

Effect of Determinants of E-Retailing on Customer Satisfaction: Empirical evidences from India

Rashmi Dang,

Phd Research Scholar,
HNB Garhwal University, India.

ABSTRACT

This study examines the scope to which different factors influence customer's satisfaction with e-retailer's Website in the context of online buying using Technological acceptance model (TAM). The main goal of this paper is not only to investigate the efficacy of e-Services provided by the online retailers but also considers how customers can benefit from those services in India. To analyze the data of a conceptual model authors used multiple regression analysis techniques. Result of 165 respondents' reveals that, perceived usefulness, perceived ease of use, and trust positively influence customer satisfaction. Future scope of research and recommendations for marketing manager's and practitioners are conferred in the end.

Keywords: E-retailer's Website, Customer satisfaction, perceived usefulness, perceived ease of use, Trust.

INTRODUCTION:

Electronic retailing over the internet or online shopping first started in 1994 (Khatibi, Haque, & Karim, 2006). This concept of retailing has captured the interest of many retailers and merchants because of the recognition that online shopping will is considered as an alternative channel alongside traditional offline retail channels such as physical retail stores (Khatibi et al., 2006). The world wide web (WWW) has enabled numerous firms to transform the challenges of the past into the opportunities of the future, not merely in the context of marketing but more importantly as an efficient medium to nurture customer relationships (J. H. Kim, Kim, & Kandampully, 2007). Merchants tend to establish online storefronts as an online retailing method when the product brand names and reputations are well established and widely known among consumers (Khatibi et al., 2006).

Since the advent of internet in India and its use by different business enterprises, many of the challenges triggering competitors to satisfy customers relatively better than others do. The key challenge is how well they offer and perform services to the customers while holding the significant importance of customer satisfaction in Customer's behavioral loyalties are now changing mind (Yang, Jun, & Peterson, 2004). Website usability factors are the key factors that allow e-businesses to gain customers trust online. in other words, Website usability means, how well Website visitor interact with their website. More specifically apparent Website usability increase user's Website experience and in result in future it moves Website behavior towards visitor (Casaló, Flavián, & Guinalú, 2008). Different Studies reveal that quality Website had the largest impact on customers' beliefs. Good Website usability is to develop it according to the site visitor needs and wants (E. K. E. Kim & Tadisina, 2005). Website "which focuses on the visitor's expectations have a better chance for success." Therefore, Service quality delivery through Website has gradually become one of the most important aspects influencing Business Customer success (Dai, Huang, & Yi, 2005). The old rules of interaction among the retailers and Customers are now changed; advancement of information technology revolutionizes the conventional way of doing businesses. Customers are now more knowledgeable and informed about their needs and wants. It is now need of the day for businesses to assess what their customers need and how they can do and fulfill these needs in such a way to successful in the current era of revolution and change.

Customer's behavioral loyalties are now changing and varying with different services and products offered by businesses, there is no guarantee of success for E-businesses by just only to show up. Therefore, this study considers (interaction of retailers with the customer, considering the effect of different e-service factors that a retailer's Website include) to understand more easily the implications of these important categories between online retailer and customer interaction. Based on Technology acceptance model (TAM) (Davis, 1989) adapted from the Theory of reasoned action (TRA) (Ajzen & Fishbein, 1980), current study proposes to investigate the relationship and effects of different variables on customer satisfaction in developing country, as such, findings and results are beneficial to marketing professionals, managers, researchers and those who have an interest in customer relationship marketing business.

REVIEW OF LITERATURE:

Perceived ease of use and perceived usefulness are key constructs in the TAM (Davis, 1989) and have been researched in a number of contexts and among different users. In Malaysia, (Ndubisi, Gupta, & Ndubisi, 2005) examined the role of the two constructs in information systems (ISs) adoption by entrepreneurs and found to be instrumental. Perceived ease of use in the context of this research refers to the extent to which a consumer believes that online shopping will be free of effort (Chiu, Chang, Cheng, & Fang, 2009). The WWW is a medium that allows users arbitrary connections in an open environment; within this environment, users have computer skills ranging from novice to expert (Pearson, Pearson, & Green, 2007). With all the available web sites and the diverse set of user skills, what motivates users to choose one site over another may lie in their ease of use perceptions. If a user finds a site difficult to use, cannot find the desired product on a business-to-consumer (B2C) web site, or is not clear on what a site offers, the user will typically leave that site (Pearson et al., 2007). Web site design quality is crucial for online stores (Lee & Lin, 2005) and has strong impact on user perception of ease of use. Web site design describes the appeal that user interface design presents to customers (Lee & Lin, 2005). A recent empirical study found that web site design factors are strong predictors of customer quality judgments, satisfaction and loyalty for internet retailers (Lee & Lin, 2005). According to J. H. Kim et al., (2007), online features that are customer centered have an impact on online shoppers' positive attitude toward the internet. J. H. Kim et al., (2007) found that retail web sites with more customer-centered web attributes had higher annual web sales and higher market shares than those retail web sites with fewer customer-centered web attributes. In addition, J. H. Kim et al., (2007) indicate that the buying environment characteristics of retail web sites impact the financial performance of e-retailers, and many e-retailers under-perform in offering web service attributes that can accommodate individual customers' needs and facilitate online shopping. Thus, when consumers perceive web site to be ease to use, it would affect their intentions to repurchase in future.

