



A study on consumer awareness and satisfaction with e-commerce with reference to Mumbai region

Dr. Sandeep Ponde¹, Dr. Arjita Jain²

¹ University of Mumbai, Management Studies, University of Mumbai, NCRD's Sterling Institute of Management Studies Nerul, Navi Mumbai, Maharashtra, India

² Management Studies, University of Mumbai, NCRD's Sterling Institute of Management Studies, Nerul, Navi Mumbai, Maharashtra, India

Abstract

Electronic commerce (E-commerce) is a form of transaction completed over a computer mediated network that involves the transfer of ownership or rights to use goods or services. It is about technology- enabled transactions. This paper presents Consumer Awareness and Satisfaction with E-commerce in Mumbai Region. The data was collected from e-commerce customers who purchase various kinds of product through e-commerce websites. Data was collected from total 1250 e-commerce customers in different areas of Mumbai Region. Data was analyzed using Chi-Square. Data analysis revealed that majority of customers are aware of e-commerce but afraid of answering too many personal questions while purchasing a product online; customers prefer e-commerce websites those do not seek for much personal information. It was observed that to find information customers use e-commerce but they select e-commerce site which is easy to use.

Keywords: e-commerce, consumer awareness, websites, payment mode and internet shopping

Introduction

Electronic commerce (E-commerce) consist transactions conducted over internet either by consumers purchasing goods and services or directly between businesses or even between consumers [2]. It encompasses all businesses conducted by means of computer networks. Advancements in telecommunications and computer technologies in recent years have made computer networks an integral part of the economic infrastructure. More and more companies are facilitating transactions over web. There has been terrific competition to target each and every computer user who is connected to the Web. Although business-to-business transactions play an important part in e-commerce market, a share of e-commerce revenues in developed countries is generated from business to consumer transactions. Accessibility of goods at lower cost with wider options and less time is the ultimate benefit of E-Commerce. With the click of mouse customer can see & take the decision. Similarly online services such as banking, ticketing (including airlines, bus, railways), bill payments, hotel booking etc. have been a incredible advantage to the customers. Many of experts are of the opinion that by and large e-commerce will raise exponentially in future. B2B transactions will stand for the largest revenue but online retailing will also benefit from a radical growth. Online businesses like financial services, travel, entertainment, and groceries are all likely to grow up enormously in coming future.

Objective of the Study

The objective of this research study is to identify consumer awareness and satisfaction with E-commerce in Mumbai Region.

Literature Review

This section provides a brief idea on the existing literature that supports increased customer awareness regarding e-commerce but level of awareness various from country to country, due to personal inhibitions interns of security customer satisfaction also varies.

Issa Najafi, in her article titled as *The Role of e-Commerce Awareness on Increasing Electronic Trust*, published in Life Science Journal (2012) reveals about intervention of ICT in various aspects of life and business. Author is of the opinion that regardless of technological advantages in the areas of increasing speed, accuracy, ease and dramatic reduction of transaction or processing costs, there are many challenges and application barriers continuously faced by users. Concerns such as users' privacy breaches, ensuring the accuracy, original identification of the buyers and sellers, confidentiality provision cause discomfort and distress in an individual during cyberspace transaction or deal. E-trust is the pillar of e-commerce. This study identifies the enabling factors, the bottlenecks and, forecasts the future growth of e-commerce in scope of using e-commerce.

Selvarajah Krishnan1,, Iiham Sentosa, Siti Nurain, Nur Amalia, Syakila Syamim and Wan Nur Hafizah, in their paper titled as "*E-commerce Issues on Customer's Awareness in Malaysia*", published in International Journal of accounting & Finance (2017) highlights that customer's awareness towards e-commerce transaction has been a major issue in Malaysia. Authors are of the opinion that the main reason why most people still doubting about electronic commerce is because the customer's safety associated with electronic transaction over the Internet. Both qualitative and quantitative data has been used for the study. Survey method has been used. Research findings reveal that the age group

between 21 to 35 years is the highest age group that used e-commerce for their convenience in making transactions in Malaysia. Limitations of the study were that the survey only asked respondents whether they were confident with e-commerce and therefore they prefer online transactions. Another limitation was that the survey did not examine other factors that might influence respondents in making online transaction such as flexible time frame and convenience or online promotion attraction. The study did not examine factors and reasons for choosing or not choosing online transactions other than items stated in the survey.

