Investigating the Effect of Inter-organizational Factors (Culture, structure, and strategy) on the Success of Customer Relationship Management with Mediation of Knowledge Management in EN BANK, Tehran

1Fatemeh Karimi*, 2Seyed Majid Elahi, and 3Dana Khaledi
1- Imam Khomeini International University, Iran
2- Department of management, Imam Khomeini International University, Iran
3- Imam Khomeini International University, Iran

* Corresponding author E-mail: aylar2222@yahoo.com

Abstract

Customer relationship management (CRM) with its emphasis on controlling and reducing the costs, and increasing the productivity results in reinforcing the value chain and clarification of policies and methods. In the other words, CRM includes all the steps an organization takes to create and develop a beneficial relationship with customers, and is defined as working within a team to achieve reliability and customer satisfaction. This paper investigates the effect of inter-organizational factors (organizational culture, structure and strategy) on the success of customer relationship management with mediation of knowledge management in Eghtesad Novin Bank (EN BANK) in Tehran, Iran. In this paper a combination of two models proposed by Garrido-Moreno et al. in 2011, and Zheng et al. in 2010 has been used as the research model. This research is of descriptive and applied type. To collect the required data, a questionnaire was distributed between 84 EN BANKS after verifying its validity. Then, Structural Equation Modeling Technique was used and it was found that the model parameters are in the desired state. The findings of the present study suggest that strategy as an inter-organizational factor has the greatest impact on the success of customer relationship management with mediation of knowledge management.

Key words: Customer relationship management; knowledge management; organizational culture; organizational structure; organizational strategy

Introduction

Necessity of extensive use of information technology requires organizations to equip themselves with technical knowledge, skill, and expertise in order to realize customers’ needs and improve the quality of their products and services. Meanwhile, during the 1990 decade, interaction process of customer management based in the information technology was surveyed and assessed and created the concept of “customer relationship management (Riyad Eid, 2007). This concept includes a set of activities for improvement of value chain of organization. Value chain embodies saving at the cost of production, quality improvement, speed, sensitivity and flexibility of working process, increasing the personnel’s competency, and concerning the sustainability of production that every organization applies for satisfying its customers. In the new era, being a leader in economic activities requires presenting new ideas; and, the concept of customer relationship management facilitates the way of reaching new ideas. Application of this concept from attitude of customer’s leads to increasing the sensitivity of producer toward the customers’ needs and improvement of the production quality.

An effective CRM plan leads to improvement of customers’ satisfaction, growth of revenue, enhancement of competitive power, and faster return of investment. To meet the above-mentioned goals, CRM processes create a system in which people work as a team, and optimization sources of production procedure are controlled to maximize the productivity of organization. Experts of information technology believe that team
work has an important role in the efficiency of organization and consolidation of standards and quality improvement. Because team work leads to rapid solving of customer's problems and creates deep satisfaction of them. Furthermore, customer relationship management helps to improve delivering services to customers, increasing relationship, reducing the distribution costs, and justifying the application of advanced facility for consistent role in the economic activity such as electronic trade (Zablah et al, 2004). In general, there is no precise definition of a successful project of customer relationship management. A Successful performance of customer relationship management is one that meets business goals. These goals can be attracting the customers, maintaining the customers, satisfying the customers, loyalty of customer, presenting good service to customers or other goals that set by the organization. Customer relationship includes presenting fixed and increasing levels of satisfaction and keeping customer through maintain and promotion of the relationship (Palmer 2005).

Internal features of organization are parts of vital resource for successfullness of customer relationship. So, more attention to identifying of these features and their effect on the output of organization are unavoidable and necessary in a rapidly changing environment (Zheng et al, 2010, p763). This paper aims to investigate the effect of inter-organizational factors (organizational culture, structure and strategy) on the success of customer relationship management with mediation of knowledge management in a bank. After studying and assessing the models at this scientific field, two presented models by Garrido-Moreno in the 2011 and Zheng in 2010 are identified as selected models.

