Quality Improvements for Ensuring e-Retailing Success in India: Constructs and Frameworks

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Abstract. This extended abstract presents a review of various constructs and evaluation frameworks proposed in the literature for e-Retailers. Our study shows that the existing frameworks apply to either the technical or the non-technical elements of an e-Retailing site and not *both* of them. Therefore, a comprehensive framework covering all aspects of quality is what is required. Furthermore, for the long run sustenance and growth of e-Retailing, it is necessary to focus on the service provided and not only the technical aspects. In the Indian context, where e-Retailing is beginning to enter a rapid growth phase, evaluation methods and metrics which are appropriate are necessary. Our extended abstract highlights the key issues that will help define these constructs

1 Introduction

E-Retailing has grown as a service sector globally. The e-Retailing market stood at $198.8 billion in 2011 in the United States, and €200.52 billion in Europe (Center for Retail Research, 2012). E-Retailing in India has started to gain momentum. The industry stood at a valuation of $948.6 million in 2011 and is expected to reach $260 billion by the year 2025 (First Data, 2011).

Quality improvement in e-Retailing can ensure a robust growth of the sector and encourage standardization and improvement of overall business practices. For evaluating the measurement of quality improvements a broad approach suggested by Practical Software and Systems Management (Statz, 2005) is employed to understand the comprehensiveness of the constructs and frameworks available in literature.

Practical Software and Systems Management (Statz, 2005) identified four major areas of quality improvement derived from the balance score card approach. These areas are:

- Financial (F): That deal with financial goals from the project.
- Customer Satisfaction (CS): The satisfaction for both internal and external customers is important. These relate to things like mean time to failure, response time, price/performance etc.
- Internal Business Processes (IBP): These goals relate to practices and methods for product and service development, management of people in the organization etc.

- Learning and Growth (L&G): This relates to people related capabilities of the organization like technical skills of staff, staff growth in terms of numbers, domain knowledge, morale and turnover.

Table 1. Important measures for e-Retailing quality improvement.

Author(s) & Year	Major Areas	Existing Measures	Suggested Measures
Baty & Lee (1995)	CS, IBP, F	Wide reach, multimedia, better market functionality, information availability, shopping agents , better search, reduced transaction costs	Semantic representation, advanced navigation and product comparability features
Hawkins, Mansell, & Steinmueller (1999)	IBP, F	Provision of wider product basket (complementary) e.g. linking cash to smart cards	Customer perception issues, develop and harness virtual communities, disintermediation to re-intermediation
Srivastava & Mock (1999)	CS	Trust, business practices, transaction integrity, information protection, legal environment	Trust should be incorporated as an essential construct
Casati & Shan (2000)	IBP	Different vendors like SAP, ATG, Oracle	Integrated platform for a seamless process like Enterprise Application Interface (EAI)
Rust & Kannan (2003)	CS,IBP, F	Strategic, cost reduction, supply chain efficiency, brand equity	Revenue expansion, information flows, customer profitability, customization
Van der Merwe & Bekker (2003)	CS,IBP	Design, content, navigation, reliability	Conversion of buyers decision making process into technical aspects
Croom & Johnston (2003)	CS, IBP, L&G	Cost efficiency, process conformance, internal customer satisfaction	Greater awareness of and importance to internal customer satisfaction
Burt & Sparks(2003)	CS,IBP, F	Cost reduction, low inventory, branding	ROI is not very clear for traditional retailers
Desai, Richards & Desai (2003)	CS, IBP	Trust, process efficiency	Employment of EDI, and other standards that can iron out deficiencies causing trust issues
Klischewski & Wetzel, (2003)	CS, IBP	XML based representation	customer orientation

Keeping the above framework in mind, we focus on measures for e-Retailing service quality improvement as suggested by researchers over the years. Table 1 and 2 provides a list of measures employed in various studies to evaluate an e-Retailer's quality. Table 1 lists important constructs and table 2 lists important frameworks identified by researchers. The last column of table 1 i.e. 'suggested measures' lists the measures that the researchers have suggested for future investigation.

It can be observed from Tables 1 and 2 (column 2) which lists the areas covered by the study in terms of the four suggested dimensions, that most of the measures focus on three aspects of quality improvement i.e., customer satisfaction, financial and internal business processes and learning and growth has been mostly ignored.