Perceived usefulness is defined as the extent to which a consumer believes that online shopping will enhance his or her transaction performance (Chiu et al., 2009). An individual is more likely to undertake continued usage when such usage is perceived to be useful. Customers who have accomplished the shopping task of product acquisition in an efficient manner will be more likely to exhibit stronger online customer satisfaction. Prior research shows that perceived usefulness has a significant effect on customer loyalty (Chiu et al., 2009). Perceived usefulness has also shown to be an important determinant of ISs adoption in general (Ndubisi et al., 2005) (Davis, 1989). On other hand Customer's trust plays a fundamental role in maintaining long-term relationships with the retailer. Trust is viewed as a set of specific beliefs dealing primarily with the benevolence, competence and integrity of another party. Benevolence is the belief that the trustee will not act opportunistically against the trustor, even given the opportunity (Chiu et al., 2009; Ndubisi et al., 2005). Competence is the belief in the trustee's ability to fulfill its obligations as expected by the trustor. Integrity is the belief that the trustee will be honest and will honor its commitments (Chiu et al., 2009; Ndubisi et al., 2005). Customer's trust implies that the good intentions of the firm are not questioned by the consumer, that the promises made do not generate uncertainties in the purchaser, and that the communication between the parties is honest. Customer's uncertainty can imply the potential for service failure and negative outcomes therefore, trust becomes vital to long-lasting relationships (Eisingerich & Bell, 2007). Lack of trust reduces the chances of buyers to engage in online shopping because they are unwilling to deal with a vendor whom they do not trust. Indeed, prior research indicates that trust plays a pivotal role in driving customer satisfaction (Chiu et al., 2009). While customer satisfaction means how a company provides supply, or deliver products or services to meet the customer needs and wants (Ha & Janda, 2008). In E-business context, company should pay special concentration on the policies and applications in marketing services and products online because well-designed and well-practiced policies will make sure customer service experience and buy intentions positively with their

Website (Zhou, Dai, & Zhang, 2007). While, another study reveals that customer satisfaction with the Website and its impact on customer, repurchase intent plays an important role in enhancing customer likeliness in shopping online (George, 2002). However, In E-business context to understand user's preferences, plays an important role in developing and creating satisfactory technological, strategic and marketing decisions, because it increase their level of satisfaction and improves business performance and returns in future (Chen & Corkindale, 2008). Web sites having consumer awareness and usability factors positively influence trust and satisfaction of customer in B2C environment (Dholakia & Zhao, 2009).

Conceptual framework and hypothesis development:

Figure 1 shows the research framework for this paper and illustrates three independent variables namely perceived ease of use, perceived usefulness, and trust. We generated three hypotheses based on this framework to test the influence of each independent variable on online customer satisfaction. The TAM developed by (Davis, 1989) underpins the development of this framework. The extended TAM model which integrates eight constructs was adopted in this study to help understand the role of user process, customer confidence, as well as customer trust in e-retailing

Hence, the following hypotheses were formulated:

- H1.** Perceived ease of use will have a positive influence on customer online satisfaction
- H2.** Perceived usefulness will have a positive influence on customer online satisfaction.
- H3.** Trust will have a positive influence on customer online satisfaction.

METHODOLOGY:

The information and data for this research paper were gathered from primary. The primary data was derived from survey questionnaire. Survey questionnaires were used to obtain responses from participants from north India. We employed snowballing sampling method to select the participants for this research. This was to ensure that the participants have used the internet to purchase a product or service. Since, we were interested in participants' willingness and ability to purchase products/services online, it was considered reasonable to collect data from those who have prior experience in buying products or services online in line with the key informant technique (Ndubisi et al., 2005). The key informant method was used and only customers with online shopping experience were requested to respond to the questions. Key informants are viewed as appropriate respondents if appropriate selection procedures are used (John & Reve, 1982). Thus, using guidelines on selecting key respondents from previous research (Campbell, 1955), key informants were screened and chosen on the basis of their knowledge of the research issues, their experience with online shopping, and willingness to respond. The snowball approach used in this study enabled us to achieve this objective and the wider research objective and is a sampling method widely used in internet-based research.

