variations among Online Buyers in terms of visiting e-Retailing website in future, suggestion and recommendation to others.

TABLE 7: CORRELATIONS BETWEEN STUDY VARIABLES FOR HYPOTHSIS - 4

Factors		**Customer Trust**	**Customer Satisfaction**	**Customer Loyalty**	**Interaction Quality**	**Environment Quality**	**Outcome Quality**
Customer Trust	Pearson Correlation	1					
Customer Satisfaction	Pearson Correlation	0.357**	1				
Customer Loyalty	Pearson Correlation	0.140*	0.550**	1			
Interaction Quality	Pearson Correlation	0.331**	0.411**	0.206**	1		
Environment Quality	Pearson Correlation	0.397**	0.404**	0.259**	0.510**	1	
Outcome Quality	Pearson Correlation	0.173**	0.171**	0.082	0.192**	0.310**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The relationship possibility between 6 study variables such as interaction quality, environment quality, outcome quality, customer trust, customer satisfaction and customer loyalty is defined in hypothesis-4 taken up and its results are results are shown in the table-24, as an outcome of Bivariate Correlation test. From the results it can be inferred that Pearson 'r' values between the range 0.140 and 0.550 corresponding to 14 different correlations are found to be significant at 5 percent level. However, the Pearson 'r' value of 0.082 corresponding to a correlation is not found to be significant at 5 percent level. This insignificant correlation has study variable customer loyalty as one of the correlating dimension that has lowest mean value of 71.201 While these results forms the basis to accept the hypothesis-4, the importance of 14 significant correlations out of total 15 possible relationships provide the base to identify varied level of relationships which can exist among study variables.

Based on standard approach (Nunnally, 1978) different possible correlations between these study variables with varied levels of relationship are identified and provided in table-23. Form the table-6, it can be noted that 'r' values corresponding to six correlations such as Environment Quality & Interaction Quality, Customer Satisfaction & Interaction Quality, Customer Satisfaction & Environment Quality, Customer Trust & Environment Quality, Customer Trust & Customer Satisfaction and Customer Loyalty & Customer Satisfaction are related at higher levels. The 'r' values corresponding to four correlations such as Customer Trust & Interaction Quality, Customer Loyalty & Interaction Quality, Environment Quality & Outcome Quality and Customer Loyalty & Environment Quality are related at Medium levels. Further, the 'r' values corresponding to four correlations such as Outcome Quality & Interaction Quality, Customer Satisfaction & Outcome Quality, Customer Trust & Outcome Quality and Customer Loyalty & Customer Trust are related at Lower levels. The 'r' value corresponding to correlation Customer Loyalty and Outcome Quality is found to be insignificant representing no relationship between the corresponding variables.

CONCLUSION

E-Retailers that desire to survive successfully must search some ways of providing unique service quality. It has been observed that with the introduction of internet, retailing business has catered wider sphere of customer base. The result of this research work proves construct reliability and validity of scale adopted, with the elimination of few item through factorability procedure. Further, the findings reveal that customer trust and customer satisfaction have significant positive dependency effect on e-Service quality dimensions. Also customer loyalty depends on customer trust and satisfaction. In addition, out of fifteen correlations, six are related at higher levels, four at medium levels and four are related at lower levels. This research work is conducted in one state with minimum sample size, thus it may not reveal universal output to explore favored values sought by online buyers regarding different areas.

