

Exploring the Inherent Growth of e-Tailing via e-Personalization and Technological Innovations

Alan D. Smith, Department of Marketing, Robert Morris University, Pittsburgh, PA, USA

ABSTRACT

It is the hope of essentially all e-tailers to deliver personalized and real-time communications to customers that are tailored to their interests, preferences, based on big data mining that customers will value over privacy concerns. The technology (e.g., interaction data from segmentation marketing, transactions data, and sophisticated analytics) should optimize the customer's journey through the array of brands via unique identifiers from customer's profiles that provide enrichment, not just enlargement, of each brand's value proposition. These interactions can vary from simple transactional e-mails to conversations with product experts and recommended selections based on previous purchases from a variety of websites. Through appropriate multivariate analyses and data-reduction techniques, the basic elements e-personalization, namely online purchasing behaviors, personalized communications, information retrieval services, degree of personal web presence, quality assurance of customer service, and the promotion of customization services, were found to be conceptually and statistically related to retailer benefits of e-personalization (e.g., increased buying and creates customer loyalty).

KEYWORDS

Branding, Case Study, Customer Relationship Management, Customer Service Quality Empirical, e-Personalization, e-Tailing

INTRODUCTION

Technological Activities in e-Tailing

Although the traditional relationship between buyers and sellers has changed little in 200 years, the role of technology in this relationship has changed greatly in the past 10 years, especially in communicating to customers and partners in the overall value chain. As suggested by Kim and Hahn (2012, p. 40), "fashion/brand leadership as not only one's involvement in and knowledge about fashion but also one's level of influence over peers in regards to selecting fashion products and brands related to being fashionable." Much of this leadership depends on the ability of management to use appropriate trends in technology to develop and maintain a competitive edge (Keng, Huang, Zheng, & Hsu, 2007; Komulainen, Mainela, Tahtinen, & Ulkuniemi, 2007; Smith, 2002; 2012a; 2012b). The numerous advancements in e-personalization communication have generated both benefits and challenges as online retailers try to regain competitive advantages in the global marketplace. Undoubtedly, much

DOI: 10.4018/IJIDE.2017010102

Copyright © 2017, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

of the communication and the technology that supports the social webs and sharing of large data exploration are highly dependent on the ability of companies to keep privacy concerns by customers to a minimum (Lee, Lee, Lee, & Park, 2015; Stead & Gilbert 2001). Previous researchers (Blake, Neuendorf, & Valdiserri, 2005; Bourlakis, Papagiannidis, & Fox, 2008; Brynjolfsson & Smith, 2000; Fiorito, Gable, & Conseur, 2010) have examined the typical roles of retail buyers and explored how these roles have changed due either to the type of retail store or the role technology has played in the job function. Kim and Hahn (2012) investigated the how the personal traits variables and their effect on Generation Y consumer's attitude toward using mobile devices for communication as well as for the shopping. There were three variables under the personal traits (e.g., high involvement, experiment productivity and fashion/brand leadership) and three theories (e.g., Stimulus-Organism-Response, Uses and Gratification Theory and Technology Acceptance Models) to investigate consumer behavior on mobile communication and commerce. Essentially, their study personal traits variables that positively influenced younger consumers' attitude to using mobile devices to communicate and shopping (e.g., exogenous variables were including high-tech involvement, experiment proclivity, and fashion/brand leadership and endogenous constructs were including perceived ease of use, perceived usefulness, perceived enjoyment, attitude towards using the mobile devices for communication, and attitude towards using mobile devices for commerce). Specifically, Smith (2006, 2011, 2012b) examined the various uses of knowledge-technology in regards to e-personalization which today's retail buyers have become dependent, especially in the face of ever tighter profit margins. Therefore, the basic purpose of this research effort is to help retail practitioners identify areas of improvement for retail buyers, especially in the examination of customization via electronic means and customers over satisfaction.

Keng, et al. (2007) and Komulainen, et al. (2007) have suggested various avenues through which technology has changed in retailing and the impact it has had on the supply chain. From the early beginnings of data mining and data warehousing, the basic foundation for customer relationship management (CRM) systems were laid down (Kyoung-jae, 2011). CRM-embedded systems allow buyers to analyze consumers' buying behavior for the purpose, as it relates to operations, of forecasting future demand for products. Data mining is the analysis of the information and data warehousing is the store of such customer-related data. One of the major functions of CRM is to understand customers' behavior, even down to an individual or personalized level via enhanced and sophisticated algorithms. This technology has greater implications for marketers than for operations personal.

Fiorito, et al. (2010) documented the usefulness of data mining when used in conjunction with point-of-sale (POS) systems. POS has been the evolution of the once humble cash register into a mighty data collector. Retail buyers are able to mine the data from POS to predict consumer trends or identify stock movements in relation to store layout just to name a few. This analysis can be used by retail buyers to customize store layouts in an effort to make products more accessible to their customers. Perhaps, one of the biggest boosts to efficiency through technology for retail buyers comes from electronic data interchange (EDI).

EDI allows retail establishments and their suppliers to communicate in real time. All partners in the supply chain are fully aware of what products are moving, when inventory needs replenishment, and can react quickly to inventory issues. This process has automated a key function of the retail buyer. This automation has not eliminated the need for this position, instead through efficiency it has freed retail buyers up to concentrate on other tasks. EDI has major implications for the supply chain.

Much of the recent advancements in retail communication technological advancements have been made in the area of inventory management systems, notably automatic identification and data capture systems, especially barcodes and radio frequency identification (RFID) (Smith, 2012a). These technologies are most notably used for inventory tracking, as bar codes allow for quick scanning which can easily register all the vital information of products. RFID takes this a step further by allowing data transmission through radio frequency. This can be used to track the location of inventory, whether in a warehouse or on a sales floor. The same technology can be used in loss-prevention which directly effects to retailers' bottom line. RFID tags also collect data as the product moves off the shelf and

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/exploring-the-inherent-growth-of-e-tailing-via-e-personalization-and-technological-innovations/165402

Related Content

The Information System Strategies of MNC Affiliates: A Technology-Organization-Environment Analysis

Vincent S. Lai (2010). *Technological Advancement in Developed and Developing Countries: Discoveries in Global Information Management* (pp. 49-73).

www.irma-international.org/chapter/information-system-strategies-mnc-affiliates/39431

Factors Determining the Use of E-Government Services: An Empirical Study on Russian Students in China

Isaac Kofi Mensah, Piankova Veraand Jianing Mi (2018). *International Journal of E-Adoption* (pp. 1-19).

www.irma-international.org/article/factors-determining-the-use-of-e-government-services/208933

MOOCs as Supplement of Informal Education

Malgorzata B. Pankowska (2017). *International Journal of E-Adoption* (pp. 10-25).

www.irma-international.org/article/moocs-as-supplement-of-informal-education/178499

A Fuzzy System for Evaluating Human Resources in Project Management

Oladele Stephen Adeolaand Adesina Rafiu Ganiyu (2020). *International Journal of Technology Diffusion* (pp. 66-95).

www.irma-international.org/article/a-fuzzy-system-for-evaluating-human-resources-in-project-management/242992

Factors Stimulating Entrepreneurship: A Comparison of Developed (U.S. and Europe) and Developing (West African) Countries

George M. Puia, Joseph A. Affholterand Mark D. Potts (2015). *Comparative Case Studies on Entrepreneurship in Developed and Developing Countries* (pp. 1-18).

www.irma-international.org/chapter/factors-stimulating-entrepreneurship/125075