Sebin George, in his article titled as “Consumer Awareness & Protection in E-Commerce Transactions – An Overview”, published in International Journal of Research in Economics and Social Sciences presents the impact of new Consumer Protection Bill 2015 approved by Indian cabinet that aimed to replace a 29-year-old law and proposed to set up a regulatory authority which will have powers to recall products and initiate class suit against defaulting companies, including e-tailers. The new bill came against the backdrop of emergence of complex products and services in the era of growing e-commerce business in India that has rendered consumers vulnerable to new forms of unfair trade and unethical business practices. India is likely to emerge as the world's largest middle class consumer market with an aggregated consumer spend of nearly US\$ 13 trillion by 2030, as per a report by Deloitte titled 'India matters: Winning in growth markets. The proposed amendments address various issues which remained unaddressed under the current consumer protection regime. The author is of the opinion that upon implementation of these amendments to the existing laws, the consumer laws of the country will not only get stronger but also will help India to outshine in the global strata with a stronger consumer driver- economy.

Aziz Obaid Alotaibi and Christian Bach in their paper titled as “Consumer Awareness and Potential Market for e-Commerce in Saudi Arabia”, presented and published in ASEE 2014 Zone I Conference explored the challenges faced by the e-commerce industry in establishing efficient facilities in Saudi Arabia. According to authors the primary challenges in the successful implementation of e-commerce in Saudi Arabia were: lack of government involvement, weakness of the postal delivery system, insecure online payment infrastructure, and the absence of e-commerce law. Authors are of the opinion that e-commerce in Saudi Arabia is still in its early stages. The government assisted e-commerce development can rapidly transform the existing state in Saudi Arabia and generate new opportunities of social and economic growth. Various solutions proposed by authors were- additional government support, establishing permanent home addresses, providing secure online payment, and introducing policy and regulation.

Husam Yaseen, Moh'd Alhusban, Amal Alhosban and Kate Dingley, in their research paper titled as Making Sense of E-Commerce Customers Awareness in a Developing Country Context: A Framework for Evaluation, published in The Electronic Journal of Systems Evaluation (2017), discusses that the increasing number of Jordanian Internet users should naturally be reflected in e-commerce conversions. However, they observed that this is not the case. While social-media users in Jordan are becoming more engaged and involved in social-media transactions, e-commerce activities have not experienced a similar trend. This issue has been identified in the literature as the e-commerce awareness paradox, wherein

customers are partially aware but are not engaged. This highlighted to a missing link between different levels of awareness and e-commerce process engagement. Both qualitative and quantitative data has been used for the study. A questionnaire-based survey was put together to investigate customers' level of awareness with respect to e-commerce. The questionnaire was divided into sections. The first questioned demographic characteristics such as age, gender and education, as well as English proficiency, Internet access, knowledge of the existence of e-commerce, and online purchasing experience. This was followed by the development of new levels of awareness instruments, awareness of product/services, payment methods, delivery methods and brands. Authors are of the opinion that this awareness can be improved by integrating four distinctive levels of awareness awareness of products/services (AOP/S), awareness of payment (AOP), awareness of delivery (AOD) and awareness of brand (AOB) – are projected at e-commerce processes. For the successful adoption of e-commerce, both stakeholders and consumers must understand and integrate their e-commerce experience.

Research Methodology

The researchers adopted analytical, descriptive and comparative methodology for this study; reliance has been placed on books, journals, newspapers and online databases. Both qualitative and quantitative data has been used for the study. Key variables considered for data collection were- frequency of online shopping by the e-commerce website customers in Mumbai Region, sources used by the e-commerce website customers of Mumbai Region for gathering information about various products and Payment mode normally adopted by the e-commerce website customers in Internet shopping. Data was analyzed using Chi-square method.

Results and Discussion

Table 1: Frequency of online shopping by the e-commerce website customers in Mumbai Region

Frequency of Online Shopping	Frequency	Percentage
Once a week	63	5.0
at least once a month	311	24.9
Once in 2-3 months	62	5.0
Once in a year	125	10.0
According to the need	689	55.1
Total	1250	100.0
Chi-Square	df*	Sig.**
1129.520	4	<0.05

(*df- degree of freedom; **Sig. - Significance)

Table 1 illustrates frequency of online shopping by the e-commerce website customers of Mumbai Region. It is evident from the information that 5.0% e-commerce website customers do online shopping once in a week, which was followed by customers doing online shopping at least once in a month (24.9%). Furthermore, 5.0% e-commerce website customers do online shopping once in 2-3 months whereas 10% and 55.1% customers do online shopping once in a year and according to the need respectively. The non-parametric chi-square statistics showed that there is significant (Chi. Sq. = 1129.520; P<0.05) difference among e-commerce website customers with respect to their frequency of online shopping. Thus, it is evident from the above information that majority

of e-commerce website customers of Mumbai Region do online shopping according to their need.

