The Determinants of Service Quality: A Study in E-Retailing

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Abstract

The expeditious development of technology and the internet has diverted the company direction to retain customer satisfaction by providing superior service quality. Service quality is becoming an area of great interest for companies and it has a straight impact on the profitability of a company. With regard to customer service quality importance, we investigate the determinants of service quality which affects customers. Measurement and improvement of e-service quality is important for keeping competitive advantage of an e-retail site. If online retailers understand what dimensions customers use to evaluate quality, they can take appropriate actions to monitor and enhance performance on those dimensions and remedy service failures. This paper focuses on investigating the effective factors in successful electronic retailing. In order to test the factors a questionnaire survey was designed and questionnaires were sent to online customers of e-retailing; the sample consisted of 452 respondents. By conducting exploratory factor analysis and structural equation model we found that responsiveness, security, Website design, reliability, ease of use and personalization are the six dominant factors which influence consumer perceptions of e-retailing.

Keywords: Service Quality, e-Retailing

1. Introduction :

With the growth of internet application by non-professional users in India, many retailing companies tend to sell their services and goods online instead of the traditional ways. Online shopping in India is an emerging trend for marketers to promote their products in wide geographical areas using the internet and the trend is likely to grow upwards over the coming decade. Online retail sector is a booming sector with exceptional development potential. The sector poses itself as one of the capable avenues for investment by entrepreneurs. An online selling system can make opportunity for the system to bring in its goods and services, advertise its new items, sell well and speedily, and receive money online. Due to these changes, e-retailing companies are trying to get loyal customers to ensure their survival. Customers' loyalty is considered essential because of its positive effect on long-term profitability. Several authors indicated that e-loyalty is subsequently of interactions of e-service quality, e-customer satisfaction, trust and perceived customer value.

Online retailing in India is bound to experience high growth rates on the backbone of rising internet penetration in the country, growing disposable incomes, the smart phone revolution and also the dominance of the younger population in the country's demographics. The market share in India is one of the fastest rising e-commerce markets in Asia-Pacific and the industry expecting it to raise $8.8 billion by the end of 2016. The youth of our country has contributed a great deal to this increase irrespective of the geographical locations. The people of age group 15-25 years, literally live and breathe through the internet. Purchasing items with just few clicks has become the newest and the latest trend of shopping, which hurts not only saved time but more importantly money. In today's world, no one has time to walk to different shopping malls or to cover great lands to buy products to fulfill their daily needs. E-retailing is the second biggest category of Indian e-commerce industry. E-tailing or online retailing includes consumer items like electronics, jewellery, mobile phones, computer peripherals, home appliances, apparels, shoes and toys. Moreover lifestyle accessories like watches, books, beauty products and perfumes and baby products are gaining traction.

Going along with the changing styles, today's Indian consumers increasingly desire to savor the convenience of shopping online. They do not desire to endure through the hassles of rushing to brick and mortar stores; instead, they want to order the products of their choice by sitting at home and bring the goods delivered at their doorsteps.

And such changes have contributed to the explosive development of e-tailing industry in the country. Top e-retailers in the Indian e-commerce landscape are homeshop18, ebay, flipkart and snapdeal contributing ~70% of the e-tailing market. (Source: NPCS Research, IAMAI)

2. Electronic Retailing :

E-retailing is a subset of e-commerce consists of buying and selling of products or services over electronic systems such as the Internet and other computer networks. In simple terms, E-tailing refers to retailing over the internet. With the rapid growth of commercial enterprise to consumer (B2C) electronic commerce (e-commerce), electronic retailers realized that irrespective of their business type and product offerings, they are requested to deliver superior service quality over the web, termed e-service quality. Delivering high quality service is considered an essential strategy for business success and survival (Reichheld & Schefter 2000; Zeithaml et al. 1996). Initially, companies focused on establishing attractive websites to interact and spend along with online shoppers. Accordingly, a number of attempts have been made to understand e-service quality in terms of web interactivity (Aladwani & Palvia 2002; Loiacono et al. 2007). Such approaches on measuring e-service quality using cues that emerge from interacting with the internet site were found to be insufficient and inappropriate to measure the role of the online service experience.