**Theoretical literature and research background**

An Extensive investigation on the field of customer relationship management and knowledge management was carried out. Tuamsuk and colleagues in 2011 in an article entitled "Effective factors in implementation of customer relationship management in academic libraries in Thailand" had focused on the analysis of the influential factors on the implementation of customer relationship management in academic libraries in Thailand. Data was collected through interview techniques from managers, staffs and customers of 6 university libraries in Thailand. Malte Dous and colleagues in 2005 presented an article entitled " Knowledge management capabilities in CRM: Making knowledge for, from and about customers work ". In this article by taking two-stage approach, first of which concerned with the results of a study to evaluate the solutions in the field of knowledge management (with a focus on customer relationship) among organizations then based on the findings of the study, the case analysis is presented. Garrido-Moreno and colleagues in 2011 have presented an article entitled " Analyzing the impact of knowledge management on CRM success: The mediating effects of organizational factors". The purpose of this research was to understand a way to implementation of project customer relationship management that can contribute to project success. The results indicate that three types of customer knowledge competence are required: Skills of customer knowledge acquisition, skills of Customer knowledge diffusion, and skills of using the knowledge of customer. Zheng et al, 2010 have presented a done a research by the title of “Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management “considering the investigation of relationship between organizational culture, structure and strategy in application of organization by regarding to the role of knowledge management as mediation”. Scales of culture factor belong to Denison et al, and were used in skinner and Ferrell surveys in 1988 for assessing the organizational structure. In the strategy discussion, the strategic orientation of Venkatraman and STROBE framework are used. Scale items of knowledge management were extracted from the Gold and colleague surveys.

In this research, after a thorough study of highlighted models in the field of the success of customer relationship management and knowledge management, two presented models by the Garrido-Moreno at the 2011 and Zheng at the 2010 were identified as selected models. The reason of selecting above-mentioned models was generality of them and. Considered variables were selected in the direction of a research aim and business type. In the following step, two mentioned models were combined to create a third model that was harmonious with the research goals. In the model of Garrido-Moreno at the 2011, variable of knowledge management was identified as an effective factor on customer relationship management. In the second model, which was presented by Zheng at the 2010, culture, structure and strategy variables were identified as effective factors on knowledge management. A brief definition of the model variables is presented.

**Knowledge management**

Knowledge management can be defined as the ability of creation, demonstration, distribution, dissemination, retention of knowledge in an organization (Decastro, 2009). Documents related to customer relationship management indicate that for creating profitable background in the field of relationship with customer, organization should create the knowledge supply in relevance to the below cases:

1) desired condition of vision 2) customers’ tendencies 3) customers’ needs and priorities 4) volume of profitability of the current and future customer 5) emergence of threats for the market (Zablah, 2004). In fact,
Customer relationship management is Management of knowledge of customer for a better understanding of them and meeting the needs of the customers. That is certainly related to the topic of knowledge management. Therefore, existence of enough and updated knowledge of customers, is essential for a successful system of customer relationship management (Garrido, 2011). In this research, scale items of knowledge management were embedded from the Garrido-Moreno.

Knowledge management is not only one of direct influential factors in customer relationship management but also knowledge management is applied as mediation between inside factors of organization and the success of customer relationship management. Outputs of inter-organizational factors such as culture, structure and strategy are inputs and resources of the methods of knowledge management, because knowledge is created by a set of cultural values and standards and it emerges at the structural relations and reflect at the strategic priorities of organizational.

Organizational cultures

Organizational culture includes common theories, values, and standards in an organization that according to Barney is one of resources of gaining competitive advantage (Barney, 1991). Denison and colleagues evaluated and identified four dimensions of the organizational cultures; these four dimensions are adaptability, consistency, involvement, and mission. In the present research all four dimensions of the organizational cultures were studied. Consistency refers to degree to which an organizational tends to the formulation the behavior, structure and system for keeping the current state. Adaptability is related to the field that things, values, expectations are change by the people for facing with external environment. Involvement refers to the amount of collaboration of the members of the organization. Mission refers to the published definition of goals between members of the organizations (Yilmaz & Ergun, 2008). Vast investigations performed around organizational cultures are indicative of the positive relationship between the organizational cultures and knowledge management.

Organizational structures

Organizational structure is the framework of relationships in the jobs, functions, and the operational processes, peoples and groups that attempt for reaching the goals (Jimes, 1998). Organizational structure determines the relationships in the organization, even the status of the people in the organization, and scope of their responsibility in the organization. Various factors were considered in determination of the structural dimension in organization such as official component, independence, concentration, complexity, intrusting the prerogative, formalization, composition, Professionalism, scope of control, expertise, standardization, and vertical field (Rabines, 2008). In this research, Ferrell and Skinner surveys concerning the organizational structure are used. Based on their attitude, organizational structure composed of concentration, formalization and controlling factors. Formalization deals with the extent of the standardization at the organization process. Concentration pays attention to the place of the decision maker, and control refers to the systems that are applied for displaying performance.

