

# Chapter 9

## Enhancing the Electronic Customer Relationship Management through Data Mining: A Business Intelligence Approach

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### ABSTRACT

*According to the Moore's law, the number of transistors per microprocessor will double in every two years. In no doubt, this exponential increase in the processing speeds would be flanked by the increasing amount of data that corporates contend on a daily basis. Hence all corporates are literally drowning in data. But definitely there exists a hiatus between the data storage and the information retrieval. One can ask an enigmatic question, how effectively a stored data can be utilised for the decision making in the long-term perspective. The answer is not yet arrived out. Hence the "Organizations are data rich, but information poor!". If capturing and storing the relevant data is a hectic task, then analyzing and translating this data into the actionable information is the other corner stone in any information systems of a concern. This gap can be bridged or overruled by the concept of business intelligence. Business Intelligence (BI) can be simply defined in terms of data-driven approach rather than information driven which includes methods as decision support systems, online analytical processing (OLAP), statistical analysis, query and reporting, forecasting which can be primarily done by data mining. BI along with customer relationship management (CRM) software forms the second tier of a firm's IT infrastructure. This chapter holds a bird's eye view of the usage of datawarehousing approaches for a systematic business intelligence approach and its varied applications in view of electronic customer relationship management.*

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## **INTRODUCTION**

The very purpose of Customer Relationship Management (CRM) is to enable organizations to better serve its customers through the integration of reliable processes and procedures for interacting with those customers. The Customer Relationship Marketing revolves around the crux of relationship marketing wherein, the real concept of marketing plays a major role than that of selling a product. Hitherto, the relationship marketing is purely a strategy to bring and to nurture the relationships with the customers so as to maintain a long-term value. Selecting and acquiring customers based on their lifetime value results in higher profits than seeking out customers based on other criteria (Venkatesan and Kumar, 2004). Thanks to the concept of ebusiness and eSCM, where corporates played a major role in maintaining their relationship with their customers through the electronic means. Companies as Dell Computers, DHL services maintain such eCRM practices in terms of ordering, supply chain management, online tracking facilities and so on. In fact, relationship marketing, the underlying premise of CRM, cannot be effective without an appropriate use of information technology (IT) (Zineldin, 2000).

The crux of CRM is customer selectivity. The company must therefore be selective and tailor its campaign efforts by segmenting and selecting appropriate customers for individual marketing programs in terms of marketing automation or sales force automation (SFA), campaign management, internet personalization and email management. In extraordinary instances, it could even lead to “outsourcing of some customers” so that a company better utilize its resources on those customers. However, the motto of the concern is not to prune off its customer base but to identify appropriate customer programs and methods that would be profitable and create value for the firm and the customer. Also there is a saying that, it fetches ten times more cost to acquire a new customer than to retain a new customer. Hence

it is imminent to select and to retain the existing profitable customers in this competitive era.

## **Missions and Learning Outcomes of the Chapter**

With the advancement of IT, CRM can be redefined in terms of eCRM which allows aplenty of opportunities for organizations to reach their goals by the a clear cut way of setting up their mission and value propositions of the business through a better understanding of their customers and to serve them accordingly and to personalize online experiences and agent interaction in the ECRM environment.

From this chapter, learners will learn how to:

- The differences between CRM and eCRM
- How to build the knowledge infostructure to support decision making and marketing
- The advancements in business forecasting through the Knowledge Discovery (KD) rather than a decision support system.
- Trends in applying the CRM tools and techniques
- CRM-based business strategies
- Futurological aspects in Business Intelligence.

## **What is an eCRM?**

The stepping stone of a CRM programme is “customer selectivity”. As several research promulgates not all customers are equally profitable (Infact in some cases 80% of the sales come through 20% of the customers). Therefore a concern must be selective and tailor its program and marketing efforts accordingly, by segmenting and selecting appropriate customers for a better relationship management.

With the advent of Information and Communication Technologies (ICT), the letter ‘e’ gained its significance elsewhere. Needless to say, that

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