3. Service quality :

Service quality is normally defined as the difference of expected service and perceived service. Quality service is the customer's subjective assessment that the avail they are receiving meets and exceeds their expectations. (Gronroos, 1982 and Parasuraman et.al, 1988). "Service quality is a focused appraisal that reflects the customer's perception of specific dimensions of service: responsiveness, reliability, trust, empathy, tangibles. Satisfaction, on the other hand, is more inclusive: it is influenced by perceptions of serving quality, merchandise quality, and price as well as situational factors and personal factors. As online retailing grows, service quality has become an increasing vital factor in determining the success or failure of e-retail businesses by influencing consumers' online shopping experience (Yang, 2001). Thus, delivering quality in service has shown to be an important strategy for sellers who are attempting to distinguish their service offering and fill client needs (Ozment and Morash, 1994).

Both concepts of customer satisfaction and customer retention have become increasingly significant subjects for e-business. A satisfied customer is more likely to remain with the same fellowship and effective loyalty building strategies enable e-business to grow in size and population. One way of enhancing customer satisfaction and increasing customer loyalty is through offering superior e-service quality. Furthermore, Service quality frequently evaluated in terms of five dimensions such as reliability, responsiveness, tangibility assurance and empathy using the SERVQUAL scale. But the electronic delivery of retail services differs in many ways from traditional 'Brick and mortar'. Online services have unique characteristics that offline service do not possess, which can affect the perception of service quality.

4. Review of literature :

In the light of grown consumer marketplace at an exponential rate as well as technology at the same rate has increased many times the capacity of online companies to improve the quality of their services. Just as the E-Retailing created many exciting new opportunities, it also introduced many new questions that warrant careful study. Many researchers have been conducted regarding different issues relating to service quality.

Collier and Bienstock (2006) proposed and empirically tested that combines process, outcome and recovery dimension. The study found formative indicators and the three-dimensional approach to conceptualizing e-service quality and it seems apparent that e-service quality is more than just the interaction of the customer with website. The study concluded that how the process quality of an e-service experience plays a crucial role in the overall evaluation of e-service quality. Result of the finding suggested that customer evaluating the process of placing an order by evaluating the design, information accuracy, privacy, functionality and ease of use of a website

Kim and Lennon (2006) identified online service attributes that facilitates efficient and affective shopping, purchasing and delivery based on the modified E-S-QUAL scale and to evaluate the extent to which current online retailers provide such service attributes as an objective measure of service performance. After that Swaid and Wigand identified that Key dimension of e-commerce service quality are website usability, reliability, responsiveness, assurance and personalization and second is the customers satisfaction is influenced mostly with the perception of reliability, while customer loyalty is affected by the perception of assurance third is customer retention is predicted by customer satisfaction index.

San et.al (2010) studied the relationship between reliability/prompt responses, attentiveness, and perceived ease of use, access and security towards perceived online service quality. The result showed that reliability/prompt responses, ease of use and access are significantly correlate with perceived online shopping service quality and Sadeh identified seven dimensions of website quality which included research facility, provides detail information, privacy and security, interaction facilities and contents, speed and facility of assess, reliability and up to date information.

Sita et al (2013) studied the behaviour of online consumer in India in terms of internet usage, perceived risks, and website attributes influencing online users and the influence of perceived risks on intent to do online purchase in future. The Results showed that Indian online users had high levels of perceived risks, highest fear being related to the delivery of products purchased online.

Information quality product range and after online sales service are most preferred website attributes which influence Indian online users.

Pratminingsih et al (2013) revealed in his empirical study that satisfaction, trust and commitment have significant impact on student loyalty toward online shopping. **Nsairi et al** (2013) examined the key determinants of satisfaction in an online shopping context and their consequences on loyalty. The findings revealed that the effect of website environment on perceived value is supported and that some dimensions of perceived value influence online customer satisfaction. Moreover, satisfaction has a positive influence on loyalty while computer anxiety has a negative influence.

5. Objective and Research Method :

To study the determinants of e-retail service quality convenience sampling is used to collect data from individuals who could reasonably interpret the E-retailing, hence in the present study those individuals have been included who are educated and exposed to online shopping. The survey has been conducted via email and face-to-face interviews. A total of 500 survey questionnaires had been sent out, of which 452 questionnaires were received. Each of the responses received has been screened for errors, incomplete or missing responses. Efforts have also been taken to contact the affected respondents through e-mail for clarification and corrections, especially for missing or blank responses. After the screening process carried out, only 452 responses have been considered complete and valid for data analysis.