Organizational strategy

Organizational strategy is a map for facing and making relationship with the competitive environment for reaching the goals that has close relationship with organizational performance (Zheng et al, 2010). In this research, to display the organizational strategy, the STROBE framework that was raised by Venkatraman was used. In this framework, six dimensions of strategies are studied, including aggressiveness, analysis, riskiness, futurity, proactivity, and defensiveness. In this research, aggressiveness, riskiness, and analysis are surveyed (Lau and Bruton, 2011). Analysis refers to the general position of the problem solving that shows the tendency toward deep research for finding the cause of the problems and creating the best possible solution. Proactiveness indicates the tendency of the organization to accessing to the new market, and riskiness shows decision making and function of the organization regarding to possible changes (Morgan & Strong, 2003).

Prior investigation shows the positive relationship between organizational strategies and knowledge management. As an example, Pedler (1991) considers the importance of an analytical approach for the strategy that has a role in learning.

Research Methodology

This research is an applied research, considering its purpose. It also falls within the category of descriptive analytical concerning its nature, since this method requires gathering regular information about people, groups, and societies for adopting necessary and direct information and interpretation of the obtained statistical result. Geographical scope of this research includes Tehran Eghtesad Novin banks (EN BANKS). Time scope of the research starts from mid June 2012 to mid-July 2013. The population studied in this
research is all the Eghtesad Novin banks in Tehran, Iran. Here, the researcher relied on the presented statistics by the central Eghtesad Novin bank that there are 107 EN banks in Tehran, forming the populations studied in this research. The sample size in this research was calculated by Kokrean sample formula. Consequently, a number of 84 Eghtesad Novin banks in the Tehran were considered as the sample of study. Questionnaires were distributed to gather data from the sample. The questionnaire included 58 separate questions, that 4 questions were related to the general specification of the respondents and 54 questions for evaluating the variables.

To carry out this research, a Likert scale of five choices was used in the questionnaires. In this study, Cronbach alpha was used to determine the reliability of the test. The alpha level (0.892) indicated the high reliability of questionnaire. Hypotheses are as follow:

- Knowledge management has an impact on the success of customer relationship management.
- Organizational culture has an impact on the success of customer relationship management and is under mediation of the knowledge management.
- Organizational structure has an impact on the success of customer relationship management and is under mediation of the knowledge management.
- Organizational strategy has an impact on the success of customer relationship management and is under mediation of the knowledge management.

Research findings

In this section, considering the structural equation methodology, the model and its hypotheses are presented. First of all we check model’s value index. For analysis toward model’s value and acquisition of variable’s effect, Amos software 18th edition was used. Structural modeling, covariance structures analysis, logic modeling, and torque structures analysis are set of notions that have a similar approach toward statistical analysis of hidden variables. And this software has capability of such kind of analysis.

<table>
<thead>
<tr>
<th>Result</th>
<th>The developed model</th>
<th>Index Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>desirable</td>
<td>0.978</td>
<td>NFI</td>
</tr>
<tr>
<td>desirable</td>
<td>0.945</td>
<td>RFI</td>
</tr>
<tr>
<td>desirable</td>
<td>0.981</td>
<td>IFI</td>
</tr>
<tr>
<td>desirable</td>
<td>0.953</td>
<td>TLI</td>
</tr>
<tr>
<td>desirable</td>
<td>0.981</td>
<td>CFI</td>
</tr>
</tbody>
</table>

By regarding table 1 that related to the presented models at this research shown that value of NFI is 0.978 that by regarding to the standard value of the 0.9 that is desired value of the index, model is confirmed by regarding to this index and has suitable and desired fitting criteria. Value of the IFI is 0.981 that by regarding to the standard value of 0.90 refer to the desired fitting of the model by documentation to this index. CFI is 0.981 that by closing this index to the one number refers to much desired fitting model by documentation to this index.

After confirmation of the presented model, the effect of the variables is studied. One observed variable (knowledge management) and other three variables with mediation of the knowledge management influence the success of the management of relationship with customers that variables of management of relationship with customers explained by the two observed variable in the marketing and financial result. Figure 1, is the research 's model along with path coefficient.
According to table 2, the reported level of significance in all variables is less than 0.05. So, effect of relationship is meaningful. Presented numbers on the evaluation column and standard evaluation report the effect of the independent variables on the success of customer relationship management. The positive value indicates the positive and direct effect.

