

Factors Determining Customer Satisfaction, Customer Trust and Customer Loyalty in Online Retailing: An Empirical Study

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Abstract

Online retailing is increasing with a rapid speed in India. E-commerce websites in India have increased handsomely in the last five years. The present study investigates the determinants of customer satisfaction, trust and loyalty in the Business to Customer model of E-commerce. This model may be simply known as online retailing wherein the product is sold to the ultimate consumer. The present study is descriptive in nature. The study is based on primary data. The sample size of the study is 400 for the study. Data was collected online through judgment sampling and only those respondents were selected who have purchased online 400 online shoppers were chosen on the basis of judgment sampling with the judgment criteria of at least one online purchase in the last month and at least one more purchase in the last 1 year. The data has been collected from Delhi, Gurugram, Faridabad, Noida and Ghaziabad. The study uses statistical tool – factor analysis and develops a scale on e-satisfaction, e-trust and e loyalty.

1. Introduction:

Online retailing is the form of business to customer model of online retailing. This model is one of the most widely used models in the Indian e-commerce industry. B2C has held the major share in the market and are retailing transactions with individual shoppers. B2C

transactions range from apparels, footwear, and electronics, stationary to gifts etc. e.g Flipkart.com, Amazon.com, Ebay.com, Shopclues.com, Snapdeal.com etc. These all marketers work on the marketplace model, which may be understood with the help of the following diagramme:

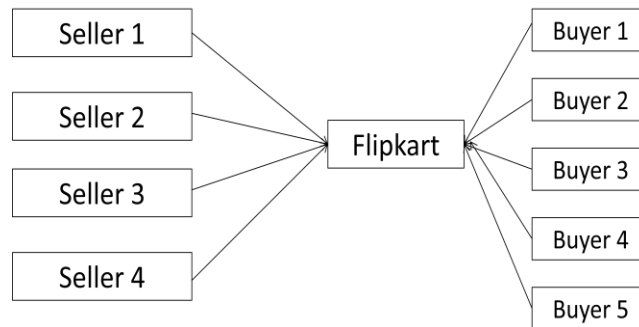


Figure 1 Example of Marketplace Model of Online Retailing

People prefer online retailing because of a wide variety of reasons. They find it easier to shop online, as the products gets home-delivered coupled with the facility to shop 24x7. Thus, an online buyer saves precious time, extra efforts and money while buying online as compared to buying from physical stores. E-Retailing eliminates the need to maintain expensive and fancy showrooms. Instead, what attract customer attention to online stores is the great deals ‘best prices and better bargains. The rising trend of internet shopping has taken off more noticeably in metropolitans such as Delhi and Mumbai where both consumers and merchants have become equally net savvy. There is also rise in internet shopping in small cities such as Chandigarh, Ludhiana, Jalandhar, Puducherry etc. Moreover the growth of the mobile communication i.e. mobile governance has led to the growth of the online retailing as people are more accessible to internet 24 x 7. The electronic transactions have been made secure by the use of various technologies. The banks (RBI and others) are bringing out new guidelines (like one time passwords, security questions) so that the online transactions can be made safe for the consumer.

In the present era, nuclear families are increasing and both husband and wife are working, as they have less time to go to the market for purchasing commodities. Online shopping is a big attraction for the NRIs (non-resident Indian), the apparel and gifting business online has maximum NRI consumers. With increased internet and broadband penetration and

schemes like e-Choupal for the convenience of farmers, the rural India is awakening. If farmers have to purchase any such thing they have to come all the way to a nearby city. The online stores can offer them these products and many good deals in a convenient way.

