Studying CRM Maturity in Service Organizations in Isfahan Province  
(Case Study: Sina Hospital)

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Abstract
In today's highly competitive business world all companies seek guidelines, strategies, and tools to remain stable in competition, and to support their growth and promotion. The organizations are required to adapt them as far as possible in order to retain their longevity in the market. Customer relationship management (CRM) is a useful tool employed by organizations to enhance their service capabilities, improve performance, make better decisions, and achieve a competitive advantage. CRM enables organizations to provide particular services to a certain customer and, thereby to create increasingly intimate relationships with their customers. The present study was a descriptive-survey research; the descriptive method was used to collect data about the literature on the topic, and the survey method to confirm or refuse any of the hypotheses. A researcher-made questionnaire was used for the research hypotheses testing and analysis. The statistical population consists of all patients and staff of Sina Hospital and the random sampling technique was applied. In this study, descriptive statistics such as frequency distribution, percentage, and means were employed for the demographic questions analysis and also, inferential statistics for the analysis of the data on hypotheses confirmation or refusal, respectively. The results indicate that, the maturity level of components under study regarding implementation of customer relationship management in Sina Hospital is higher than the average level.

Keywords: Customer Relationship Management (CRM), CRM Maturity, Service Organizations.

1. Introduction
During the mass production age, the competition in the business world was about efficient production and capturing the new customers in the market. The 4P (product, price, place and promotion) was developed as a tool for marketing success and has been the unchallenged paradigm for marketing management (Gro¨nroos, 1989). But the changing environment, especially the energy crisis, progress in service industry and the focus on quality management, forced the companies to change their focus from customer acquisition to customer retention (Sheth, 2002) by building relationships with customers and adding more value to goods and services (Lindgreen and Wynstra, 2005).

In the late 1990s, customer relationship management (CRM) is formed as a popular business term, which holds the same roots with relationship marketing and enhances the paradigm with the emerging information technologies. Although the term is accepted in the professional area, there is confusion about the definitions of the term.

Customer relationship management (CRM) is the key competitive strategy that firms need in order to stay focused on the needs of their customers and to integrate a customer-facing approach throughout the organization.
CRM explores an approach to maximize customer value through differentiating the management of customer relationships. The company utilizes its understanding of the drivers of current and future customer profitability
to appropriately allocate the resources across all areas that affect customer relationship, including communications, customer service, billing and collections, product/service development, pricing strategies, etc. In one of the enhanced studies, Zablah et al. (2004) define five perspectives of CRM which are strategy, process, capability, philosophy and technology. As a result of its complex structure, the positive financial return rates of CRM related projects vary from 10 to 30 percent (Brewton and Schieman, 2003; Krol, 2002; Richards and Jones, 2008). Besides, the low level of success rates, the experiences show that unsuccessful CRM implementations may lead to decrease in customer satisfaction (CS) and customer loyalty (CL) (Richards and Jones, 2008).

In addition, customer lifetime value (CLV), customer satisfaction and customer loyalty are all critical factors in a successful CRM program (Ness et al., 2002). CRM starts with well-established strategies (Reinartz et al., 2004), such that a wrong strategy decision will result in a loss (such as investing limited resources in unprofitable customers), regardless of the adoption of a well-established CRM technology.

2- Concept of CRM

CRM is an information industry term for methodologies, software, and usually Internet capabilities that help an enterprise manage customer relationship in an organized way. A company might build a database about its customers that depicts relationship in sufficient detail so that management, salespeople, people providing service, and perhaps the customer directly, could access information, match customer need with product plans and offerings, remind customers of service requirements, know what other products a customer had purchased, and so forth.

CRM is also defined as an all-embracing approach, which seamlessly integrates sales, customer service, marketing, field support and other function that touch customers. When using this approach, by integrating people, process and technologies and leveraging the Internet, the relationship with all your customers including e-customers, distribution channel members, internal customers and suppliers are maximized. Basically, CRM is a notion regarding how an organization can keep their most profitable customers and at the same time reduce the costs; increase the values of interaction to consequently maximize the profits.

