A Study on Consumer Perception of E-Tailing Services for Electronic Goods in Kolkata

Biswajit Roy

Abstract

The term "retailing" also has been continuously changing its meaning and scope as the organization progress. With the advent of internet and the World Wide Web, a lot of effort has been given to discover new and sophisticated e-tailing approaches than the traditional approach of retailing. In fact the entire world has become a virtual market for a common man nowadays, since it can provide faster and easier way of buying and selling of goods and services. Retailing is emerging as a big service industry in India, following the footsteps of the other parts of the world.

E-tailing is the concept of selling of retail goods using electronic media, in particular, the internet (as well as fax or phone or Digital TV), to a place defined by the customer (Sharma, 2009).

The study investigates consumer perception on e-Service quality of e-tailing activities. Service quality refers to an attitude formed by a long term overall evaluation of a firm's performance. It is closely related to customer satisfaction. It can be said that satisfaction assists consumers in formulating a revised opinion about their service quality perception (Srinivasan, 2010). Customer satisfaction could be defined as a comparison of perceptions and predicted service expectations, in association with various marketing activities.

The present study covers the different perceptual factors of e-tailing. The study is important for measuring the e-service quality and satisfaction level of e-customers. It provides an outline to revalidate different dimensions and factors involved with e-retailing and can help to find out new model in e-retailing by identifying new dimensions and factors. For the purpose of measure e-customers' satisfaction level for electronics goods, a satisfaction index is developed in the paper. For identifying perceptual dimensions, confirmatory factor analysis is applied with multiple regression analysis. The study is limited to the geographical region of Kolkata city only and no forward or backward linkages of e-retailing is taken into consideration.

Keywords: e-tailing, Consumer perception, Customer satisfaction, Factor analysis, Regression

1. Introduction

E-business is getting extensive growth, on the consequence of it, the consumer experience, expectations of online businesses are increasing day by day (Grewal, H et al.

Biswajit Roy, Assistant Professor, Future Business School, Kolkata. Email: email2biswajit@gmail.com, Phone: 09883015054, Mailing Address: 18N, Kalupara Lane, Dhakuria, Kolkata – 700031, (Corresponding Author)

2012). Retailing business is also experiencing the same changes, mainly the consumer goods, as e-retailing or e-tailing is gaining popularity day by day. It is therefore imperative to understand the structural changes taking place in market and also the long term impact of the changes due to online buying especially to understand the reasons /causes influencing the customers to buy online. (Datt, R, et al 2009).

The conceptualization and design of e-services and e-service quality dimensions are essential prerequisites to connect retailers' infrastructural and integration choices to mark-ups and ultimately, to articulate conducts that will allow retailers to profitably target their markets with their e-services. It is possible that e-retailers adopting a particular conduct may find themselves targeting markers in which buyers are freely able to search and find the lowest priced goods. Thus according to information economics theory, these retailers would have no choice but to bring uniformity at cost and to render their e-services irrelevant.

This study addresses on the above topic to understand and measure consumer perception for the development in e-retailing services in India, by considering the city of Kolkata as a place of study to judge the consumers' preference in a metropolitan city, where availability of technology is considered to be sufficient for conducting such research. Consumers' Perception is a marketing concept that encompasses customers' impression, awareness and/or consciousness about a company or its offerings. Customer perception is typically affected by advertising, reviews, public relations, social media, personal experiences and other channels. So, to develop a new business model for e-tailing by identifying consumer perceptual dimensions can help retailers to target buyers by providing superior e-service quality.

2. Literature Review

Retailing is viewed as a service industry (Berry, 1986). So, it is as important in retailing as it is in any other service sector to have a little bit of idea about the service quality dimensions. Later in 1988, Parasuraman et al. have conducted another research in more constructive manner and developed SERVQUAL model from a 22-item scale for measuring consumer perceptions of service quality. This paper can be considered as a path breaking contribution to measuring consumer perception in service and retailing organization, as a reliable scale was developed with the discussion of potential application of the same. The paper identified five service quality dimensions as Tangibility, Reliability, Responsiveness, Assurance and Empathy. Most importantly, it is mentioned in the research that, a retailer can also use SERVQUAL to assess its service performance, relative to its principal competitors. The two section format of the instrument, with separate expectation and perception sections, makes it convenient to measure the quality of service firms simply by including a set of perception statements for each firm as the expected section needs no repetition.