6. Analysis :

The factor analysis technique was applied on responses of respondents with regard to twenty two variables related to the e-retail service quality and six factors were extracted. The respondents were asked to rate twenty two variables/statements, on five point Likert scales, which ranged from strongly satisfy to strongly dissatisfy.

6.1. Scale Development :

A scale was developed to identify the factors affecting service quality in e-retailing. The literature for the same was consulted as shown in literature survey. The variables were selected based on literature support and in consultation with professional in the field of service quality. Total 22 variables were selected to find the perceptions of the respondents toward e-retail service quality. These items were to be rated on a five point Likert scale by the respondents.

6.2 Scale Refinement

Item wise reliability analysis was performed on selected variables to for developing a reliable scale. For the purpose of reliability assessment of unidimensionality, reliability and validity have been done. Hence, based upon these concepts the scale generated for present objective was refined and purified. Moreover the Inter item correlations and Cronbach's alpha statistics were employed to carry out the scale reliability analysis and to know extend to which items were correlated with the rest of the items in a set of items under consideration. The results are shown in Table 1 as follows:

Table 1 : Scale Reliability Analysis (E service quality in e-retailing)

	Initial	Extraction	Mean	Std. Deviation	Corrected Item-Total Correlation
ER3	1.000	0.785	3.004	1.454	0.401
ER4	1.000	0.586	3.621	1.170	0.509
ER5	1.000	0.650	3.289	1.225	0.665
ER6	1.000	0.534	3.641	1.280	0.538
ER7	1.000	0.571	3.752	1.144	0.648
ER8	1.000	0.799	3.546	1.149	0.593
ER10	1.000	0.736	3.517	1.239	0.488
ER11	1.000	0.737	3.486	1.349	0.570
ER12	1.000	0.605	3.011	1.302	0.621
ER13	1.000	0.757	3.121	1.320	0.545
ER14	1.000	0.649	3.455	1.428	0.561
ER15	1.000	0.665	3.376	1.321	0.612
ER16	1.000	0.630	3.327	1.323	0.525
ER18	1.000	0.537	3.252	1.484	0.429
ER20	1.000	0.790	2.780	1.181	0.574
ER22	1.000	0.599	2.716	1.420	0.606
ER25	1.000	0.761	3.130	1.413	0.515
ER26	1.000	0.793	3.342	1.301	0.554
ER28	1.000	0.586	3.150	1.349	0.566
ER29	1.000	0.602	2.949	1.335	0.566
ER30	1.000	0.597	3.119	1.309	0.642
ER31	1.000	0.721	3.057	1.301	0.659

6.3 Reliability validity and unidimensionality:

The cronbach's alpha of scale is .841 (Table 4) which is a good indicator to go further on as the value of the cronbach's alpha coefficient of 0.6 and above is good for research in social science (Cronbach, 1990). Moreover the corrected-item-total correlation > 0.5 and inter-item correlation is more than 0.3. Here, it is pertinent to mention that corrected-item-total correlation > 0.5 and inter-item correlation >0.3 is good enough for reliability of the scale (Hair et al., 2009). The significance for communalities using principal component analysis ranged from .595 to .815. Here, it is pertinent to mention that communalities >0.5 is sufficient for the explanation of constructs (Hair et al., 2009). All these values show factors analysis has extracted good quantity of variance in the items. Thus, all the requirements of reliability and validity are met.

Table 2 : KMO and Bartlett's Test

6.4 Correlation Coefficients

Correlations of all variables with each other were analysed using Pearson Correlation coefficients. Correlations among different items were quite satisfactory and were also significant. The correlation matrix is computed as shown in Table 3.