2. Literature Review

2.1 E-Satisfaction:

Li and Zhang (2002) defined consumer satisfaction as the extent to which consumers' perceptions of the online shopping experience confirm their expectations. The European Public Administration Network (EUPAN) explained consumer satisfaction with a model using the disconfirmation theory, in which suggests that consumer satisfaction with a service is related to the size of the *disconfirmation experience; where disconfirmation is related to the person's initial expectations*. If experience of the service greatly exceeds the expectation clients had of the service, then satisfaction will be high. Guo et. al (2012) identified that e-satisfaction depends upon shopping time, convenience, ease of browsing, number of offerings, variety of offerings, quality of information, less searching cost, navigation structure of the website, interface, website design, fast presentation, customized content, updated information, privacy, financial security, complaints redressed, customer support, packing, timeliness of delivery, post service, competitive price, return policy, confirmation E-mail, purchase process and feedback to site design. Customer satisfaction is crucial for the success of online retailing businesses (Wang and Huarng, 2004), but very little is known about the key indicators of consumers' satisfaction with online retailers' web sites (Evanschitzky et al., 2004; Wang and Huarng, 2004). Limbu (2007) found that security, fulfillment, non-deception explains the satisfaction of the customers and fulfillment, non-deception and privacy explains the loyalty. Further satisfactions leads to the customer loyalty.

2.2 Customer Trust:

Mukharjee (2007) found that privacy and security features of the website along with shared values are the key antecedents of trust, which in turn positively influences relationship commitment. Behavioral intentions of customers are consequences of both trust and commitment. The relationship termination cost has a negative impact on customer

commitment. Kimery and McCord (2002) studied the role of Third-Party Assurances for Trust in Online Retailing and concluded that consumer trust in e-retailing has been identified as one of these barriers and third party assurance seals have emerged as one trust building method to help break it down. Further research should help us understand how trust is built and maintained in on-line exchange relationships, what role third-party assurance seals play in this process, and how they can be better applied to facilitate commercial exchanges in an electronic marketplace. LeGresley (2004) found that to optimize the benefits derived from information, detailed customer profiles are often created which may lead to abuse if exploited by aggressive marketers who do not respect and protect an individual's privacy. Media reports of abuses and online criminal activities have raised fears in the minds of the consumer, who sense a risk of financial loss or loss of privacy in shopping online.

Wang et. al. (2009) studied the impact of Knowledge and Trust of E-Consumers' Online Shopping Activities and found the influence of knowledge and trust on online shopping was positive and also significant. Barnes and Guo (2011) found the impact of external motivators like perceived value, instinct motivators like perceived happiness, social factors and consumers' habits. The result of study indicated that one's habits, external and instinct motivators have great effect on shaping online shopping behavior of them. Halliburton & Poenaru (2010) found that trust act as safety net, building trust takes time, trust is created through both rational bonds and emotional bonds etc. The authors listed the dimensions of trust such as empathy, feeling of security and perceived strength, personal experience, beliefs, benevolence/ good, altruism as the rational antecedents of trust. Similarly, knowledge, competence, ability, integrity, reliability, predictability, creditability, dependability are the emotional antecedents of trust. Paliszkievicz (2014) listed the tools of building customer trust as Highlight professional accomplishments, certificates and awards on website, Share testimonials, organizations should be honest and straightforward, secured transactions, Respond personally to correspondence, Social media presence, Make it easy for customers to complain, Give the right advice to the clients, Professional web design, Use company branded email, Customer review sites, company profile and customer contact.

2.3 E-Loyalty

Bati Uğur (2011) found that social media tools increased brand awareness and brand loyalty. Madjid et al. (2013) found that the customer trust plays a significant role and it is found that customer satisfaction affects customer trust and customer trust affects the customer commitment and customer loyalty significantly. Srivastava (2014) found that customer satisfaction and service quality of the online retailer leads to the loyalty. The author proved that service quality leads to customer satisfaction and customer satisfaction leads to loyalty, hence customer satisfaction plays the role of mediator between the service quality and loyalty. Chiu et al. (2009) defined loyalty as the subjective probability a customer will make future purchases from the same web site. Zhao (2010) characterized loyalty in terms of the dependence and recognition of a web site's products or services, as well as the consumer's confidence in continuing to purchase products or services from the web site.

3. Methodology:

The present study is descriptive in nature. The study is based on primary data. The sample size of the study is 400 for the study. Data was collected online through judgment sampling and only those respondents were selected who have purchased online 400 online shoppers were chosen on the basis of judgment sampling with the judgment criteria of at least one online purchase in the last month and at least one more purchase in the last 1 year. The data has been collected from Delhi, Gurugram, Faridabad, Noida and Ghaziabad. The study uses statistical tool – factor analysis and develops a scale on e-satisfaction, e-trust and e loyalty.