In their subsequent research work, Parasuraman et al. developed and extended their ideas on measuring consumer perception with a different view point.

Evidence exists that service quality delivery through websites is an essential strategy to success, for the managers of companies with web presences. To understand how customers perceive and evaluate online customer service, the primary step involves defining what e-service quality (e-SQ). Followed by identifying its underlying dimensions, and determining how it can be conceptualized and measured (Zeithaml et al., 2002). For that, Zeithaml et al. developed a conceptual model for understanding and improving e-service quality. Apart from a discussion on the impact of technology readiness on e-services, this paper discussed about different e-service gaps and a comparative study between service quality aspects with e-service quality aspects.

Wolfinbarger. M et al. (2003) in their study paper "eTailQ: dimensionalizing, measuring and predicting etail quality", establish the dimensions of the etail experience, and develop a reliable and valid scale for the measurement of etail quality. The analysis suggests that four factors—website design, fulfillment/reliability, privacy/security and customer service—are strongly predictive of customer judgments of quality and satisfaction, customer loyalty and attitudes toward the website.

Yang.Z et al. (2004) have tried to set a reliable and valid means of measuring online service quality based on online banking customer review. They succeed to identify six key online service dimensions, viz, reliability, responsiveness, competence, ease of use, security, and product portfolio, through a confirmatory factor analysis. The identification of six factors was followed by a regression analysis that revealed the association the six dimensions of perceived online service quality with overall service quality and satisfaction. The measurement instrument constructed in this study can be used to further investigate how customer perceived online service quality influence customer satisfaction and in turn purchasing behaviors such as customer repurchase intentions and loyalty.

Parasuraman et al. (2005) developed a multiple-item scale for assessing electronic service quality. They developed E-S-QUAL) for measuring the service quality delivered by Web sites on which customers shop online. The basic E-S-QUAL scale developed in the research is a 22-item scale of four dimensions: efficiency, fulfillment, system availability, and privacy. They also proposed a second scale, E-RecS-QUAL, is salient only to customers who had non routine encounters with the sites and contains 11 items in three dimensions: responsiveness, compensation, and contact.

Ye. N. et al. (2007) studied the impacts of consumers' perceived service quality in e-retailing on their attitude towards e-retailing and behavior intention towards internet shopping. The study revealed that consumers' perceived reliability, post services,

pay-delivery easiness and personalized care have impact over consumers' attitude towards online retailing. And this attitude has a strong impact on consumers' online shopping intention. Earlier in another research paper "Customers' perceived service quality of internet retailing", YE, N. et al. (2005) identified eight dimensions of e-retailing service quality consumer perception. Applying a confirmatory factor analysis, they have identified reliability, convenience, diversify, availability, responsiveness, empathy, post-service and security as eight consumer perception dimensions.

Li. H et al (2008) investigated e-service quality dimensions from both e-service provider's and customer's perspectives. They proposed a 10-dimension scale for measuring e-service quality: Website design, reliability, fulfillment, security, responsiveness, personalization, information and empathy from the e-service provider's perspective, and trust and experience from the customer's perspective.

3. Objectives
The basic objectives of this study are enumerated below:
- To identify perception based E-QUAL service dimensions to measure e-service quality of electronics goods in Kolkata
- To measure the e-retailing customer satisfaction based on e-service quality of electronics goods in Kolkata

4. Research Methodology
4.1 Research design
The research is based on Causal research design. Causal research, as the name specifies, tries to determine the cause underlying a given behavior. It finds the cause and effect relationship between variables. It seeks to determine how the dependent variable changes with variations in the independent variable.