Table 3 : Inter- Item correlation

	ER3	ER22	ER28	ER29	ER30	ER31	ER4	ER8	ER10	ER18	ER20	ER25	ER26	ER7	ER14	ER15	ER16	ER11	ER12	ER13	ER5	ER6
ER3	1.0																					
ER22	.467	1.0																				
ER28	.432	.455	1.0																			
ER29	.408	.435	.556	1.0																		
ER30	.426	.466	.506	.450	1.0																	
ER31	.395	.470	.478	.551	.531	1.0																
ER4	.118	.213	.194	.301	.295	.388	1.0															
ER8	-.073	.273	.213	.348	.214	.367	.495	1.0														
ER10	-.078	.222	.220	.197	.224	.256	.527	.578	1.0													
ER18	.023	.255	.137	.239	.305	.306	.369	.440	.462	1.0												
ER20	.338	.433	.281	.328	.452	.323	.378	.110	.436	.321	1.0											
ER25	.221	.563	.300	.309	.411	.349	.166	.212	.186	.187	.435	1.0										
ER26	.093	.399	.298	.255	.399	.359	.289	.216	.306	.242	.518	.614	1.0									
ER7	.379	.386	.342	.260	.324	.313	.301	.455	.391	.220	.284	.261	.291	1.0								
ER14	.145	.338	.350	.196	.361	.417	.258	.311	.268	.082	.167	.261	.255	.487	1.0							
ER15	.015	.257	.175	.252	.290	.298	.330	.549	.357	.374	.270	.212	.270	.543	.556	1.0						
ER16	.221	.325	.259	.211	.227	.170	.164	.273	.160	.258	.282	.294	.347	.463	.429	.472	1.0					
ER11	.201	.242	.184	.312	.306	.231	.273	.300	.369	.269	.384	.179	.238	.392	.347	.404	.372	1.0				
ER12	.187	.269	.303	.307	.322	.339	.380	.348	.376	.319	.323	.214	.232	.362	.428	.382	.390	.583	1.0			
ER13	.440	.305	.289	.283	.203	.318	.165	.171	.143	.171	.309	.160	.127	.313	.329	.320	.318	.623	.487	1.0		
ER5	.425	.339	.421	.322	.550	.469	.411	.377	.170	.224	.326	.314	.359	.504	.414	.314	.329	.253	.425	.392	1.0	
ER6	.205	.136	.365	.277	.298	.239	.214	.304	.255	.145	.234	.227	.270	.344	.280	.278	.413	.408	.480	.452	.575	1.0

There is a sufficient correlation to go forward with factor analysis. Factor analysis is performed with varimax rotated, Principal Component Analysis. The scale reliability has also made for factors, so classified. The results are shown in the Table 4.

Table 4 shows the factor analysis of the twenty two variables; this analysis extracted six factors from the variables. Each factor was defined by at least two scale items. *Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA)* value of .825 is adequate enough for validating factor analysis results. Here, it is pertinent to mention that KMO>0.6 and p<0.5 are good enough for research in social sciences (Hair et al., 2009). The *Bartlett's Test of Sphericity* also has a value of X^2 =9.658, DF =276. All these requirements are adequate for validating factor analysis. The six factors classified using the factor analysis is shown on the Table 4. All the factors having loading more than 0.4 are considered and the loading ranged from .766 to .624. The six factors so generated have Eigen values ranging from 10.287 to 1.072. All these requirements are sufficient for validating factor analysis. The six factors classified using the factor analysis is shown in the Table 5.

Table 4 : Rotated Component Matrix

Code	Statements	Factors					
		1	2	3	4	5	6
ER3	Have relevant and accurate Emails' responses	.745					
ER28	Handle quickly to a consumer complaint.	.709					
ER31	Has an acceptable return policy	.704					
ER29	Sends e-mail and messages for special offers frequently	.703					
ER30	Offer fair Compensation for problems Orders from this e-retailer	.603					
ER22	Orders are protectively packaged when delivered	.595					
ER13	Website performs the service right the first time		.766				
ER11	Provide a confirmation of items ordered.		.729				
ER6	Have order cancellation and return policy		.657				
ER12	Order tracking details are available till delivery		.639				
ER14	Security policy is accessible			.747			
ER15	Websites contain company details			.728			
ER7	Purchasing from the websites will not cause financial risk			.657			
ER16	Online payment is safe			.625			
ER4	Websites are visually pleasing.				.735		
ER10	Able to see the graphics clearly on e-retailer's Web site.				.731		
ER8	Website designs are innovative				.673		
ER26	Websites load its page quickly.					.815	
ER25	The websites are be well organised					.741	
ER20	Websites completes a transaction quickly					.624	
ER17	Has service representatives online						.661
ER18	Have a toll free call number						.651
Alpha		**0.841**	**0.786**	**0.766**	**0.794**	**0.795**	**.730**
% Var		**14.968**	**11.574**	**11.572**	**11.076**	**10.100**	**7.303**
Eigen Value		**8.312**	**2.234**	**1.778**	**1.357**	**1.276**	**1.026**