One view of CRM is the utilization of customer related information or knowledge to deliver relevant products or services to customers (Levine, 2000). While such definitions are widespread, they tend to offer a narrow insight into the goals or basic characteristics of CRM. As CRM evolves, richer definitions are emerging, with an emphasis on the goals, logistics and complex character of CRM. According to Light (2001), CRM evolved from business processes such as relationship marketing and the increased emphasis on improved customer retention through the effective management of customer relationships. Relationship marketing emphasizes that customer retention affects company profitability in that it is more efficient to maintain an existing relationship with a customer than create a new one (Payne et al., 1999; Reichheld, 1996). The idea of relationship marketing within CRM is fairly strong and has led others such as Newell (2000) to explore strategic methods for maintaining or improving customer retention. Another view of CRM is that it is technologically orientated. Sandoe et al. (2001) argue that advances in database technologies such as data warehousing and data mining, are crucial to the functionality and effectiveness of CRM systems. For example, Fingerhut has four million names of repeat customers, each with up to 1,000 attributes, stored in a data warehouse that can hold 4.5 trillion bytes (Davenport et al., 2001). Furthermore, Peppard (2000) suggests that technological advances in global networks, convergence and improved interactivity, are key to explaining the growth of e-business and CRM. The increasing use of digital technologies by customers, particularly the Internet, is changing what is possible and what is expected in terms of customer management (Tammenga and O’Halloran, 2000). The appropriate use, for instance, of automation technologies, such as interactive voice response systems and Web-based frequently asked question pages, could be popular with customers and highly cost effective (Pettrissans, 2000). Despite the Strategic issues in CRM implementation 593 appearance of two extremes, the ELMS case study will demonstrate that in reality CRM is a complex combination of business and technological factors, and thus strategies should be formulated accordingly.
3- Research methodology
This survey was conducted using the field-descriptive method. In order to collect information related to research literature historical study method was used like scientific books and magazines and field study method was applied to collect necessary data in order to confirm or reject of research hypotheses. The self made of researcher questionnaire with accepted validity and reliability (cronbach alpha coefficient=0.85) that is designed in the form of five-option Likert scale is applied to examine of maturity level of components under study regarding implementation of customer relationship management in Sina Hospital. The statistical population consists of all patients and staff of Sina Hospital and the random sampling technique was applied. Estimated sample volume in this survey includes 164 staff and 173 patients. After distributing the questionnaires, 125 questionnaires were collected from staff and 150 questionnaires were collected from patient.

4- Studying normality of research data distribution
Kolmogrov-Smirnov test is used to examine the claim proposed about distribution of data related to a quantitative variable. Null hypothesis in this test is establishment of normal hypothesis regarding type of data distribution.

\[
\begin{align*}
H_0 & : \text{Data distribution is normal} \\
H_1 & : \text{Data distribution is not normal}
\end{align*}
\]

According to results of table1, hypothesis $H_0$ is not rejected because the calculated test statistic is not significant and normality of research data distribution is accepted.

5- Testing research hypotheses

Research hypotheses are studied in this section. To do this hypotheses are tested through t-test.

5-1- Testing hypothesis one: maturity level of organizational strategies in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

Results related to testing hypothesis one are indicated in table 2.

According to above results, hypothesis one is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words maturity level of organizational strategies in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.
5-2- Testing hypothesis two: maturity level of organizational processes in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

*Results related to testing hypothesis two are indicated in table 3.*

According to above results, hypothesis two is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words maturity level of organizational processes in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

5-3- Testing hypothesis three: maturity level of organizational culture in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

*Results related to testing hypothesis three are indicated in table 4.*

According to above results, hypothesis three is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words, maturity level of organizational culture in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

5-4- Testing hypothesis four: maturity level of human resources in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

*Results related to testing hypothesis four are indicated in table 5.*

According to above results, hypothesis four is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words, maturity level of human resources in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

5-5- Testing hypothesis five: maturity level of organizational structure in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

*Results related to testing hypothesis five are indicated in table 6.*

According to above results, hypothesis five is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words, maturity level of organizational structure in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.
5-6-Testing hypothesis six: maturity level of technology in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

Results related to testing hypothesis six are indicated in table 4-16.

According to above results, hypothesis six is confirmed since the calculated test statistic at significance level lower than 5% is significant. In other words, maturity level of technology in Sina Hospital in Isfahan province regarding implementation of customer relation management is higher than the average level.

6- Conclusion
Customer relationship management (CRM) is the key competitive strategy that firms need in order to stay focused on the needs of their customers and to integrate a customer-facing approach throughout the organization. CRM explores an approach to maximize customer value through differentiating the management of customer relationships. The company utilizes its understanding of the drivers of current and future customer profitability to appropriately allocate the resources across all areas that affect customer relationship, including communications, customer service, billing and collections, product/service development, pricing strategies, etc.

This study aims to study the CRM maturity levels in Sina Hospital. This objective is examined by some variables including Organizational strategy, Organizational structure, Organizational culture, Organizational technology, human resources, and Organizational process within the framework of the research hypotheses. The results indicate that, the maturity level of components under study regarding implementation of customer relationship management in Sina Hospital is higher than the average level.
References


Petrissans, A. (2000), Customer Relationship Management and the Challenge of the Internet, CapmGemini Ernst and Young-IDC, Toronto.


### Annexure

### Tables

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<thead>
<tr>
<th>Research hypotheses</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Significance level</th>
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**Table 1- Studying normality of research data distribution**

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<th>Research hypothesis</th>
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<tr>
<td>274</td>
<td>6.64</td>
<td>Maturity level of organizational strategies regarding implementation of customer relation management</td>
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**Table 2- Testing hypothesis one**

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**Table 3- Testing hypothesis two**
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Table 4- Testing hypothesis three

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Table 5- Testing hypothesis four

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Table 6- Testing hypothesis five

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Table 7- Testing hypothesis six