4.2 Data Collection
For present study, mainly primary data is used. For the purpose a range of response based close ended questions, providing limited answers to specific responses or on a numeric scale is used. Face-to-face interview was conducted to develop the interview questions including open-ended questions and close ended questions and carefully eliminating leading questions. Samples were drawn following simple random sampling method. All sample units was personally contacted and interviewed.

4.3 Sample Size: 437

4.4 Tools of Collecting Primary Data
A structured, undisguised questionnaire is used based on rating scale. Questions were both open ended & closed ended.

5. Results

This study consists of two parts. One part deals with knowing the consumer beliefs for the e-retailing service provider. For this purpose, their expectations about different e-service providers are recorded for ideal case. Another part deals with identifying the consumer attitude towards e-retailing service provider. For this purpose, their perceptions about different e-service providers were recorded and 37 variables which were identified by the researcher were all rated by the respondents.

5.1 Analysis stage 1: Working with average values

Here in this stage, the average values of expectation and perception for all 437 respondents are calculated to address the hypothesis. By this process, it is attempted to know the overall idea of each respondent about their expectation or perception of the e-service. This stage of analysis consists of several sub stages.

5.1.1 Finding average expected score for all 437 respondents

In this stage, average score for all the 437 respondents and for all 37 variables are calculated. The formula used for the purpose is:

$$1/n \sum_{i=1}^{n} ei$$

where, n=number of variables=37
ei stands for the ith expected score
For details, please refer to the table 7.3.1.1 in the Annexure.

5.1.2 Finding average perceptual score for all 437 respondents

Similar to the previous section, average perceptual score for all the 437 respondents and for all 37 variables are calculated. The formula used for the purpose is:

$$1/n \sum_{i=1}^{n} pi$$

where, n=number of variables=37
pi stands for the ith perception score

5.1.3 Measuring customer satisfaction

As per the hypothesis it was found that customers are not fully satisfied with the e-retailing services of electronics goods in Kolkata. To prove that whether there is any significant difference exists between these two groups of satisfied and dissatisfied customers, a paired sample t-test is conducted. To identify the satisfied and dissatisfied customers, a ration between average perceptual score and average expectation score is taken for each and every individual, as under:

i.e;

$$\frac{\sum_{i=1}^{n} pi}{\sum_{i=1}^{n} ei}$$

This ratio is considered as "satisfaction index".

5.2 Analysis stage 2: Identification of Perception dimensions
The researcher then analyzed those 37 variables of perception to extract dimensions of perception. For the purpose factor analysis was conducted with Principle Component Analysis.
Factor Analysis for Perception dimension

Table 1: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.857
Bartlett's Test of Sphericity	Approx. Chi-Square	9511.785
	Df	666
	Sig.	.000

Figure I: Screen plot for perception factors

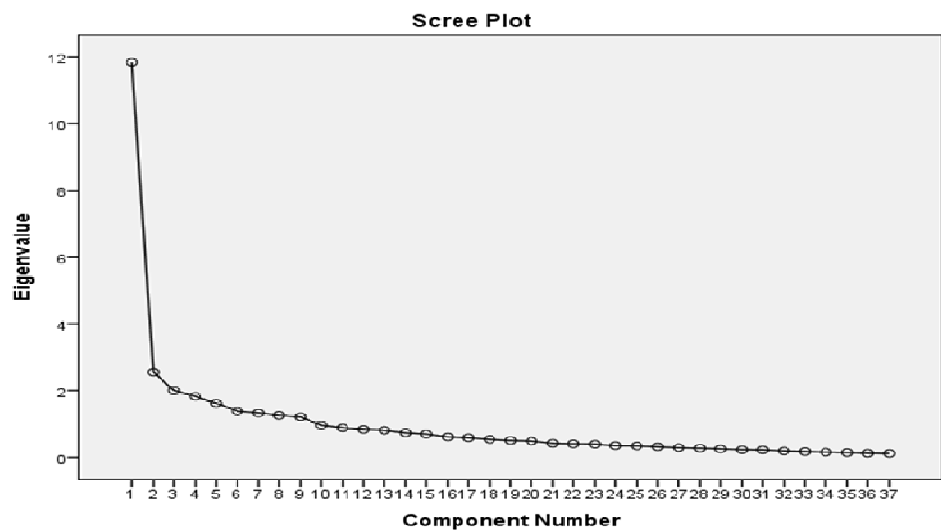TSM Business Review, Vol. 4, No. 2, December 2016