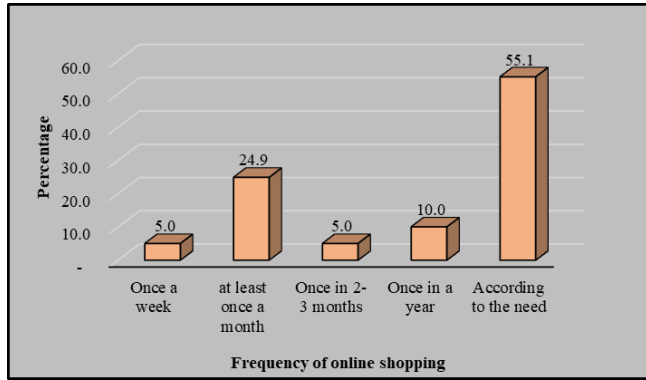


Fig 1: Frequency of online shopping by the e-commerce website customers in Mumbai Region

Table 2: Sources used by the e-commerce website customers of Mumbai Region for gathering information about various products

Sources of gathering information about various products	Frequency	Percentage
Search Engines	376	30.1
Friends and Family	188	15.0
Company Website	124	9.9
Advertisements	375	30.0
Promotional e-mails	62	5.0
Television Advertisements	125	10.0
Total	1250	100.0
Chi-Square	df	Sig.
	440.512	5
		<0.05

Table 2 illustrates sources used by the e-commerce website customers of Mumbai Region for gathering information about various products. It is evident from the information that 30.1% e-commerce website customers use search engines for gathering information, which was followed by taking views of friends and family (15.0%). Furthermore, 9.9% e-commerce website customers use company websites whereas 30%, 5% and 10% customers use advertisements, promotional e-mails and television advertisements respectively. The non-parametric chi-square statistics showed that there is significant (Chi. Sq. = 440.512; P<0.05) difference among e-commerce website customers with respect to sources used by them for gathering information about various products. Thus, it is evident from the above information that majority of e-commerce website customers of Mumbai Region use search engines and advertisement for gathering information about various products.

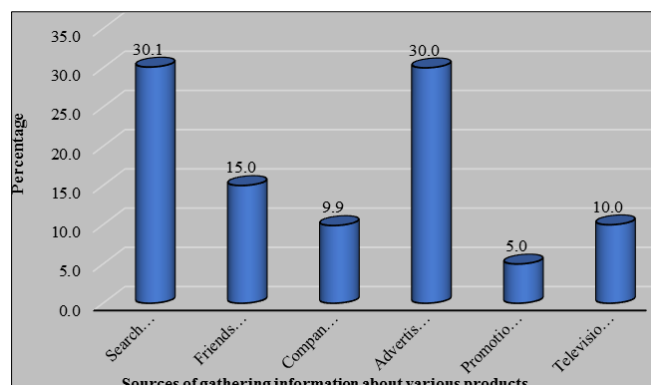


Fig 2: Sources used by the e-commerce website customers of Mumbai Region for gathering information about various products

Table 3: Payment mode normally adopted by the e-commerce website customers in Internet shopping

Payment mode normally adopted in Internet shopping	Frequency	Percentage
Credit Card	63	5.0
Debit Card	376	30.1
Net Banking	124	9.9
Cash on Delivery	687	55.0
Total	1250	100.0
Chi-Square	df	Sig.
	774.608	3
		<0.05

Table 3 illustrates payment mode adopted by the e-commerce website customers of Mumbai Region for doing internet shopping. It is evident from the information that 5.0% e-commerce website customers use credit card for the payment of online shopping, which was followed by use debit card for payment (30.1%). Furthermore, 9.9% e-commerce website customers use net banking whereas 55% customers use cash on delivery mode for payment of internet shopping. The non-parametric chi-square statistics showed that there is significant (Chi. Sq. = 774.608; P<0.05) difference among e-commerce website customers with respect to payment mode normally adopted by them while internet shopping. Thus, it is evident from the above information that majority of e-commerce website customers of Mumbai Region normally use cash on delivery as mode of payment for internet shopping.