Table 2. Major frameworks for e-Retailing quality improvement

Author(s) & Year	Major Areas	Title of Framework	Measures Employed
Bressolles (2006)	CS, IBP	NetQual	Ease of site use, design, reliability, security
Chiou, Lin & Perng (2010)	CS, IBP, F	4PsC	Place, product, price, promotion and customer relation.
Yoo & Donthu (2001)	CS, IBP	Sitequal	Ease of use, design, speed of order processing, security of financial information
Barnes & Vidgen (2003)	CS, IBP	Webqual	Usability, quality of information, quality of interaction
Wolfinbarger & Gilly (2003)	CS, IBP	E TailQ	Site design, customer service, reliability, security, privacy.
Parasuraman, Zeithaml & Malhotra (2005)	CS, IBP, F	E S Qual/ E RecSQual	Efficiency, fulfillment, system availability and privacy. E RecS Qual is a measure for non-frequent customers

2   e-Retailing in the Development Context

According to A. T. Kearney (2012), India's retail sector ranks 5th in the world based on the global retail development index. This growth in e-Retailing is fuelled by increased broadband connectivity, rising living standards, busy lifestyle and traffic, much wider product range, and convenient processes. As the industry matures it would require quality improvement to keep up with the rising customer expectations and maturing industry standards. Indian e-Retailers can greatly benefit from studies on e-Retailing available from developed countries. Most e-Commerce research in India is based on adoption factors and employs qualitative measures without empirical analysis (Vaithianathan, 2010). e-Retailers like flipkart.com and snapdeal.com have benefited by following the business models and best practices of established e-Retailers like amazon.com and groupon.com.

Few researchers have addressed the e-Retailing quality dimensions in developing countries which can be applied to the Indian context. For example studies have focused on core service dimensions (Malhotra et al, 2004); system availability and fulfillment (Kim and Kim, 2010); e-Commerce infrastructure (Okoli and Mbarika, 2003); strategic alliance and innovative business strategies (Li and Chang, 2004); cultural adaptation (Zahedi & Bansal, 2011; Singh & Matsuo, 2004). Researchers suggest that developing countries have typical issues like infrastructure, technology acceptance etc. (Malhotra et al, 2004) and hence require different quality dimensions.

3   Conclusion and Future Research Opportunities

This research provides a list of measures for evaluating e-Retailing quality. It highlights the need for a comprehensive framework that encompasses the major aspects of e-Retailing quality i.e., customer service, financial, internal business processes, and learning and growth. However, this paper suffers from the limitation in that it lacks a proposed framework and an empirical analysis.

As e-Retailers expand their markets across the globe future research on e-Retailing quality improvements must also include country specific issues. Extensive studies are required to examine if country-specific websites reflect national cultural values (Zahedi & Bansal, 2011). Future research should focus on development of an

evaluation framework for e-Retailing quality improvement that addresses technical, non-technical and country specific issues.

