International Journal of Sales &
Marketing Management (IJSMM)
ISSN(P): 2319-4898; ISSN(E): 2319-4901
Vol. 5, Issue 3, Apr - May 2016; 1-6

International Academy of Science,
Engineering and Technology
Connecting Researchers; Nurturing Innovations

ROLE OF INFORMATION TECHNOLOGY AND ANALYSIS OF VARIOUS FRAMEWORKS IN CUSTOMER RELATIONSHIP MANAGEMENT

R. HEMANTH BABU, T. RAJA REDDY & N. GIRI BABU

Faculty of School of Management Studies, Sri Venkateswara College of Engineering and Technology, Chittoor, India

ABSTRACT

Customers are the important entities in the field of marketing and business especially in globalised world. In order to be successful, the companies should maintain good relationship with customers. Customer Relationship Management (CRM) helps in analysing and tracking such interactive relationship. CRM helps small business entities in tackling with various challenges like sales decline, operational challenges, misalignment between target and policies. But, CRM suffers from many negative prospects which can be solved with Information Technology tools. This paper deals with various aspects of Information Technology in Customer Relationship Management and investment in IT for CRM along with data warehouse solutions for CRM.

KEYWORDS: CRM, Data Warehouse, Information Technology

INTRODUCTION

CRM is defined as a process in which customers are influenced through proper communications. An effective communication with customers helps in improving customer retention, loyalty, acquisition and profitability. If the customer is found to be unprofitable, CRM also helps in the termination of relationship with such customer. As CRM involves the storage and analysis of customers' data which provides an insight into behaviour of customer, technology plays a vital role in CRM. Customers are the important entities in the business markets as they can make or break any business. Hence, customer satisfaction is considered vital in any business market. With the help of Information technology, CRM enhances products' quality by understanding the customers.

INFORMATION TECHNOLOGY (IT)

IT is an important factor in CRM that helps in maintaining long lasting customer relationships, retention of customers and maximising customer's value. Customer management is not a new concept which is being used for the success of market since 1990s. But the usage of IT in CRM was developed in later 1990s for tracing various activities of customers which is the main difference with the conventional CRM.

But IT is only a necessary factor but not a sufficient factor in CRM which stresses the need for other tools in CRM. Various tools of IT are helpful in the collection and analysis of customers' data to build effective relationship between customers and organisations. IT helps CRM by developing automation tools for sales and databases along with connecting duties and marketing sales. Effective utilisation of IT in CRM develops a common customer-oriented culture. Hence, with the changes in business circumstances, IT plays a major role in the effective working of CRM. As complex systems are embedded in CRM, IT programs in CRM helps in building of loyalty.

ADVANTAGES OF NEW TECHNOLOGIES IN CRM

With the advancements in IT, there is a profound change in business and marketing environment. There are many software tools that help in bringing effectiveness in the application of CRM and E-CRM is the new application software of CRM. E-CRM helps in improving the effectiveness of communication with customers through individualisation. Another technology, M-CRM works with the help of a mobile device or wireless device in customer relationship management. E-CRM consists of two procedures in maintaining customer relation- pre-processing of data and constructing customer profiles with the help of that data.

E-CRM also benefits the business in enhancing customer experience. By using technology as a key element, business proves all its way that allows customers' purchase through internet, improves sales meetings and other functions. Even the technology provided greater access to business and customers. Customers can be knowledgeable when they access organisational information through multiple channels. This in turn enhances customer experience. Through E-CRM, business can able to integrate various processes and there by improves customer experience and customer service.

By implementing E-CRM practices in the business, it can tailor whole customer experience to a single individual. For example, E-CRM technology has allowed Nestlé to personalise its interactions with individual customers, cut the number of phone calls into its call centres and provide employees with one computer system to tap for information across numerous sales channels. Another example is every Amazon customer gets personal recommendations for books based on Amazon's personalisation technology. The personalised web pages of American Airlines have provided a source of competitive advantage in a fiercely competitive marketplace, as has the Hertz Rent a Car strategy with its unique service for preferred customers. Through such personalised websites customers are empowered to customise the site to suit their preferences and facilitate their navigation.