Questionnaire Design:

The questionnaire for this research is divided into two parts – Sections A and B. Section A of the questionnaire contains questions on the demographic profile such as respondents' age, gender, occupation, education level and monthly income. Section B of the questionnaire solicits responses on the key constructs of the research framework namely perceived ease of use, perceived usefulness, trust and customer satisfaction. The measurement items were adapted from previous studies and revalidated for this study. Measures of perceived usefulness and ease of use were adapted from (Chiu et al., 2009) and (Davis, 1989). Trust was measured with items adapted from (Pavlou & Fygenson, 2006) and online customer satisfaction was measured items adapted from (Khalifa & Liu, 2007). The data was collected on five-point scale.

Data Analysis:

We used inferential statistics to make deductions based on the results and the significance. Descriptive analytical tools such as mean and standard deviation were used to summarize the respondents' feedback. For reliability of the variables, reliability tests were conducted before subjecting the data to inferential analysis. The three variables were tested for their relationship with customer satisfaction using correlations and regression analysis. SPSS was used for the analysis.

FINDINGS AND DISCUSSION:

A total of 185 completed questionnaires were returned, and 20 of this were invalid due to incomplete responses, which results to 16 usable responses. Table no 1 illustrates the demographic profile of the 165 respondents who

participated in this research.

Table 2 presents the mean values, standard deviations and the number of items for each variable. For the independent variables, trust yielded the highest mean (3.92), followed by perceived ease of use (3.89) lastly perceived usefulness (3.77). Since all variables yielded mean value more than 3, one can conclude that the respondent's perceptions on these variables are mostly favorable. Table 2 also shows the Cronbach's alpha values for the independent and dependent variables in this research. The result indicates that Cronbach's alpha value range from 0.711 to 0.873. Accordingly, the value for Cronbach's alpha of 0.7 or higher is considered acceptable (Nunnally, 1978). Thus, the data on these variables are reliable and consistent with research standards.

Table 3 reveals the correlation matrix of the conceptual variables. A two-tail test at 0.01 significance level indicates that there are positive relationships among dependent variable and the independent variables.

From Table 4, $R = 0.802$ and $R^2\text{-value} = .644$. This means that 64 per cent of the variation in Y can be explained by all three predictors (or accounted for by) the variation in X. The results in Table 5 show the three independent variables predict 64 per cent of the variation in online customer satisfaction. This is a considerable amount of variance. The result shows that all three variables are significant at 0.01 significance level (0.01). This indicates that there is linear relationship between the dependent variable (customer satisfaction) and the predictor variables (perceived ease of use, perceived usefulness, and trust, reliability). *Hence all hypotheses (H1, H2 and H3) stand accepted.*

CONCLUSION:

Existing research has dealt extensively with the factors affecting customers' offline satisfaction. Relatively, the amount of research that have considered online customer satisfaction is small, as such this paper adds value by contributing to the relatively sparse literature in the area by integrating different models from past studies. The results from this study indicate that the all the factors identified in the study influence the customer satisfaction. The outcome of this research not only corroborates some of the findings of prior studies, but is also an advance over many as the integrated model explains a greater amount of variance in customer satisfaction than any former model. As such, the integrated model is more helpful in understanding customer's satisfaction. Practitioners can avail the knowledge and information unveiled in this study, especially in strategy decision. Clearly, as the coefficients suggest, some factors emerged with stronger impact compared to others, online retailers are therefore able to make informed decision on which factors to pay greater emphasis. Online businesses could use the findings to boost their service by deploying more information and knowledge management systems with stronger capabilities.