Table 2: Total variance explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.842	32.005	32.005	11.842	32.005	32.005	4.159	11.239	11.239
2	2.550	6.891	38.896	2.550	6.891	38.896	3.567	9.639	20.879
3	2.005	5.418	44.313	2.005	5.418	44.313	2.783	7.521	28.400
4	1.827	4.937	49.250	1.827	4.937	49.250	2.694	7.280	35.680
5	1.619	4.377	53.627	1.619	4.377	53.627	2.507	6.777	42.457
6	1.381	3.732	57.359	1.381	3.732	57.359	2.496	6.746	49.203
7	1.328	3.590	60.949	1.328	3.590	60.949	2.462	6.655	55.858
8	1.256	3.393	64.342	1.256	3.393	64.342	2.251	6.085	61.943
9	1.208	3.265	67.608	1.208	3.265	67.608	2.096	5.665	67.608
10	.956	2.583	70.191						
11	.879	2.375	72.566						
12	.831	2.247	74.813						
13	.805	2.174	76.987						
14	.727	1.966	78.953						
15	.693	1.874	80.826						
16	.609	1.646	82.472						
17	.583	1.574	84.047						
18	.536	1.447	85.494						
19	.503	1.360	86.855						
20	.484	1.308	88.163						
21	.418	1.130	89.293						
22	.402	1.086	90.379						
23	.391	1.058	91.437						
24	.348	.941	92.378						
25	.340	.919	93.296						
26	.315	.850	94.147						
27	.287	.776	94.923						
28	.273	.737	95.660						
29	.252	.681	96.341						
30	.227	.612	96.954						
31	.223	.601	97.555						
32	.191	.517	98.072						
33	.175	.472	98.544						
34	.156	.422	98.966						
35	.144	.388	99.355						
36	.123	.333	99.687						
37	.116	.313	100.000						
Extraction Method: Principal Component Analysis.									

Table 3: Rotated component matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
It provides me with convenient options for returning items.	.774	.053	.080	.116	.148	.181	.184	.177	.041
This site handles product returns well.	.761	.179	.173	-.060	.221	.193	-.017	.225	.191
It picks up items I want to return from my home or business.	.730	.130	.242	.037	.109	.178	.213	-.019	-.062
This site offers a meaningful guarantee.	.563	.382	.027	-.187	.210	.180	-.072	.270	.206
It takes care of problems promptly.	.556	.373	.136	.308	-.191	.159	.129	.111	.204
It tells me what to do if my transaction is not processed.	.536	.397	.130	.250	.122	-.070	.040	.272	-.093
It compensates me when what I ordered doesn't arrive on time.	.514	.409	-.067	.510	-.063	-.166	.214	.070	.056
This site compensates me for problems it creates.	.404	.065	.111	.279	-.030	.355	.321	.375	.009
It offers the ability to speak to a live person if there is a problem.	.164	.771	.088	.024	.004	.018	-.038	.246	.115
This site has customer service representatives \available online.	.108	.732	.089	.049	.041	.116	.287	.029	.131
This site provides a telephone number to reach the company.	.203	.727	.106	.059	.124	.101	.136	-.135	.125
It makes it easy to get anywhere on the site.	-.021	.065	.739	.201	.066	-.114	.186	.089	.301
This site makes it easy to find what I need.	.241	.042	.731	.092	.019	.151	.120	-.079	.063
Information at this site is well organized.	.138	.397	.532	.115	.282	.243	.045	.131	-.199
This site is well organized.	.238	.366	.512	.064	.242	.179	.251	.183	-.091
It enables me to complete a transaction quickly	.150	.047	.493	-.013	.369	-.111	.065	.246	.288
This site does not crash.	-.020	.109	.120	.681	.048	.245	-.031	.197	.079
Pages at this site do not freeze after I enter my order information.	.014	-.031	.246	.630	.320	.185	-.002	.135	.133
It quickly delivers what I order.	.402	.480	.145	.542	.098	-.125	.039	.012	.176
This site is always available for business.	.133	-.175	.065	.488	.365	.320	.119	.052	.078
It protects information about my Web-shopping behavior.	.121	.076	.116	.025	.735	-.100	.031	.262	.262
It does not share my personal information with other sites.	.079	.030	.201	.213	.623	.313	.113	.043	.145
This site protects information about my credit card.	.261	.274	.018	.278	.600	.136	.131	-.027	-.226
It sends out the items ordered.	.166	.086	.035	.161	.003	.742	.197	.314	.033