These technologies also help call centres to communicate with their customers very frequently. This further increase the customers' satisfaction as new services is offered and the relationship between customers and companies are increased.

VARIOUS IT FUNCTIONS IN CRM

In the context of technological advancements, IT enhances the customers' relation and analyses the customer information before providing a coherent view. Good customers are great assets to the company and hence companies use customer behaviour analysis and information recording technologies to find good customers. Technology is vital in the collection of data from customers and in utilising and integrating them with the firms for their development.

Companies are competing in collection and integration of such information of customers. However, a company which uses IT capabilities in exploiting such kind of unique and difficult resources is always at sustainable competitive edge and can acquire customers' satisfaction faster. The ability of the company to store, analyse and access the customers' information is related to the performance of the company. For example, an online shopping site uses various IT resources to improve relation with its customers. IT investments also play a great role in this mechanism.

The figure 1 describes the general framework for IT investments which consists of various stages like strategic plan, pre-selection stage, selection stage, control stage and evaluation stage. Hence, customers' data is used effectively and efficiently in CRM through the usage of IT. However, many improvement programs are emerging rapidly for various new

business processes like CRM. There are many solutions for improving the performance of CRM but IT has been considered as the most important and reliable tool. Proper usage of IT helps in the better management of customers which is based on the stronger relationship. Hence, sophisticated IT support is required for CRM.

