Chapter 6
The Intelligence of E–CRM Applications and Approaches on Online Shopping Industry

Bashar Shahir Ahmed
University Abdelmalek Essaadi (Computer Science and Systems Engineering Laboratory), Morocco

Fadi Amroush
Universidad de Salamanca, Spain

Mohammed Ben Maati
University Abdelmalek Essaadi, Morocco

ABSTRACT

Today, most businesses are in continuous search of sophisticated tools and techniques to progressively grow their business. Therefore, the use of intelligence systems has found its pace in the global market. The intelligence systems has mostly affected the E-CRM as it is the most critical and central part for the growth of the business. The E-CRM approaches have enhanced drastically with an integration of the business intelligence systems and organizations are now diligently striving for excellence by gaining benefit from these integrated systems. However, there are many organizations that lag behind in escalating their progress and growth as they have not yet understand how to improve the data quality by using business intelligence systems and therefore used it for decision making. Hence, the following research is conducted to study the implementation trends of intelligence E-CRM in business process and how the business intelligence systems could help in improvising the data quality and the business processes.

INTRODUCTION

Many organizations are implementing electronic Customer Relationship Management systems in an effort to secure and maintain competitive advantage. Developing and enhancing long-term relationships with customers requires using quality data about the customers. Unfortunately, many e-CRM systems have failed to achieve their objective because of the issues associated with data integrity (Chen & Ling,

2008). The integrity of the data used to make decisions regarding customers in an organization affects the quality of the decisions made.

Protecting data integrity is challenging particularly in big organizations. The challenges associated with data integrity are increased by the complexity of the current business environment. Furthermore, marketing strategies and programs usually change rapidly in organizations (Fan, W. et-al, 2011). Therefore, to get the most out of relationship marketing, the customer data has to conform to the standards in a given industry. In addition, the data should be time stamped to make its validity clear. In addition, the data should be complete and accurate by having all the required values correctly entered. Finally, it is important for the customer data to be consistent (Chen & Ling, 2008). This means that the data values should be aligned across all systems in an organization.

BACKGROUND

Various studies have been done before by a number of scholars as far as the quality and accuracy of data in e-CRM systems are concerned. Research on optimising the value of e-CRM application in E-commerce aims at determining the responsive prospect of customers to E-commerce applications (Ahmed, Maati & Al Mohajir, 2015a). The study revealed that customers often become frustrated if the e-CRM system is redundant and incapable of meeting their needs and expectations. A revelation from the study is that quality of data goes far deeper to include ergonomic relationships (Ahmed, Maati & Al Mohajir, 2015a, pg. 150). As such, any design or approach to improve data quality must measure and ascertain that the implementation of an e-CRM system meets the ergonomic conditions. With the study aiming to determine whether potential customers can respond to the e-CRM application, the researchers established that culmination of the application should deal with all customer-related issues. Such issues include customer services facilitation, sales and marketing, and field support (Ahmed, Maati & Al Mohajir, 2015a, pg. 152).

In addition to data quality issues, companies embracing e-CRM systems face difficulties in developing effective technological infrastructure considering the limited time and resources (Ahmed, Maati & Al Mohajir, 2014, pg. 214). A recent study revealed that 66 percent of loaded orders are discarded before checkout, and only 5 percent of customers who visit organisations' online stores become customers (Ahmed, Maati & Al Mohajir, 2014, pg. 214). The aim of the research was to show that E-CRM is not limited to internet data but includes other devices such as phones, set-top boxes, pagers and so forth.

In another research by same authors, Ahmed, Maati, and Al Mohajir on how to improve the E-CRM intelligence by using CRM data analytic tools such as OLAP, data mining and web analytics, it was established that CRM analytics tools not only contribute to exceptionally productive customer relationship as regards sales and service delivery but in the development of adverts, planning, and the analysis of customer data as well (Ahmed, Maati & Al Mohajir, 2015b, pg. 7). As such, it is evident that real experience for an online client is dependent on an intelligent, concise, and convenient application.

In another study, authors targeted to a larger extent the problems resulting from formatting errors, data inconsistencies and lexical errors. A good example is the token based and attribute selection algorithms (Z. Yuhang, 2010). The algorithms allow for eliminating duplicate records data in databases. The algorithms' implementation is in such a way that users pick on the source and the preferred mode of repair. This functionality is realized courtesy of the application of distance function on the attributes that are unclean. In these algorithms, the repair time and progress is visible (Z. Yuhang, 2010). Yuhang

11 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/chapter/the-intelligence-of-e-crm-applications-and-approaches-on-online-shopping-industry/217283

Related Content

Financing Nascent Entrepreneurs by Reward-Based Crowdfunding: Lessons From Indiegogo Campaigns
Susana Bernardino, J. Freitas Santosand Silvie Oliveira (2021). *Handbook of Research on Nascent Entrepreneurship and Creating New Ventures (pp. 228-252).*
www.irma-international.org/chapter/financing-nascent-entrepreneurs-by-reward-based-crowdfunding/263905

Characteristics of the Responsible Entrepreneur: An Empirical Research
 (2019). *Responsible Entrepreneurship Education: Emerging Research and Opportunities (pp. 132-163).*
www.irma-international.org/chapter/characteristics-of-the-responsible-entrepreneur/220744

Entrepreneurial Spirit in Family Business Successors: The Case of Mexico
Cynthia Franco-Rodriguezand Cinthya Flores Rivera (2019). *Handbook of Research on Ethics, Entrepreneurship, and Governance in Higher Education (pp. 398-413).*
www.irma-international.org/chapter/entrepreneurial-spirit-in-family-business-successors/212018

Visualization and Simulation for the Analysis of Business Intelligence Products
Milena Janakova (2011). *International Journal of E-Entrepreneurship and Innovation (pp. 20-31).*
www.irma-international.org/article/visualization-simulation-analysis-business-intelligence/62079

Business Model Innovation Through Digital Entrepreneurship: A Case of Online Food Delivery Start-Up in India
Natasha Saqiband Gowsia Bashir Shah (2023). *International Journal of E-Entrepreneurship and Innovation (pp. 1-20).*
www.irma-international.org/article/business-model-innovation-through-digital-entrepreneurship/315294