It has in stock the items the company claims to have.	.289	.101	.119	.177	.192	.693	.092	.029	.082
It is truthful about its offerings.	.020	.358	.007	.080	.342	.392	.038	.369	.055
The overall convenience of using this site.	.135	.168	.152	-.115	.153	.100	.770	-.012	-.063
The overall value you get from this site for your money and effort.	-.002	-.034	.310	.068	-.049	.167	.665	.210	.176
The extent to which the site gives you a feeling of being in control.	.180	.195	-.060	.360	.034	.021	.635	.198	.226
The prices of the products and services available at this site (how economical the site is).	.320	.386	.175	-.058	.278	.021	.515	.010	.014
It delivers orders when promised.	.276	.048	.146	.207	.159	.167	.102	.695	.232
This site makes items available for delivery within a suitable time frame.	.334	.038	-.007	.183	.240	.188	.321	.643	-.014
It makes accurate promises about delivery of products.	.228	.331	.483	.152	.018	.191	.046	.511	-.013
It loads its pages fast.	-.054	.268	.050	.127	.154	-.131	.066	.188	.723
This site is simple to use.	.232	.035	.245	.055	.073	.343	.185	-.087	.642
This site launches and runs right away.	.132	.153	.060	.319	.043	.410	-.050	.089	.498
This site enables me to get on to it quickly.	.153	.123	.309	.348	.346	.224	.183	-.025	.390

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.a

a. Rotation converged in 34 iterations.

The analysis identified 9 dimensions that have impact over consumers' perception.

Table 4: Perceptual factors

Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6	Dimension 7	Dimension 8	Dimension 9
Responsiveness	Customer care	Design tangibility	System Reliability	Privacy & Security	Fulfillment	Perceived value	Assured service delivery	Accessibility

5.3 Analysis stage 3: Identification of E-Qual dimensions

For the purpose a linear multiple regression analysis is employed as a tool. The dependent variable considered here is the satisfaction index and independent variables are 9 perceptual factors, i.e, Responsiveness, Customer care, Design tangibility, System Reliability, Privacy and Security, Fulfillment, Perceived value, assured service delivery, Accessibility.

Regression Analysis of Perception Factors v/s Satisfaction Index

Table 5: ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.845	9	1.094	13.325	.000b
	Residual	35.055	427	.082		
	Total	44.900	436			

a. Dependent Variable: Satisfaction_Index
b. Predictors: (Constant), Accessibility, Assured service delivery, Perceived Value, Fulfillment, Privacy & Security, System Reliability, Design tangibility, Custome Care, Responsiveness

Though the model shows the coefficient of variation (R square value) is .219, which means the model is 21.9 % correct. But considering the number of individual variables this is considered as well acceptable and fair enough to explain the proposed model in the research.

The result shows that out of those 9 factors, only seven of them , viz, Responsiveness, Customer care, System Reliability, Privacy and Security, Perceived value, Assured service delivery, Accessibility have impact on consumers satisfaction level.

So, it can be concluded from the model that, there are 7 dimensions for e-service quality of e-retailing of electronic goods (in Kolkata).