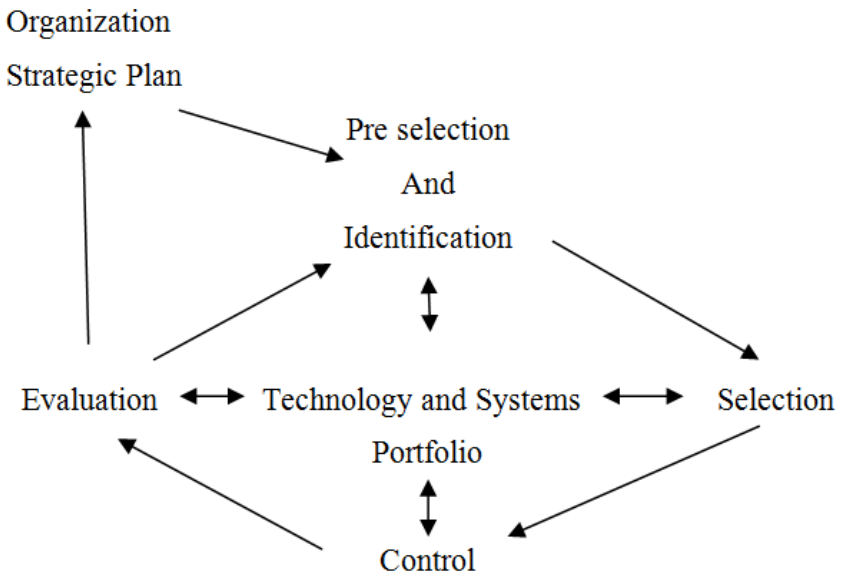

Figure 1: IT Investment Management Framework

ANALYSIS OF EXISTING FRAMEWORKS

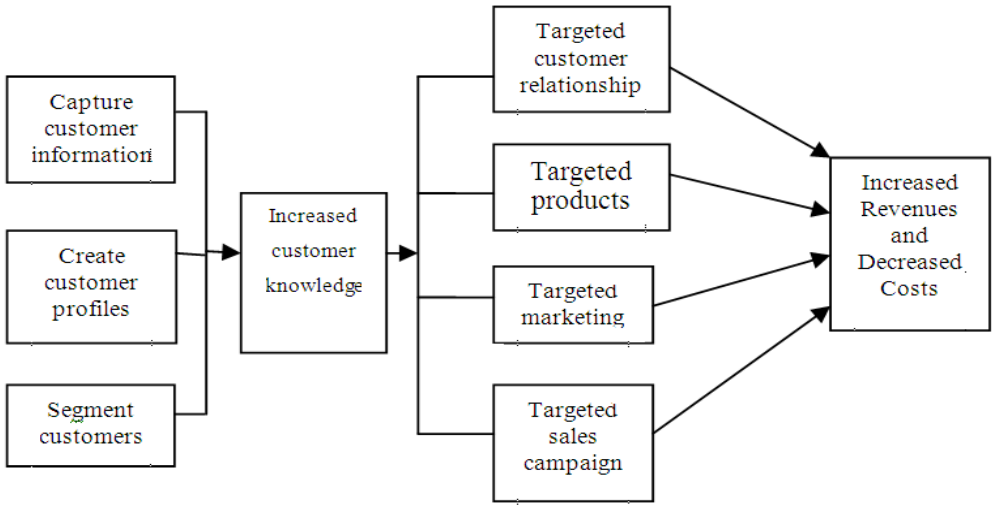

Figure 2: Strategic Framework of CRM

The figure 2 represents the framework is a strategic framework for CRM which indicates the importance of customer knowledge as it is the starting point of framework. The next step includes creation of customer profiles followed by segmentation. All these are considered as inputs for increased customer knowledge. In order to enhance customer relation, customers are targeted, offered various services with the implementation of marketing programs. Sales campaigns

are targeted by dejecting unprofitable customers. The structure goes on until increased profits are obtained along with customers' satisfaction that helps in long-term retention of customers.

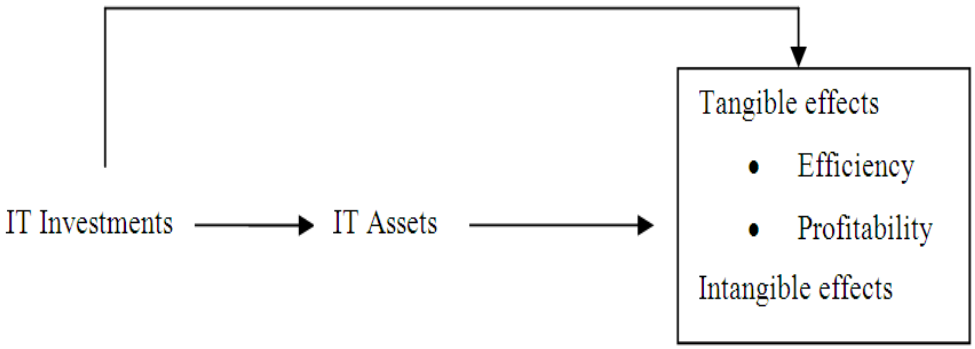

Figure 3: A Conceptual Model of the Effects of IT Investment on Organizations' Productivity

This framework is generally used by researchers as it saves time and money through various corrective measures. Engineers and employers in general try to spend fewer resources and produce great improvement in customers' satisfaction. This efficiency is only possible when defects are prioritised based on the scientific data. In the above mentioned framework, inputs are considered as all the IT tools used by enterprises and organisations in their businesses. Customer relationship is attained through various channels like call centres, web and mobile technology. Various other processes like fax, e-mail, SMS and telephone marketing activities are used in the collection of customers' data.

In the "Processes" stage, all the information obtained as input from various sources are analysed by the companies and their experts. Appropriate and useful results are obtained in the "output" stage. The main results of this framework are dynamic increase in information, reduction in costs, sustainable competitive advantages, and increment in efficiency of personnel, rapid communication, process integration and remote access.

Hence, this framework is considered more advantageous than the previous strategic framework of CRM. However, in order to get maximum benefits from this framework, companies should use all kinds of technologies in maintaining effective communication with customers that helps in maximising benefits and output. Consistent and reliable data is hence observed as the important criteria in achieving success in CRM which is provided by data warehousing. Data warehousing oversees the management, development, delivery and maintenance of the entire data received from customers. In the context of CRM, data warehouses are named as "Customer Data Repositories" because of the need of granule nature of customer transaction data. Data warehousing helps in complete analysis of customers' information from various sources like interaction data, behavioural data, transaction data and self data.