4. Data Analysis and Interpretations:

Exploratory Factor Analysis:

Factor Analysis is a multivariate statistical technique in which there is no distinction between the dependent and independent variable. In factor analysis, all variables are under investigation are analyzed together to extract the underlined factors. In order to establish the strength of the factor analysis solution it is essential to establish the reliability and validity of the

reduced factors. The KMO value obtained was found to be .931 which is greater than 0.5 which signifies that sample was adequate. The Bartlett's test of sphericity tests for the significance of the correlation matrix of the variables indicates that the correlation coefficient matrix is significant as indicated by the p value corresponding to the chi square statistics. The p value is .000 which is less than 0.05, the assumed level of significance as depicted in the table 1

Table 1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.931
Bartlett's Test of Sphericity	Approx. Chi-Square	6935.163
	df	210
	Sig.	.000

Scree Plot

Scree plot is a decreasing function showing the variance explained by each factor in a factor analysis. One uses it to assess the optimum number of factors to take into account, this happens around "the elbow", the point at which the function plateau, e.g. from there on there is usually no need to take any more factors into account. The scree test involves plotting the eigenvalues in descending order of their magnitude against their factor numbers and determining where they level off. The break between the steep slope and a leveling off indicates the number of meaningful factors, different from random error. The technique is illustrated and compared with alternative techniques for determining the number of factors to retain. As shown below, it is obvious that the number of factors to be extracted should be 3.

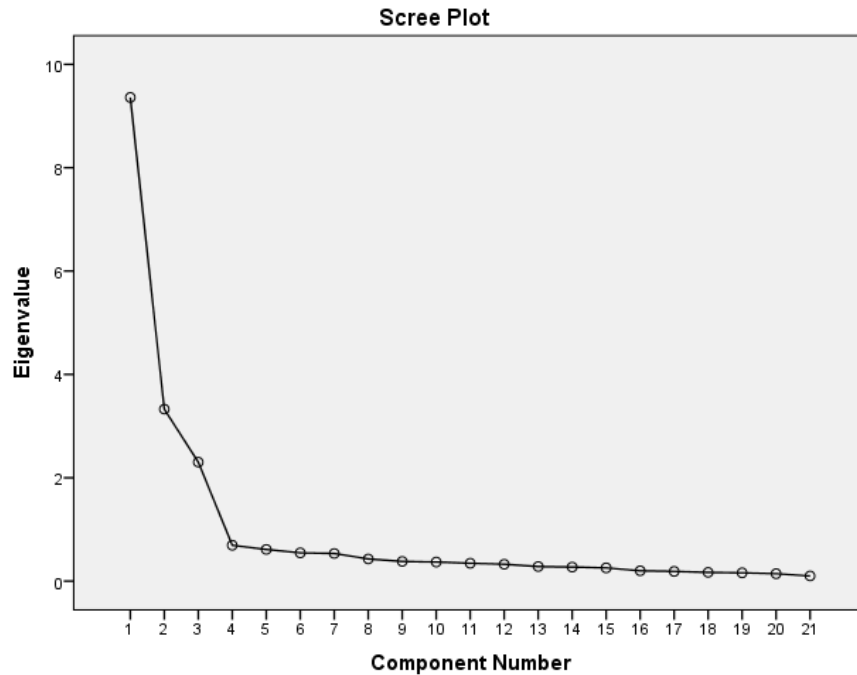


Figure 2 Scree Plot

Communalities:

Communality indicates that how much of each variable is accounted for by the underlying factors taken together. In other words, it is a measure of the percentage of variable’s variation that is explained by the factors. A relatively high communality shows that not much of the variable is left over after whatever the factors represent is taken into consideration. The table 2 shows the communalities of the items.