Table 6: Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.019	.014		74.346	.000
	Responsiveness	.068	.014	.211	4.923	.000
	Customer Care	.090	.014	.279	6.524	.000
	Design tangibility	.022	.014	.069	1.621	.106
	System Reliability	.053	.014	.166	3.879	.000
	Privacy & Security	.043	.014	.135	3.146	.002
	Fulfillment	.022	.014	.068	1.595	.111
	Perceived Value	.027	.014	.085	1.985	.048
	Assured service delivery	.053	.014	.165	3.856	.000
	Accessibility	.028	.014	.088	2.047	.041

a. Dependent Variable: Satisfaction_Index

Table 7: Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.468a	.219	.203	.28652477	.219	13.325	9	427	.000

a. Predictors: (Constant), Accessibility, Assured service delivery, Perceived Value, Fulfillment, Privacy & Security, System Reliability, Design tangibility, Customer Care, Responsiveness

The model thus developed can be given by the following expression:
Customer Satisfaction Index = 1.019 + 0.068 (Responsiveness) + 0.090 (Customer Care) + 0.053 (System Reliability) + 0.043 (Privacy & Security) + 0.027 (Perceived Value) + 0.053 (Assured service delivery) + 0.028 (Accessibility)

It is found that, out of 9 identified perceptions based e-qual dimensions, the effect of Design tangibility and Fulfillment is found to be non-significant on level of satisfaction among e-retailing customers. And, it can be concluded that there are 7 significant dimensions of E-QUAL viz, Responsiveness, Customer care, System Reliability, Privacy and Security, Perceived value, Assured service delivery, Accessibility have impact on consumers, satisfaction level.

6. Conclusion
It is been observed that e-retailing is increasing day by day all over the world. Countries like India are also witnessing this exclusive growth of e-service. This study is conducted in one of the major cities in India, Kolkata. This research concentrated only on e-purchases of electronic goods.

This research mainly aimed at developing a business model that can fit to any e-retailing organization's business activity and can help them to grow, synchronizing the growth of other part of the world. For the purpose, data were collected randomly from different part of the city based on the PIN code area of the place.

For the purpose of developing new e-business model, the concentration was given to measure the consumer perception and thus it was required to find the satisfaction level of the customer. For measuring customer satisfaction, an index is also proposed in the study. The index is defined as: (average scores of perception given by each customer divided by average scores of expectation given by each customer) and thus just by getting the proportional value, it is assumed to develop a satisfaction index.

The study also tried to discover the e-service dimensions for the current research problem. Hence it is initially discovered that there are nine e-service dimensions contradicting with the well known five service dimensions.

Perception wise the dimensions that initially identified to be important are namely; Responsiveness, Customer care, Design tangibility, System Reliability, Privacy and Security, Fulfillment, Perceived value, Assured service delivery, Accessibility.

But when it was attempted to find out the impact of these dimensions on satisfaction of the customers, it was discovered that out of those 9 factors, only seven of them , viz, Responsiveness, Customer care, System Reliability, Privacy and Security, Perceived value, Assured service delivery, Accessibility have impact on consumers' satisfaction level.

The model thus developed can be given by the following expression:
Customer Satisfaction Index = 1.019 + 0.068 (Responsiveness) + 0.090 (Customer Care) + 0.053 (System Reliability) + 0.043 (Privacy & Security) + 0.027 (Perceived Value) + 0.053 (Assured service delivery) + 0.028 (Accessibility)

Thus, it can be concluded from the model that, there are 7 dimensions for e-service quality of e-retailing of electronic goods (in Kolkata).

References

Andam. Z. A. (2003). E-commerce and e-business; e-ASEAN Task Force UNDP-APDIP.

Babich, P. (1995). Customer satisfaction: How good is good enough, *Quality Progress*, 65-67.

Barnes, S. J. & Vidgen, R. (2001). An evaluation of cyber-bookshops: The Webqual Method, *International Journal of Electronic Commerce*, *6* (1), 11-30.

Berry, L. L. (1986), Retail businesses are service businesses, *Journal of Retailing*, 62, 3-6.