6.5 First factor (Responsiveness)

The first factor alone has explained 14.968% of the total variation in the factor analysis. *It includes six factors i.e. Have relevant and accurate Emails' responses, Handle quickly to a consumer complaint, Has an acceptable return policy, Offer fair Compensation for problems Orders from this e-retailer , Orders are protectively packaged when delivered , Sends e-mail and messages for special offers frequently.* Responsiveness refers to an ability to deal effectively with complaints and rapidity of the service (Santos 2003). According to Janda et al. (2002), customers expect Internet retailers to answer to their inquiry promptly. Prompt responses help customer resolve their problems and make decision in a timely fashion. Additionally, the Web-based customers want to find desire information quickly. The factor loading ranges from .745 to .595. The inter item correlation ranges from .147 to .556 and item to total correlation ranges from .380 to .623. It covers 8.312 of the Eigen values.

6.6 Second factor (Reliability)

Four variables load on second factor which is labelled as **Reliability.** Items included in this factor are*: Website performs the service right the first time, Provide a confirmation of items ordered, Have order cancellation and return policy, Order tracking details are available till delivery*. Santos (2003) refers to reliability as the ability to perform the promised service truthfully and consistently, including frequency of updating the web site, prompt reply to customer enquiries, and exactness of online purchasing and billing. This factor has explained 3.801% of the total variation in the factor analysis. The factor loading ranges from .766 to .639. The inter item correlation ranges from .413 to .413 and item to total correlation ranges from .291 to .498. It covers 2.234 of the Eigen values.

6.7 Third factor (security)

Factor third is correlated with another four variables is *security*. According to Davis and Benamati (2003), security is a set of procedures, techniques, and safeguards designed to protect hardware, software, data, and other system resources from unauthorized access, use, modification, or theft. Security is a growing trouble on the Internet and troublesome for administrators who are in charge with sensitive and commercial data. The factor loading ranges from .747 to .625. The inter item correlation ranges from .295 to .556 and item to total correlation ranges from .457 to .601. It covers 1.778 of the Eigen values.

6.8 Fourth factor (Website design)

The fourth factor loaded with another three variables. This factor can be labelled as **Website design.** In the virtual environment of e-service, the tangible elements should be focused on the website design as it constitutes the main access to organizations and to a successful purchase process. The insufficiency of website design can result in a negative impression of the website quality to the customers, and customer may exit the purchase process. The factor loading ranges from .735 to .673. The inter item correlation ranges from .330 to .578 and item to total correlation ranges from .458 to .546. It covers 1.357 of the Eigen values.

6.9 Fifth factor (Ease of use)

The fifth factor loaded with another three variables. This factor can be labelled as **Ease of use** refers to a consumers' belief that no effort will be required to use a system; the effort includes both physical and mental effort and how easy it is to learn and use the system (Davis,1989). The dimension of ease of use included characteristic such as *easy to learn, controllable, clear and understandable, flexible, easy to become skilful, and easy to use.* This factor has explained 4.815% of the total variation in the factor analysis. The factor loading ranges from .815 to .624. The inter item correlation ranges from .487 to .623 and item to total correlation ranges from .504 to .590. It covers 1.276 of the Eigen values.

6.10 Sixth factor (Personalisation)

The sixth factor loaded with another two variables. This factor can be labelled as ***personalisation.*** Personalization is becoming more important to online service quality. *Giving customers special attention, understanding the specific needs of customers, and providing service related to convenience can be considered as personalization.* The factor loading ranges from .661 to .651. The inter item correlation ranges from .329 to .618 and item to total correlation ranges from .453 to .530. It covers 1.026 of the Eigen values. The seventh factor loaded with another two variables.

6.11 Sem for Factors Affecting e-retail Service Quality

Structural equation modeling, which includes measurement model and path analysis, is an efficient way to uncover the causal associations between constructs and their underlying measurement suitability. Amos software with maximum likelihood estimation (ML) is used to implement SEM. Confirmatory factor analysis is employed to test the reliability and validity of the questionnaires after collecting the questionnaires. The loading factor values of each manifest variable are higher than 0.6 (the suggested threshold value is 0.6 (Bagozzi & Yi (1988)), indicating that internal consistency and convergent validity are good; composite reliability (Construct reliability) and the Cronbach's á value of each construct are higher than 0.8, also the average variance extracted of each construct is greater than 0.5, indicating good reliability.