REFERENCES

1. Akbar, M. & Parvez, N. (2009). Impact of service quality, trust and customer satisfaction on customer loyalty. ABAC Journal 29(1), 24-38.
2. Asuncioet B., J. D. Martı´n, and Q. Agustı´n, (2004). A Model of Customer Loyalty in the Retail Banking Market. *European Journal of Marketing*, 38(2), 253-275.
3. Bagozzi, R, P., and Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
4. Barroso, C, C. and Martin, E. (1999). Nivel de Servicio y Retencio´n de Clientes: El-Caso de la Banca en Espan˜ a", Revista Espan˜ ola de Investigacio´n de *Marketing ESIC*, 3(1), 9-33.
5. Baumgartner, H. and Homburg, C. (1996). Applications of Structural Equation Modeling in Marketing and Consumer Research: A Review. *International Journal of Research in Marketing*, 13(2), 139-61.
6. Behjati, S., Nahich, M., & Othaman, S, R., (2012). Interrelation between E-service Quality and E-satisfaction and Loyalty. *European Journal of Business and Management,* 4(9), 75-87.
7. Brillant, M, A. & Achyar, A. (2013). The impact of satisfaction and trust on loyalty of e-Commerce customers. *Asian marketing Journal*, 5 (1), 51-58.
8. Caruana, A. (2002). Service Loyalty: The Effects of Service Quality and the Mediating role of Customer Satisfaction. European Journal of Marketing, 36(7), 811-828.
9. Chen, M., Kune, Y. and Lee, K. (2013). E-service Quality Impact on Online Customer's Perceived Value and Loyalty. *China-USA Business Review*, 12 (5), 473-485.
10. Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in e-retailing. *Journal of Service Research, 8*(3), 260-275.
11. Eid, M. (2011). Determinants of E-Commerce customers satisfaction, Trust and Loyalty in Saudi Arabia. Journal of Electronic Commerce Research, 12(1), 78-93.
12. Fassnacht, M., & Koese, I. (2006). Quality of electronic services: Conceptualizing and testing a hierarchical model. *Journal of Service Research, 9*(1), 19-37.
13. Ghalandari, K. (2012). The Effect of E-Service Quality on E-Trust and E-Satisfaction as Key Factors Influencing Creation of E-Loyalty in E-Business Context: The Moderating Role of Situational Factors. *Journal of Basic and Applied Scientific Research*, 2 (12), 12847-12857.
14. Giese, J. and Cote, J. (2002). Defining consumer satisfaction. *Academy of Marketing Science Review Volume*, No.1, Available: http://www.amsreview.org/articles/giese01-2000.pdf - Academy of Marketing Science.
15. Jing, G. and In Seon, Y. (2013). An Empirical study on the Effect of E-Service Quality to Satisfaction. *International Journal of Management Sciences and Business Research*, 2(10), 25-34.
16. Kim, E, Y., and Jackson V, P. (2009). The Effect of E-SERVQUAL on e-Loyalty for Apparel Online Shopping. *Journal of Global Academy of Marketing Science* 19(4), 57-65.
17. Kolsaker, A. & Payne, C. (2002). Engendering trust in E-commerce: a Study of Gender-Based Concerns. *Marketing Intelligence and Planning*, 20(4), 206-214.
18. Lee, E. J., & Overby, J. W. (2004). Creating value for online shoppers: Implications for satisfaction and loyalty. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 17(6),* 54-67.
19. Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management, 33*(2/3), 161-176.
20. Merrilees, B. and Fry, M. (2003). E-trust: The Influence of Perceived Interactivity on E-retailing Users. *Marketing Intelligence and Planning*, 21(2),123-128.
21. Moorman, C., Deshpande, R. & Zaltman, G. (1993). Factors Affecting Trust in Market Research Relationships. *Journal of Marketing,* 57(4), 81-101.
22. Nunnally, J, C, & Brenstein, I, H. (1994). Psychometric Theory. *New York: McGraw-Hill.*
23. Nunnally,J, C. (1978). Psychometric Methods. *New York: McGraw-Hill.*
24. Oliver, R. L. (1997). Satisfaction: A Behavioral Perspective on the Consumer. New York: The McGraw-Hill Companies Inc.
25. Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: a multi-item scale for measuring consumer perception of service quality. *Journal of Retailing*, 64, 2–40.
26. Petrick, J. F. (2004). The roles of quality, value, and satisfaction in predicting cruise passengers' behavioral intentions. *Journal of Travel Research, 42*(5), 397-407.
27. Ribbink, D., van Riel, A. C. R., Liljander, V., & Streukens, S. (2004). Comfort your online customer: Quality, trust and loyalty on the Internet. *Managing Service Quality, 14*(6), 446-456.
28. Romadhoni, B., Hadiwidjojo, D., Noermijati & Aisjah, S (2015). Relationship between E-Service Quality, E-Satisfaction, E-Trust, E-Commitment In Building Customer E-Loyalty: A Literature Review. *International Journal of Business and Management Invention, 4(2), 1-9.*
29. Roostika, R. (2011), The Effect of Perceived Service Quality and Trust on Loyalty: Customer's Perspectives on Mobile Internet Adoption. *International Journal of Innovation, Management and Technology,* 2(4), 286-292.
30. Yang, Z., Peterson, R. T., & Cai, S. (2003). Services quality dimensions of Internet retailing: An exploratory analysis. *The Journal of Services Marketing, 17*(6/7), 685-698.
31. Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the academy of marketing science*, 30(4), 362-375.
32. Zeithaml, V., Parasuraman A. & Malhorta A. (2000). A conceptual framework for understanding e-service quality: implications for research and managerial practice. *Marketing Science Institute (MSI),* Report # 00–115.