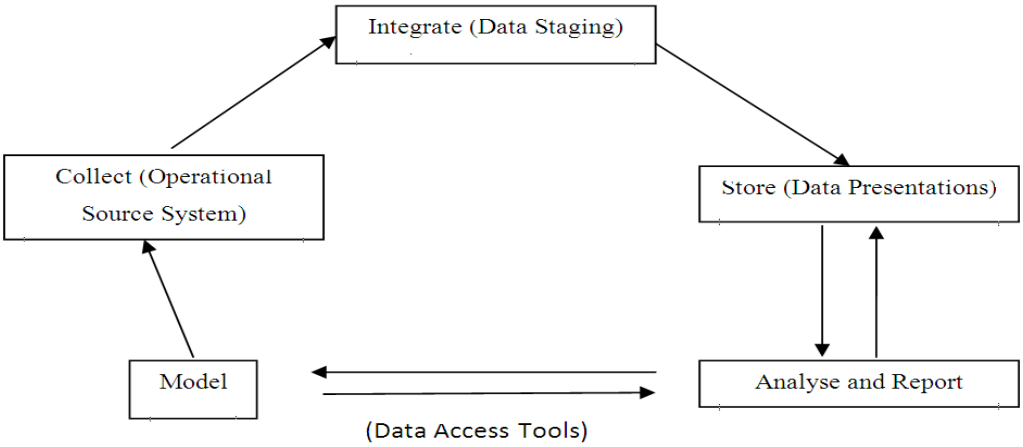

Figure 4: Analytical CRM

The figure 4 shows the structure of basic data warehouse which expands based on the amount of information from customers. Customer dimension is regarded as the challenging task of any data warehouse as there are millions of customers with many attributes in a large organisation. Hence, with the help of data warehousing, the various attributed of customers' information can be stored and analysed easily. The only disadvantage lies in the consistency and accuracy with the actual data of customers when it is tested.

CONCLUSIONS

Having known all the benefits of IT in CRM, it can be concluded that business need some special policy to improve the effectiveness in the utilisation of technology in CRM. For example, skills and infrastructural development should be focused by the companies along with legal conditions. It is clearly evident that utilisation of IT tools like e-commerce helps to improve the relationship between customers and organisations. For example, various companies can easily interact with the customers through technology portals by constantly updating them. Collection and analysis of customers' data along with the interpretation of their behaviour are vital in the effective communication with customers. This can be done through data warehousing. But there is a lack of accuracy in data warehousing which can be eliminated through creativity and innovation in CRM with the help of IT tools.

Investment in IT is also considered as the most important parameter to expect profitable outputs. CRM with the help of IT provokes companies to produce products based on the stored information of customers. Hence, CRM is the most effective way to communicate with the customers through various mediums like marketing, IT and services. But, more than 70 percent of CRM projects are registered as failure because of improper implementation of IT tools and poor investment in IT infrastructure.

REFERENCES

1. Bahrami, M., Ghorbani, M., & Arabzad, S. (2012). Information Technology (IT) as An Improvement Tool For Customer Relationship Management (CRM). *Procedia - Social And Behavioral Sciences*, *41*, 59-64.
2. Viljoen, M., Bennett, J., Berndt, A., & Van Zyl, C. (2005). The use of technology in customer relationship management (CRM). *Acta Commercii, 5*(1), 106-116.

3. Muntean, O. (2004, June). Data warehouse solutions for CRM. *International Conference on Computer Systems and Technologies-CompSysTech* (pp. 11-6).

4. Swift, R. (2000). *Accelerating customer relationships*. Upper Saddle River, NJ: Prentice Hall PTR.

5. Mahdavi, I., Cho, N., Shirazi, B., & Sahebjamnia, N. (2008). Designing evolving user profile in e-CRM with dynamic clustering of Web documents. *Data & Knowledge Engineering*, *65*(2), 355-372.

6. Goodhue, D. L., Wixom, B. H., & Watson, H. J. (2002). Realizing business benefits through CRM: hitting the right target in the right way. *MIS Quarterly executive*, *1*(2), 79-94.

7. Mahdavi, I., Cho, N., Shirazi, B., & Sahebjamnia, N. (2008). Designing evolving user profile in e-CRM with dynamic clustering of Web documents. *Data & Knowledge Engineering*, *65*(2), 355-372.

8. Parvatiyar, A., & Sheth, J. N. (2001). Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic and Social research*, *3*(2), 1-34.

9. Swift, R. S. (2001). *Accelerating customer relationships: Using CRM and relationship technologies*. Prentice Hall Professional.