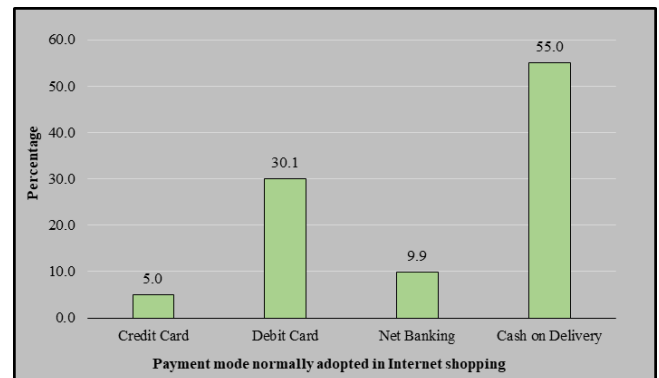


Fig 3: Payment mode normally adopted by the e-commerce website customers in Internet shopping

Conclusion

It is evident from the study result of Table 1 that significant (Chi. Sq. = 1129.520; P<0.05) number of e-commerce website customers of Mumbai Region do online shopping according to their need. Furthermore, substantial (Chi. Sq. = 440.512; P<0.05) number of e-commerce website customers of Mumbai Region use search engines and advertisement for gathering information about various products (Table 2). Noticeable (Chi. Sq. = 774.608; P<0.05) number of e-commerce website customers of Mumbai Region normally use cash on delivery as mode of payment for internet shopping (Table 3). Hence, on the basis of above results it is evident that customers are aware regarding e-commerce. But they are afraid of answering too many personal questions while purchasing a product through e-commerce site; using personal information by e-commerce websites for other purpose without seeking their consent. They select e-commerce site, which is easy to use, and to find information. Majority of e-commerce website customers are not fully aware of the security and transaction policy of e-commerce site.