Table 5 : Fit Indices and Guidelines for Model Analysis (service quality of e-retailing)

For the overall evaluation of the measurement, multiple fit indexes are reported in Table 6 from which we can see that the model is reasonably consistent with the data, with all the fit indexes better than the recommended values.

Path Analysis:

In the following part an attempt has been made to reveal the results of path analysis conducted using a Structural Equation Modeling technique.
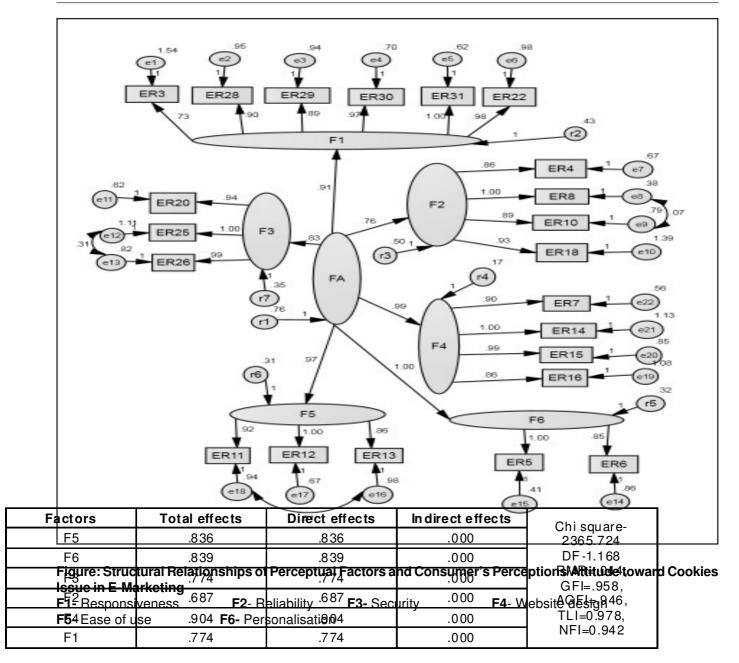
Factors	Total effects	Direct effects	Indirect effects	
F5	.836	.836	.000	Chi square-2365.724
F6	.839	.839	.000	DF -1.168
F3	.774	.774	.000	RMR=.014
				GFI=.958,
F2	.687	.687	.000	AGFI=.946,
F4	.904	.904	.000	TLI=0.978,
F1	.774	.774	.000	NFI=0.942

Figure: Structural Relationships of Perceptual Factors and Consumer's Perceptions Attitude toward Cookies Issue in E-Marketing

F1- Responsiveness   **F2-** Reliability   **F3-** Security   **F4-** Website design
F5- Ease of use   **F6-** Personalisation

Table 6 : Effect Estimates for Factors Affecting e-Retail Service Quality

7. Discussion of Results :

The values for various fit indices, chi-square, level of significance and effect of factors/items on e-retail service quality are shown in Table 6 & 7. The results in figure show that path loading on **Responsiveness** (coded-F1) factor ranged from .73 to 1.0. The path loading of 1.0 for *acceptable return policy* and 0.98 for *Orders are protectively packaged* show that these items play a more important role for this construct as compared to other items. According to Janda et al. (2002), customers expect Internet retailers to response to their inquiries promptly. Timely responses help customer resolve their problems and make decision in a timely. Moreover, the Web-based customers want to find desire information quickly and accurately.

The path loading on *reliability* (coded-F2) factor has the range from .86 to 1.00. There are four items in this factor with significantly loaded. The maximum loading is for *Website designs are innovative (1.0)* and *Have a toll free call number* (.93) showing the dominance of this factor. According to Zeithaml (2002), reliability is connected with the technical functioning of the site, particularly the extent to which it is available and functioning suitably. Santos (2003) refers to reliability as the ability to perform the promised service accurately and consistently, including frequency of updating the web site, prompt reply to customer enquiries, and accuracy of online purchasing and billing. Specifically, it involves: keeping records correctly; accuracy in billing; and performing the service at the designated time.