Cox, J. & Dale, B. G. (2001). Service quality and E-Commerce: An exploratory analysis, *Managing Service Quality*, *11*(2), 121-31.

Cox J, & Dale, B. G (2002). Key quality factors in web site design and use: An examination, *International Journal of Quality & Reliability Management*, *19*(7), 862-88.

Datt, R. M. (2009), Impact of electronic marketing in a globalizing world: Indian perspective, Computer Science and Information Technology - Spring Conference, IEEE explore, ISBN: 978-0-7695-3653-8.

Grewal, H. S. (2012), A study of ethical and social issues in E-Commerce, *International Journal of Advanced Research in Computer Science and Software Engineering*, *2* (7), ISSN: 2277 128X.

http:// www.internetworldstats.com, 2015.

https://www.statista.com/markets/413/e-commerce, 2016.

Kaynama, S. A. (2000). A conceptual model to measure service quality of online companies: E-QUAL, Annual Academy of Marketing Science Conference, Montreal, Canada, 46-51.

Kaynama, S. A. & Black, C. I. (2000). A proposal to assess the service quality of online travel agencies: An exploratory study, *Journal of Professional Services Marketing*, *21*(1), 63-88.

Parasuraman A., Berry L. L., & Zeithaml V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67 (winter), 420-450.

Parasuraman A., Zeithaml V. A., Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality, *Journal of Service Research*, *7*(3), 213-33.

Parasuraman, A., Zeithaml V. A, & Berry L. L (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing* (Fall), 41-50.

Pather, S, & Usabuwera, S. (2010). Implications of e-service quality dimensions for the information systems function, Proceedings of the 43rd Hawaii International Conference on System Sciences, IEEE explore ISBN 978-0-7695-3869-3/10.

NASSCON and BCG, 2001, E-commerce opportunities for India Inc. (study report prepared by NASSCOM and The Boston Consulting Group).

Rastogi, R. (2003). INDIA: Country report on E-commerce initiatives; Part Three: Country presentations, 133-146.

Santos, J. (2003). E-Service quality: A model of virtual service quality dimensions, *Managing Service Quality*, *13*(3), 233-46.

Sharma, D. P. (2009). E-retailing principles and practice; First Edition, Himalaya Publishing House.

Siadat. S. H, Buyut. V. C, & Selamat, H. (2008). Measuring service quality in E-retailing using SERVQUAL Model, International Symposium on Information Technology, IEEE Xplore, ISBN 978-1-4244-2327-9.

Siadat. S. H, Buyut. V. C, & Selamat, H. (2008), Measuring service quality in E-retailing using SERVQUAL model, International Symposium on Information Technology, IEEE Xplore, ISBN 978-1-4244-2327-9.

Srinivasan, R. (2010). Services marketing-The Indian context, 2nd ed., Prentice Hall of India, New Delhi.

Strauss, J. & Frost, R. (2009), E-Marketing; Fifth Edition; Prentice Hall of India.

Wan H. A, (2000). Opportunities to enhance a commercial Web site. *Information and Management*, *38*(1), 15-21.

Wolfinbarger, M. & Gilly. M. C. (2003). ETailQ: dimensionalizing, measuring and predicting etail quality, *Journal of Retailing 79*,183–198.

Yang. Z, Jun. Minjoon & Peterson. R. T (2004). Measuring customer perceived online service quality- scale development and managerial implications, *International Journal of Operations & Production Management*, *24* (11), 1149-1174.

Zaheer, A. (2011). E-retailing strategy boom across the globe, *Amity Business Review*, *12* (1).

Zeithaml, V. A., Parasuraman, A. and Malhotra, A. (2001), "A conceptual framework for understanding e-service quality: implications for future research and managerial practice", MSI Working Paper Series, Report No. 00-115, Cambridge, MA

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), 362-75.

Zhao, W. & Xiong, X. (2011), E-Tail-SERVQUAL: Conceptualization and its validity, IEEE explore, ISBN 978-1-4244-9763-8/11.