E-CRM Analytics: 
The Role of Data Integration

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ABSTRACT

Electronic Customer Relationship Management (e-CRM) Analytics is the process of analyzing and reporting online customer/visitor behavior patterns with the objective of acquiring and retaining customers through stronger customer relationships. To better understand the role of data integration in achieving the goals of e-CRM, the authors conducted a study by means of a survey. The results of this study propose that although online, offline and external data integration has its complexities, the value added is significant. This survey of CRM professionals is composed of two parts. The first part investigated the nature of the data integrated and the data architecture deployed. The second part analyzed the technological and organizational value added with respect to the e-CRM initiative. The findings suggest that organizations that integrate data from various customer touch-points have significantly higher benefits, user satisfaction and return on their investment (ROI) than those that do not. Additional insights are also presented exploring the role of data integration in e-CRM projects at both business to business (B2B) and business-to-consumer (B2C) firms. For organizations implementing e-CRM, this study reveals that data integration is worth their time, money and efforts.

Keywords: CRM, data analytics, databases, data integration, data warehouse, e-commerce

INTRODUCTION

With the advent of the World Wide Web (web) and electronic commerce (e-commerce), there has been a dramatic change in market dynamics in that customers, both end users and businesses, can check prices and buy from suppliers around the globe, regardless of time and distance (Stephens, 1999). Due to this surge in purchasing power, companies must view their data in a more strategic light. In addition, there is a growing trend of organizations leveraging their data resources by developing and deploying data mining technologies to enhance their decision-making capabilities (Eckerson & Watson, 2001). To address this need, organizations are implementing Organizational Data Mining (ODM) technologies, which are defined as technologies that leverage data mining tools to enhance
decision-making process by transforming data into valuable and actionable knowledge to gain a competitive advantage (Nemati & Barko, 2001). ODM spans a wide array of technologies, including but not limited to e-business intelligence, data analysis, CRM, EIS, digital dashboards, information portals, etc.

As a result of these marketplace trends, organizations must begin implementing customer-centric metrics as opposed to solely adopting product-centric metrics (Cutler & Sterne, 2001). This scenario has triggered increased interest in the implementation and use of customer-oriented ODM technologies such as Customer Relationship Management (CRM) systems. CRM can be defined as the adoption, through the use of enabling technology, of customer-focused sales, marketing, and service processes (Forsyth, 2001). CRM is the process that manages the interaction between a company and its customers. The goal of CRM is to create a long-term, profitable relationship with all of an organization’s customers. It is more than just a software package — it is a business process enabled by technology. CRM vendors label these packages as CRM systems because their main goal is to analyze customer behavior and identify actionable patterns. This information is then used to improve goods and services offered to customers while increasing profitability through better relationships. CRM software provides the functionality that enables a firm to make the customer the focal point of all organizational decisions. CRM technologies incorporate some of the best-in-class processes for features such as customer service, product configuration, field service, and customer analysis.

CRM has become a key process in the strengthening of customer loyalty and in helping businesses obtain greater profit from low-value customers. The manner in which companies interact with their customers has changed tremendously over the past few years. Customers no longer guarantee their loyal patronage, and this has resulted in organizations attempting to better understand them, predict their future needs, and decrease response times in fulfilling their demands. This is extremely important to retaining customers since, according to common industry knowledge, the cost of acquiring a new customer is typically much higher than retaining an existing one.

Most companies are now realizing and understanding the value of collecting customer data but are faced with the challenges of using this knowledge to create intelligent pathways back to the customer. Most data mining technologies and techniques for recognizing patterns within data help businesses sift through the meaningless data and allow them to anticipate customers’ requirements and expectations, manage channel partnerships and other relationships more profitably. These technologies also enable companies to maintain customer privacy and confidentiality while gaining the benefits of profiling, calculating the economic value of the CRM tool, and discovering the key factors that would make or break the CRM project. By integrating these data mining tools with CRM software, organizations are able to analyze very large databases to extract new customer insights for stronger and
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