References

1. Jibitesh Mishra. E-Commerce, Macmillan Publishers India Ltd, 2011, 4.
2. Jibitesh Mishra. E-Commerce, Macmillan Publishers India Ltd, 2011, 8.
3. Bernstein T, Bhimani AB, Schultz E, Siegel C. Internet Security for Business, John Wiley, New York, 1996.
4. Camp LJ. Trust and Risk in Internet Commerce, The MIT Press, 2000.
5. Center for the Study of Social Policy, "Customer satisfaction improving quality and access to services and supports in vulnerable neighborhood", 2007. Retrieved from <http://www.cssp.org/publications/constituents-co-invested-in-change/customer-satisfaction/customer-satisfaction-what-research-tells-us.pdf>. 02/11/2015
6. Changa Hwang. Support Vector Fuzzy Regression Machines, In Transaction of Fuzzy Sets and Systems. 2003; 138:2, ACM, USA
7. Corder GW, Foreman DI. Nonparametric Statistics for Non-Statisticians: A Step-by-Step Approach, Wiley, 2009.
8. Dubois D. Fuzzy Sets and Systems: Theory and Applications, Academic Press, USA, 1980.
9. Dan Kim J. An OBTG (Organizational - Business - Technological - Governmental) E-business Adoption Model for Small and Medium Sized Enterprises, AMCIS, 2008, 243.
10. DeLone WH, McLean ER. The DeLone and McLean model of information systems success: a ten-year update, Journal of Management Information Systems. 2003; 19:9-3.
11. Devendra Agarwal. Web Personalization and Recommendation Model for Trust in E-Commerce Websites, Computer Engineering & Information Technology Shobhit University, Meerut-250110, 2013.
12. Ding Mao. A Study of Consumer Trust in Internet Shopping and the Moderating Effect of Risk Aversion in Mainland China An Honours Degree Project Submitted to the School of Business, Hong Kong Baptist University, Hong Kong, 2010.
13. Azimzadeh F, Khatun S, Ali BM. A Method to Incorporate Negative Value into a Trust Model, International Review on Computers and Software. 2007; 2(2):190-197.
14. Feldman Stuart. The Changing face of E-commerce: Extending the Boundaries of the Possible, IEEE Internet Computing, 2000.
15. Gefen, Straub. The Relative Importance of perceived Ease of Use in Information System Adoption: A Study of e-commerce adoption, Journal of the Association for Information System. 2000; 1(8):1-21.
16. Grewal H, Grewal S. E-Commerce: Security Challenges & Growth: An Indian Perspective, in International Journal of Management Sciences. 2012; 1:2.
17. Humphery Jonh, *et al.* The Reality of E-commerce with developing Countries, Report, 2003.
18. Jarvenpaa Todd. Consumer Reactions to Electronic Shopping on the World Wide Web International Journal of Electronic Commerce. 1997; 1(2):59-88.
19. Kleindi Burrow. E-commerce Marketing. Thomson South-Western, 2005.
20. Koh Ai Tee. E-Commerce in an Era of Creative Destruction, 2000, Available: <http://www.alumni.nus.edu.sg/almnus/jul2000/ecom.html>
21. Lin CC, Wu HY, Chang YF. The critical factors impact on online customer satisfaction, Procedia Computer Science, 2011, 276-281.
22. Liu X, He M, Gao F, Xie P. An empirical study of online shopping customer satisfaction in China: a holistic perspective, International Journal of Retail & Distribution Management. 2008; 36(11):919-940.
23. Darbari M, Karn B, Singh V, Ahmad SS. Integrating Natural Language Requirements and OPEN Process Activity Theory Model for Platform Independent Web Monitoring, International Review on Computers and Software. 2008; 3(3):283-287.
24. Kargar MJ, Ramli AR, Ibrahim H, Noor SB. Towards a Practical and Valid Model for Assessing Quality of Information on the Web, International Review on Computers and Software. 2007; 2(2):80-88.
25. Nikhashem, *et al.* Study on Customer Perception towards Online-Ticketing in Malaysia, Eproceedings for International Research Conference and Colloquium on Contemporary Research Issues and Challenges in Emerging Economies, 2011.
26. Nusair K, Kandampully J. The antecedents of customer satisfaction with online travel services: a conceptual model, European Business Review, 2008, 4-19.
27. Pang Shuping. concept and nature of e-commerce
28. Pearson, Young. Technology Acceptance: An Individual Perspective, Current and Future Research in Malaysia". Available, 2002, at: <http://ramayah.com/journal/article/pdf/techacceptanceindividual.pdf>
29. Petter S, DeLone W, McLean E. Measuring IS success: models, dimensions, measures, and interrelationships, European Journal of Information Systems. 2008; 17:236-263.
30. PEW/Internet. Online Shopping, Survey Report, 20080
31. Pwc Annual Report. Emerging Opportunities – Financial Services M&A in Asia, 2011, Available at <http://www.pwc.com/gx/en/mergers-acquisitions-industrytrends/survey/index.jhtml>
32. Ravi Kalakota, Andrew Whinston B. Frontiers of electronic commerce", Addison Wesley Longman Publishing Co., Inc., Redwood City, CA, 1996.
33. Ravi Kalakota, Andrew Whinston B. Electronic Commerce: A Manager's Guide, Addison Wesley, 1997.
34. Schaupp LC, Belanger F, Fan W. Examining the success of websites beyond e-commerce: An extension of the IS success model, Journal of Computer Information Systems. 2009; 49(4):42-52.
35. Wigand RT. Electronic Commerce: Definition, Theory and Context, The Information Society. 1997; 13:1-16.
36. Wikipedia. The Free Encyclopedia. Introduction about India, 2011, Available: <http://en.wikipedia.org/wiki/India>
37. Yinan Yang, Lawrie Brown. Commerce Trust via the Proposed W3 Model, Published in proceedings of postgraduate ADFA conference on computer science, University of New South Wales, Australia, 2001.
38. Zwass V. Structure and Macro-Level Impacts of Electronic Commerce: From Technological Infrastructure to Electronic Market Places in Emerging Information Technologies ed. Kenneth E. Kendall, Thousand Oaks, CA: Saga Publications, 1998.
39. Issa Najafi. The Role of e-Commerce Awareness on Increasing Electronic Trust, Life Science Journal. 2012; 9(4):1487-1494. (ISSN:1097-8135)

40. Selvarajah Krishnan, Iiham Sentosa, Siti Nurain, Nur Amalia, Syakila Syamim, Wan Nur Hafizah. E-commerce Issues on Customer's Awareness in Malaysia, *International Journal of accounting & Finance*. 2017; 6(1):8-12. DOI: 10.5923/j.ijfa.20170601.02
41. Sebin George. Consumer Awareness & Protection in E-Commerce Transactions – An Overview, *International Journal of Research in Economics and Social Sciences (IJRESS)* Available online at : <http://euroasiapub.org>. 2016; 6(11):363-371 ISSN(o):2249-7382 | Impact Factor: 6.225, | Thomson Reuters ID: L-5236-2015
42. Aziz Obaid Alotaibi, Christian Bach. ASEE 2014 Zone I Conference, 2014, 3-5, University of Bridgeport, Bridgeport, CT, USA.
43. Husam Yaseen, Alhusban, Amal Alhosban, Kate Dingley. Making Sense of E-Commerce Customers Awareness in a Developing Country Context: A Framework for Evaluation, *the Electronic Journal of Systems Evaluation*. 2017; 20:2.