References

1. A. T. Kearney. 2012. http://www.atkearney.com/consumer-products-retail/global-retail-development-index.
2. Barnes, S. J., Vidgen, R. T.: An Integrative Approach to the Assessment of E-Commerce Quality. Journal of Electronic Commerce Research, 3(3), 114-127 (2003).
3. Baty, J. B., Lee, R. M.: Intershop: Enhancing the Vendor/Customer Dialectic in Electronic Shopping. Journal of Management Information Systems, 9-31(1995).
4. Bressolles, G.: La Qualite de Service Electronique: NetQual. Proposition d'uneechelle de Mesure Appliqué Aux Sites Marchands et Effets Moderateurs. Rescherche et Applications en Marketing, 21(3), 19-45 (2006).
5. Burt, S., Sparks, L.: E-commerce and the Retail Process: A Review. Journal of Retailing and Consumer Services, 10(5), 275-286 (2003).
6. Casati, F., Shan, M. C.: Process Automation as the Foundation for E-Business. In: Proceedings of the 2000 International Conference on Very Large Databases, Cairo, Egypt, pp. 688-691 (2000).
7. Centre for Retail Research 2012, http://www.retailresearch.org/onlineretailing.php
8. Chiou, W. C., Lin, C. C., Perng, C.: A Strategic Framework for Website Evaluation Based on a Review of the Literature from 1995–2006. Information & Management, 47(5), 282-290 (2010).
9. Croom, S. Johnston R.: E-Service: Enhancing Internal Customer Service through E-Procurement. International Journal of Service Industry Management, 14(5), 539-555, (2003).
10. Desai, M. S., Richards, T. C., Desai, K. J.: E-commerce Policies and Customer Privacy. Information Management & Computer Security, 11(1), 19-27 (2003).
11. First Data Corp. 2011. How E-commerce can Improve the Customer Experience and Increase Revenues?, Report. http://www.firstdata.com/downloads/thought-leadership/Ecomm-Paper.pdf
12. Hawkins, R., Mansell, R., Steinmueller, W. E.: Toward Digital Intermediation in the Information Society. Journal of Economic Issues, 383-391, (1999).
13. Kim, J. H., Kim, C.: E-service Quality Perceptions: A Cross-Cultural Comparison of American and Korean Consumers. Journal of Research in Interactive Marketing, 4(3), 257-275, (2010).
14. Klischewski, R., Wetzel, I.: Serviceflow Management for Health Provider Networks. Logistics Information Management, 16(3/4), 259-269, (2003).
15. Li, P. P., Chang, S. T. L.: A Holistic Framework of E-Business Strategy: The Case of Haier in China. Journal of Global Information Management, 12(2), 44-62, (2004).
16. Malhotra, N. K., Ulgado, F. M., Agarwal, J., Shainesh, G., Wu, L.: Dimensions of Service Quality in Developed and Developing Economies: Multi-Country Cross-Cultural Comparisons. International Marketing Review, 22(3), 256-278, (2005).
17. Murtaza, M. B., Shah, J. R.: Developing Efficient Supply Chain Links Using Web Services. Journal of Internet Commerce, 3(3), 63, (2004).
18. Okoli, C., Mbarika, V. A.: A Framework for Assessing E-Commerce in Sub-Saharan Africa. Journal of Global Information Technology Management, 6(3), 44-66, (2003).

19. Parasuraman, A., Zeithaml V.A., Malholtra, A.: E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality. Journal of Service Research, 7(3), 213-235, (2005).
20. Rian van, d. M. Bekker, J.: A Framework and Methodology for Evaluating E-Commerce Web Sites. Internet Research, 13(5), 330-341, (2003).
21. Rust, R. T., Kannan, P. K.: E-service: A New Paradigm for Business in the Electronic Environment. Communications of the ACM, 46(6), 36-42, (2003).
22. Schmid, H. A., Rossi, G.: Modeling and Designing Processes in E-Commerce Applications. IEEE Internet Computing, 8(1), 19-27, (2004).
23. Singh, N., Matsuo, H.: Measuring Cultural Adaptation on the Web: A Content Analytic Study of US and Japanese Web sites. Journal of Business Research, 57(8), 864-872, (2004).
24. Srivastava, R. P. & Mock, T. J.: Evidential Reasoning for WebTrust Assurance Services. Journal of Management Information Systems, 16(3), 11-32, (1999).
25. Statz, J.: Measurement for Process Improvement. Practical Software and Systems Measurement, Technical paper. http://www.psmsc.com/Downloads/TechnologyPapers/PI_Measurement_v1.0.pdf, (2005).
26. Vaithianathan, S.: A Review of E-Commerce Literature on India and Research Agenda for the Future. Electron Commerce Research, 10(1), 83-97, (2010).
27. Van der Merwe, R., Bekker, J.: A Framework and Methodology for Evaluating E-Commerce Web Sites. Internet Research, 13(5), 330-341, (2003).
28. Wolfinbarger, M., Gilly, M. C.: EtailQ: Dimensionalizing, Measuring and Predicting E-tail Quality. Journal of Retailing, 79(3), 183-198, (2003).
29. Yoo, B., Donthu, N.: Developing a Scale to Measure Perceived Quality of an Internet Shopping Site (SITEQUAL). Quarterly Journal of Electronic Commerce, 2(1), 31-46, (2001).
30. Zahedi, F. M., Bansal, G.: Cultural Signifiers of Web Site Images. Journal of Management Information Systems, 28 (1), 147-200 (2012).