Table 2 Communalities

Variables of Satisfaction, Trust and Loyalty	Variable Codes	Initial	Extraction
My decision to purchase online was a wise one	ESat_1	1.000	.532
I am overall satisfied with the navigation and interface of the website I visit during online purchase	ESat_2	1.000	.768
I have truly enjoyed purchasing online	ESat_3	1.000	.664
I am satisfied with the product I buy online	ESat_4	1.000	.639

I am overall satisfied with my online shopping experience.	Esat_5	1.000	.732
E-Retailers have met my expectations to great extent	ESat_6	1.000	.769
In general terms, I am satisfied with the online transactions service provided by E-Retailers	ESat_7	1.000	.537
I trust this website as a safe medium for transaction and purchase	ETrust_1	1.000	.750
I believe that online retail websites are trustful in its dealings	ETrust_2	1.000	.802
I believe the websites would keep their commitments	ETrust_3	1.000	.811
I believe in the information provided on the online retailers' websites	ETrust_4	1.000	.839
I don't hesitate while giving private information on the online retailer's website while shopping	ETrust_5	1.000	.770
I don't hesitate in giving the reasonable financial information on the online website.	ETrust_6	1.000	.681
Online retailer can be counted on to do what they say they will do	ETrust_7	1.000	.578
I seldom consider switching to another websites	ELoyalty_1	1.000	.611
As long as the present service continues, I doubt that I would switch websites.	ELoyalty_2	1.000	.771
I try to use the same website whenever I need to make a repeat purchase.	ELoyalty_3	1.000	.736
When I need to make a purchase, this website is my first choice.	Eloyalty_4	1.000	.775
I like using this website.	Eloyalty_5	1.000	.723
To me this website is the best retail website to do business with.	Eloyalty_6	1.000	.726
I have my favorite retail website for particular product category	Eloyalty_7	1.000	.776

Extraction Method: Principal Component Analysis.

E-Sat – E-Satisfaction, E-Trust – E-Trust, E-loyalty – E- Loyalty

Total 3 Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.941	42.574	42.574	4.919	23.422	23.422
2	3.187	15.175	57.749	4.843	23.062	46.484
3	2.290	10.903	68.652	4.655	22.168	68.652
4	.952	4.533	73.185			
5	.688	3.275	76.460			
6	.584	2.779	79.239			
7	.556	2.649	81.888			
8	.442	2.106	83.995			
9	.427	2.033	86.027			
10	.391	1.860	87.888			
11	.350	1.667	89.555			
12	.343	1.631	91.186			
13	.321	1.528	92.714			
14	.279	1.328	94.042			
15	.265	1.262	95.305			
16	.213	1.015	96.319			
17	.195	.929	97.248			
18	.173	.823	98.072			
19	.162	.773	98.845			
20	.143	.681	99.526			
21	.099	.474	100.000			

Table 3 shows that there are 21 variables (7 of E-Satisfaction, 7 of E-Trust and 7 of E-Loyalty). These variables have been reduced in 3 components and explain the variance above 68%. This variance is considered satisfactory. The three components have been further presented with their factor loadings in the table 3.

Extracted Factors:

The factor analysis was performed based on Principal component analysis and Eigen value greater than one. Principal component analysis (PCA) is a statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components. Eigen value is the amount of variance explained by a factor. The value (sum of the squared loading) is a determinant of retaining or not retaining a factor. Three factors were extracted which was labeled as E – Satisfaction, E- Loyalty and E – Trust. The total variance explained by these three factors was 73.01%.

Table 4 Factors, variables and Factor Loadings

Name of Dimension	Factor loading	Co-efficient Alpha
E Satisfaction		
My decision to purchase online was a wise one	.846	.887
I am overall satisfied with the navigation and interface of the website I visit during online purchase	.841	
I have truly enjoyed purchasing online	.826	
I am satisfied with the product I buy online	.777	
I am overall satisfied with my online shopping experience.	.738	
E-Retailers have met my expectations to great extent	.716	
In general terms, I am satisfied with the online transactions service provided by E-Retailers	.699	
E- Trust		
I trust this website as a safe medium for transaction and purchase	.885	.832
I believe that online retail websites are trustful in its dealings	.863	
I believe the websites would keep their commitments	.856	
I believe in the information provided on the online retailers' websites	.851	
I don't hesitate while giving private information on the online	.848	

retailer's website while shopping		
I don't hesitate in giving the reasonable financial information on the online website.	.802	
Online retailer can be counted on to do what they say they will do	.711	
E- Loyalty		.824
I seldom consider switching to another websites	.843	
As long as the present service continues, I doubt that I would switch websites.	.833	
I try to use the same website whenever I need to make a repeat purchase.	.821	
When I need to make a purchase, this website is my first choice.	.810	
I like using this website.	.806	
To me this website is the best retail website to do business with.	.791	
I have my favorite retail website for particular product category	.693	