Online retailers should strive to build good reputation and trust which will enable customers to endure to buy from them. Privacy is another vital driver. Businesses should continue to focus on improving their goodwill by maintaining good business ethics, which will help in building trust and confidence among customers. Besides, ensuring privacy of information provided by customers, building trust and good reputation, added value and usefulness of this mode should be enhanced and communicated to customers. The greater the value and/or usefulness perceptions of customers, the greater their likelihood of returning, therefore, online retailers should clearly demonstrate these benefits in their benefits proposal to the public. Outcomes are not the only important elements. While outcome orientation of the respondents is clearly demonstrated in this study, the respondents are also process oriented. It is crucial for the respective online firms in India to recognize the importance of managing consumer expectations and be able to provide functional, reliable and easy-to-use systems that enable enjoyable online purchase experiences. As the study shows, customers will be happy to purchase products and services from an online store that offers an excellent functional store front that is free of hiccups and other constraints that could frustrate potential customers. Online businesses must understand what a great online shopping experience is for its customers. To achieve business success in the marketplace, online businesses would need to invest resources and time to understand their customers and their buying motives. Based on this research, the online firms should capitalize on the ethical, outcome, and process orientations of customers, and through that develop applicable marketing strategies to retain their customers, which would enhance repurchase activities in the future. A good customer relationship management will enable a firm to provide excellent service quality to satisfy customers' needs. This can enhance customer satisfaction, and help to reduce customers switching behaviors. It is therefore possible for online firms to improve their competitiveness by effectively managing and delivering services to customers that guarantee highest level of ethical standards, efficient processes and beneficial outcomes. Relevant government agencies could find the outcomes of this paper useful, particularly with respect to developing internet infrastructure in India. There is the need to enhance competition

among internet service providers. With greater competition, customers would have greater options and better services at competitive prices. It is necessary at this point to mention some of the weaknesses of this paper and to draw some future research directions. First, we consider the number of usable responses in this research small. Whereas, the research objectives were fully met, future research should strive for higher response rate. This will increase the representativeness of the sample and consequently the generalizability of the findings. In addition, future research may also consider the responses from businesses. This will enable a stronger and a more balanced perspective on the research issues.

REFERENCES:

- Ajzen, I., & Fishbein, M. (1980). Theory of Reasoned Action/Theory of Planned Behavior. *Social Psychology*, 2007, 67–98. https://doi.org/10.5771/9783845260341_1
- Casaló, L., Flavián, C., & Guinaliú, M. (2008). The role of perceived usability, reputation, satisfaction and consumer familiarity on the website loyalty formation process. *Computers in Human Behavior*, 24(2), 325–345. <https://doi.org/10.1016/j.chb.2007.01.017>
- Chen, Y.-H. H., & Corkindale, D. (2008). Towards an understanding of the behavioral intention to use online news services: An exploratory study. *Internet Research*, 18 (3), 286 – 312. <https://doi.org/10.1108/10662240810883326>
- Chiu, C., Chang, C., Cheng, H., & Fang, Y. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, 33(4), 761–784. <https://doi.org/10.1108/14684520910985710>
- Dai, L., Huang, L., & Yi, Y. (2005). How B2C Service Quality Influences Website Continuance. *Pacific Asia Conference on Information Systems 2005 Sections 18 and Poster Sessions 16*, 1375–1381.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>
- Dholakia, R. R., & Zhao, M. (2009). Retail web site interactivity: How does it influence customer satisfaction and behavioral intentions? *International Journal of Retail & Distribution Management*, 37(10), 821–838. <https://doi.org/10.1108/09590550910988011>
- Eisingerich, A. B., & Bell, S. J. (2007). Maintaining customer relationships in high credence services. *Journal of Services Marketing*, 21(4), 253–262. <https://doi.org/10.1108/08876040710758559>
- George, J. F. (2002). Influences on the intent to make Internet purchases. *Internet Research*, 12(2), 165–180. <https://doi.org/10.1108/10662240210422521> - Ha, H., & Janda, S. (2008). An empirical test of a proposed customer satisfaction model in e services. *Journal of Services Marketing*, 22(5), 399–408. <https://doi.org/10.1108/08876040810889166>
- John, G., & Reve, T. (1982). The reliability and validity of key informant data from dyadic relationships in marketing channels. *Journal of Marketing Research*, 19(4), 517–524. <https://doi.org/10.2307/3151724>
- Khalifa, M., & Liu, V. (2007). Online consumer retention: Contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems*, 16(6), 780–792. <https://doi.org/10.1057/palgrave.ejis.3000711>
- Khatibi, A., Haque, A., & Karim, K. (2006). E-Commerce: A study on Internet shopping in Malaysia. *Journal of Applied Sciences*, 6(3), 696–705. <https://doi.org/10.3923/jas.2006.696.705>
- Kim, E. K. E., & Tadisina, S. (2005). Factors Impacting Customers' Initial Trust in E-Businesses: An Empirical Study. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (Vol. 0, pp. 1–10). <https://doi.org/10.1109/HICSS.2005.272>
- Kim, J. H., Kim, M., & Kandampully, J. (2007). The impact of buying environment characteristics of retail websites. *Service Industries Journal*, 27(7), 865–880. <https://doi.org/10.1080/02642060701570529> -
- Lee, G., & Lin, H. (2005). Customer perceptions of e service quality in online shopping. *International Journal of Retail & Distribution Management*, 33(2), 161–176. <https://doi.org/10.1108/09590550510581485>
- Ndubisi, N. O., Gupta, O. K., & Ndubisi, C. (2005). The moguls' model of computing: Integrating the moderating impact of users' persona into the technology acceptance model. *Journal of Global Information Technology Management*, 8(1), 27–47. <https://doi.org/10.1080/1097198X.2005.10856389>
- Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill. <https://doi.org/10.1037/018882>
- Pavlou, P. A., & Fygenson, M. (2006). Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior. *Mis Quarterly*, 30(1), 115– 143. <https://doi.org/10.2307/25148720>
- Pearson, J. M., Pearson, A., & Green, D. (2007). Determining the importance of key criteria in web usability. *Management Research News*, 30(11), 816–828. <https://doi.org/10.1108/01409170710832250>