The *security* (Coded F3) factor has path loading from .94 to 1.00. The results show that the loading of *websites are be well organised* (1.00) played a more dominating role for this factor. All the loading is different and sufficient to explain this factor. According to Davis and Benamati (2003), security is a set of techniques, procedures, and safeguards designed to protect hardware, software, data, and other system resources from unauthorized access, modification, use, or theft. Security is a growing trouble on the Internet and troublesome for administrators who are in charge with sensitive and commercial data (Colin, 1999). Even though consumers like to shop online, unfortunately they are concerned about the security when they want to reveal their private and financial information.

The path loading on *website design* (coded-F4) factor has the range from .86 to 1.00. There are four items in this factor with significantly loaded. The maximum loading is for *Security policy is accessible (1.0)* and *Websites contain company details* (.99) showing the dominance of this factor. In the virtual environment of e-service, the tangible elements should be concentrated on the website design since it constitutes the main access to organizations and to a thriving purchase process. The absence of website design can result in a harmful impression of the website quality to the customers, and customer may exit the purchase procedure. Website is the starting point for customers to gain confidence. Thus website design should gather the various attributes like Appealing and well organized website, Quickly downloading Consistent, standardized navigation, and Well-organized appearance of user interface in order to attract customers to conduct purchasing online easily with good navigation and helpful information on the website.

The path loading on *Ease of use* (coded-F5) factor ranged from .86 to 1.0. The path loading of 1.0 for *Order tracking details are available till delivery* and 0.92 for *Provide a confirmation of items ordered* show that these items play a more important role for this construct as compared to other items. Ease of Use has been studied extensively in the context of IT adoption and diffusion and it is one of the key measures for user satisfaction, system adoption, or IS success (Moore and Benbasat 1991). Ease of use is defined as the degree to which a system is "user friendly". In the context of e-commerce, consumers may access the websites based on how simple they are to use and how effective they are in helping them accomplish their tasks (Zeithaml et al. 2002).

The *personalisation* (Coded F6) factor has path loading from .85 to 1.00. The results show that the loading of *websites are be well organised* (1.00) played a more dominating role for this factor. All the loading is different and sufficient to explain this factor. Personalization is becoming more important to online service quality. Giving customers personal attention, providing service related to convenience, and understanding the specific needs of customers, can be considered as personalization.

8. Limitations of the Study and Future Research Directions:

◆ The survey was confined to individual shopping behavior. Punjab and Chandigarh are being a collectivist State and UT, most of the shopping happens in a family set up. Consideration of family shopping behavior might take an interesting findings.

◆ The present study was cross-sectional in nature and given the corresponding drawbacks of the same, longitudinal studies should be conveyed in the future to prove the proposed model so as to re-evaluate directions of causality among the survey variables. As perceptions change over time, longitudinal research may be helpful.

◆ The sample for the present study comprised of 268 respondents. The sample is small proportion of the entire population of online consumers in the Punjab and Chandigarh. Thus, research studies with much bigger sample size would be commanded to ensure more generalized findings of the survey.

9. Conclusion :

With Internet and Web technologies, online customers can have unlimited access to the information they require and may enjoy a wider scope of choices in choosing products and services with highly competitive prices. So, it is generally not easy for online retailers to assume and sustain competitive advantages so "differentiating" service quality levels of the online retailers have gradually more become a central driving force in enhancing customers' satisfaction and inward turn in spreading out their customer bases. Service quality improvement initiatives should begin with defining the customers' requirements and preferences, and their related quality dimensions. If online retailers see what dimensions customers use to assess quality, they can take appropriate actions to monitor and enhance performance on those dimensions and remedy service failures. This work identified a sum of six key online service quality dimensions. Apparently, in parliamentary procedure to sustain a high degree of overall service quality, the online retailers should pay attention to all eight dimensions identified in this survey. Even so, to strengthen competitiveness in the exceedingly competitive market, given limited organizational resources, it is recommended that the online retailers focus particularly on four

dimensions, responsiveness, functionality, serviceability and ease of use, in lodge to reach high levels of consumers' perceived overall service quality and their satisfaction simultaneously. For online retailers, the six service quality dimensions identified in this research provide useful information on which areas the online retailer should focus on to improve online shopping service quality.

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