5. Findings and Conclusion:

The objective of the present study is to determine the factors of e-satisfaction, e-trust and e-loyalty. The variables with their respective factors have been listed as below:

E- Satisfaction: E-Satisfaction comprised of statements such as *My decision to purchase online was a wise one; I am satisfied my online shopping experience; I have truly enjoyed purchasing online; I am satisfied with the product I buy online; I am overall satisfied with my online shopping experience; E-Retailers have met my expectations to great extent; In general terms, I am satisfied with the online transactions service provided by E-Retailers.*

E – Loyalty comprised of statements such as *I seldom consider switching to another websites; As long as the present service continues, I doubt that I would switch websites; I try to use the same website whenever I need to make a repeat purchase; When I need to make a*

purchase, this website is my first choice; I like using this website; To me this website is the best retail website to do business with; I have my favorite retail website for particular product category

E- Trust comprised of items such as *I trust this website as a safe medium for transaction and purchase; I believe that online retail websites are trustful in its dealings; I believe the websites would keep their commitments; I believe in the information provided on the online retailers' websites; I don't hesitate while giving private information on the online retailer's website while shopping; I don't hesitate in giving the reasonable financial information on the online website; Online retailer can be counted on to do what they say they will do.* The 4 depicts the factor loading of each items and Co-efficient Alpha.

6. References:

- Chiu, C.M., Linb, H.Y., Sunc, S.Y. and Hsu, M.-H. (2009), "Understanding customers' loyalty intentions towards online shopping: an integration of technology acceptance model and fairness theory", Behaviour & Information Technology, Vol. 28 No. 4, pp. 347-60.
- Evanschitzky, H., Iyer, G.R., Hesse, J. and Ahlert, D. (2004), "E-satisfaction: a re-examination", Journal of Retailing, Vol. 80 No. 3, pp. 239-47.
- Guo Xiaoying, Choon Ling Kwek and Liu Min (2012)," Evaluating Factors Influencing Consumer Satisfaction towards Online Shopping in China Asian Social Science.
- Halliburton C.,and Poenaru , A., (2010). The role of trust in consumer relationship. ESCP Europe Business School, UK.
- Li, N., & Zhang, P. (2002). Consumer Online Shopping Attitudes and Behavior: An Assessment of Research. Eighth Americas Conference on Information Systems
- Madjid, R. (2013) Customer Trust as Relationship Mediation between Customer Satisfaction and Loyalty at Bank Rakyat Indonesia (BRI) Southeast Sulawesi, the International Journal of Engineering and Science (IJES), Volume 2, Issue 5, Pp. 48-60, 2013.

- Mukherjee A., Prithwiraj Nath, (2007) "Role of electronic trust in online retailing: A re-examination of the commitment-trust theory", European Journal of Marketing, Vol. 41 Issue: 9/10, pp.1173-1202
- Paliszkiewicz, J. (2014), Management trust, organizational trust, and organizational performance: Empirical validation of an instrument, Online Journal of Applied Knowledge Management, Volume 2, Issue 1, 2014.
- Srivastava, R. (2014), "Customer Satisfaction-Loyalty Link in Indian Online Retail, SMS Management Insight, Vol. 10, No. 2. Pp. 58-60.
- Wang, M. and Huarng, A.S. (2004), "Determinants of e-satisfaction in pre-order and post-order phases", Journal of Academy of Business and Economics, Vol. 4 No. 3, pp. 152-60.
- Yam B. Limbu, Marco Wolf, Dale L. Lunsford, (2011) "Consumers' perceptions of online ethics and its effects on satisfaction and loyalty", Journal of Research in Interactive Marketing, Vol. 5 Issue: 1, pp.71-89.
- Zhao, G.M. (2010), "Research on customer loyalty of B2C e-commerce", China-USA Business Review, Vol. 9 No. 5, pp. 46-52.