APPENDIX

APPENDIX-1

e-SQ Dimension 1: Interaction quality (Ribbink et al., 2004; Lee & Lin, 2005; Yang et al., 2003; Fassnacht & Koese, 2006 and Chen et al., 2013)		
Ease of use	EU1	It is easy to get access to this e-Retailer's Web site.
	EU2	This site is user friendly.
	EU3	Navigation on this site is easy.
Responsiveness	RS1	This e-Retailer is willing to quickly solve problems for me.
	RS2	I think this e-Retailer gives prompt service.
	RS3	I believe this e-Retailer is always willing to help customers.
Information quality	IQ1	This e-Retailer provides up-to-date information.
	IQ2	This e-Retailer presents information that is easy to understand.
	IQ3	This e-Retailer provides all the information necessary.
e-SQ Dimension 2: Environment quality (Lee & Overby, 2004; Fassnacht & Koese, 2006; and Chen et al., 2013)		
Visual appearance	VA1	This e-Retailer's site is aesthetically appealing.
	VA2	The "look" of this Web site is appealing.
	VA3	This e-Retailer's site is visually appealing.
Clarity of layout	CL1	The layout of the Web site enables the user to find important things at first sight.
	CL2	Everything on this Web site is clearly arranged.
	CL3	The layout of this Web site provides a clear structure.
e-SQ Dimension 3: Outcome quality (Collier & Bienstock, 2006; Lee & Lin, 2005; Petrick, 2004 and Chen et al., 2013)		
Order fulfillment	OF1	This e-Retailer's orders are protectively packaged when shipped.
	OF2	My orders from this e-Retailer rarely contain the wrong items.
	OF3	The time between placing and receiving an order is short.
Reliability	RE1	Transactions with this e-Retailer are error-free.
	RE2	This e-Retailer has adequate security.
Emotional benefit	EB1	Making a purchase from this e-Retailer is enjoyable.
	EB2	Making a purchase from this e-Retailer makes me feel good.
	EB3	Making a purchase from this e-Retailer gives me happiness.

Customer Trust (Moorman, 1993; Kolsaker & Payne, 2002; Merrilees & Fry, 2003; Eid, 2011)	
CT1	E-product/service provider is trustworthy and honest.
CT2	E-product/service provider instills the confidence in his customers.
CT 3	E-product/service provider does not usually fulfill the promises and commitments he assumes.
CT 4	It is a problem to give the private information and the credit card number to the E-product/service provider.
Customer Satisfaction (Oliver, 1997; Giese & Cote, 2000; Eid, 2011)	
CS 1	The performance of Web site meets my expectation.
CS 2	The Web site does not have sufficient experience in the marketing of the products and service that it offers.
CS 3	The Web site knows its users well enough to offer them products and services adapted to their needs.
CS 4	The Web site does not have the necessary resources to carry out its activities successfully.
Customer Loyalty (Oliver, 1997; Barroso & Martı´n, 1999; Asuncioet al., 2004;Eid, 2011)	
CL1	I will continuously purchase from the Web site in the near future.
CL 2	I do recommend that others use the Electronic Commerce services.
CL 3	My preference for the Electronic Commerce would not willingly change.
CL 4	Changing my preference from the Electronic Commerce requires major rethinking.

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