<table>
<thead>
<tr>
<th>Depended Variable</th>
<th>Intervening Variable</th>
<th>Independent Variable</th>
<th>Estimation</th>
<th>Standard Estimation</th>
<th>Level of Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM</td>
<td>Knowledge Management</td>
<td>Structure</td>
<td>0.322</td>
<td>0.262</td>
<td>0.011</td>
</tr>
<tr>
<td>CRM</td>
<td>Knowledge Management</td>
<td>Culture</td>
<td>0.248</td>
<td>0.243</td>
<td>0.01</td>
</tr>
<tr>
<td>CRM</td>
<td>Knowledge Management</td>
<td>Strategy</td>
<td>0.454</td>
<td>0.461</td>
<td>0.011</td>
</tr>
<tr>
<td>CRM</td>
<td>Knowledge Management</td>
<td></td>
<td>0.868</td>
<td>0.967</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**First hypothesis’s test**

Knowledge management has an impact on the success of customer relationship management. As it is shown in table 3, the level of significance of the relationship of the knowledge management and of customer relationship management is less than 0.05. Therefore relationship and effect is meaningful. Presented numbers on the evaluation column and standard evaluation report the effect value of the knowledge management on the customer relationship management. Then this hypothesis is confirmed. Knowledge management has an effect on customer relationship management. The effect value is 0.868 for non-standard and 0.967 for standard.

**Second hypothesis’s test**

Organizational culture has an impact on the success of customer relationship management and is under mediation of the knowledge management.

With regard to table 3, the reported level of significance of the relationship between organizational culture and the success of customer relationship management with mediation of the knowledge management is less than 0.05. So effect and relationship is meaningful. Positive value of evaluation indicates the positivity and directness of the effect value. Therefore, hypothesis is confirmed. Relationship between organizational culture and the success of the customer relationship management is with mediation of the Knowledge management. Effect value is 0.248 for non-standard and 0.243 for standard.

**Third hypothesis’s test**

Organizational structure has an impact on the success of customer relationship management and is under mediation of the knowledge management.

According to table 3, the reported level of significance of the relationship between organizational structure and the success of customer relationship management with mediation of the knowledge management is less than 0.05. So effect and relationship is meaningful. Positive value of evaluation indicates the positivity and directness of the effect value. Therefore, hypothesis is confirmed. Relationship between organizational structure and the success of customer relationship management is with mediation of the Knowledge management. Effect value is 0.322 for non-standard and 0.262 for standard.
**Forth hypothesis’s test**

Organizational strategy has an impact on the success of customer relationship management and is under mediation of the knowledge management.

With regard to table 3, the reported meaningful level of the relationship between organizational strategy and the success of customer relationship management with mediation of the knowledge management is less than 0.05. So effect and relationship is meaningful. Positive value of evaluation indicates the positiveness and directness of the effect value. Therefore, hypothesis is confirmed. Relationship between organizational strategy and the success of customer relationship management is with mediation of the Knowledge management. Effect value is 0.454 for non-standard and 0.461 for standard.

**Discussion and conclusion**

In this research the effect of inter-organizational factors such as structure, culture and strategy on customer relationship management was investigated. As mentioned, variable of knowledge management enters as a mediation in this study that by regarding to previous discussions, the most influential internal factor of organization with mediating of knowledge management on the success of the customer relationship management is strategy variable. In the other words, direct effect of the Knowledge management on the success of the customer relationship management is more than effect of the inside factors of organization with mediating the Knowledge management on the success of customer relationship management. Considering the present research and its limitations, a number of recommendations are offered to develop the investigations carried out in a similar research field and eliminate the limitations as much as possible.

- Considering the similar model in other civil service organization, with similar activity like banks and insurances, etc. and comparing the results with those of the present research.
- Considering a similar model in organizations with the same production labor and comparing the results with those of the present research.
- Considering the problems and challenges of CRM in action.
- Considering the effect of other determining factors on communication management success with consumer.

**References**


Yilmaz C, Ergun E, 2008. Organizational Culture and Firm Effectiveness: An Examination of relative effects of culture traits and the balanced culture hypothesis in an emerging economy.