Yang, Z., Jun, M., & Peterson, R. T. (2004). Measuring customer perceived online service quality. *International Journal of Operations & Production Management*, 24(11), 1149– 1174. <https://doi.org/10.1108/01443570410563278>

Zhou, L., Dai, L., & Zhang, D. (2007). Online Shopping Acceptance Model: Critical Survey of Consumer Factors in Online Shopping. *Journal of Electronic Commerce Research*, 8(1), 41–62. <https://doi.org/10.1086/209376>

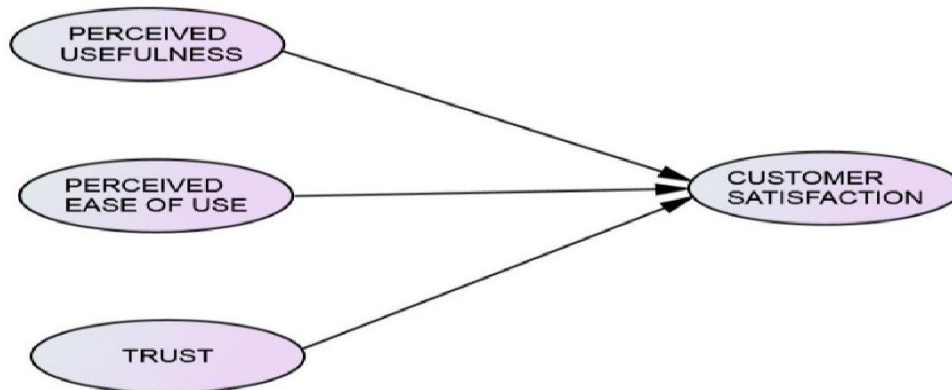


Figure 1: Shows Hypothetical Framework

Table 1: Shows Demographic profile of the respondents

Item	Categories	Frequency	Percentage
Gender	Male	90	54.5
	Female	75	45.5
Age	>25	65	39.4
	25-50	73	44.2
	<50	27	16.4
Income (per month)	>10000INR	46	27.8
	10000-20000INR	65	39.4
	<20000INR	54	32.8

Table 2: Shows descriptive statistics of variables

ID	Variable name	Mean	S.D	No. of items	Cronbach alpha
PE	Perceived ease of use	3.89	0.879	7	0.711
PU	Perceived usefulness	3.77	0.983	7	0.742
TR	Trust	3.92	0.932	7	0.873
CS	Customer satisfaction	3.67	0.876	3	0.823

Table 3: Reveals Pearson correlation coefficient matrix

ID	PE	PU	TR	CS
PE	1			
PU	.800**	1		
TR	.765**	.789**	1	
CS	.728**	.743**	.753**	1

Note: Correlation is significant at the **0.01 level

Table 4: Shows Multiple regression analysis (R and R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 ^a	.644	.641	.59348

Notes: Predictors: (constant), PE, PU, TR; dependent variable – CS; let Y – customer satisfaction (CS); X – perceived ease of use (PE), perceived usefulness (PU), and trust (TR).

Table 5: Shows Regression coefficients

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.542	.102		5.324	.000
	PE	.234	.046	.237	5.050	.000
	PU	.276	.050	.272	5.538	.000
	TR	.353	.045	.357	7.788	.000

Dependent Variable: CS
