A Proposal Framework for investigating the impact of customer relationship management on customer retention in e-commerce

Abbas Keramati
Industrial Engineering Department, Faculty of Engineering
University of Tehran, Tehran, Iran
keramati@ut.ac.ir

Alireza Nili
Department of Business Administration and Social Sciences, Division of Industrial Marketing and e-Commerce
International University of Chabahar, Chabahar, Iran/Lulea University of Technology, Lulea, Sweden
Alireza.nili@yahoo.com

Abstract
In this study, considering different views about CRM and by gaining insight from the resource-based view (RBV) of the firm and the process-oriented approach, we propose a process-oriented framework to investigate the relationship among CRM resources, CRM processes, customer retention programs of CRM, and finally customer retention as the firm performance. The study finds the mediating effect of CRM processes between CRM resources and customer retention programs of CRM which themselves have direct effect on customer retention. Also, the suitable research methodology for doing this study will be explained.

Keywords
Customer Relationship Management; CRM; electronic banking; customer retention; Iran

1. Introduction
In today competitive markets, customers are the most significant factor in management of businesses and marketing actions because they are now able to choose their favorite items among variety of choices and therefore can change the marketing strategies firms have [5]. The role of customers is so vital for firms and that is why customer relationship management (CRM) is born based on the value customers have [5, 24].

In the competitive environments, customer retention has been shown to be a very important managerial issue in especially the markets with decreasing rate of acquiring new customers. It is admitted as the first goal of CRM because of its capability in delivering superior value for the firms (from the economical aspect) and customers [14, 23]. Indeed, many firms spend most of their energy, time, and marketing budgets to gain new customers. However, because the cost of acquiring new customers is much more than the cost of retaining existing ones, customer retention is very important to most organizations and banks [2, 10].

Although many evidences show the strong positive impact of CRM on organizational performance such as customer retention, there are many reports showing disappointing results of applying CRM to retain existing customers and developing relationships with them [6, 8]. To find the reason of this problem, many academicians and practitioners tried to identify the origin of this situation and found a major reason relevant to the performance of CRM. The reason is that many firms consider CRM as an IT solution [6, 7]. In this regard, academicians believe that although it is easy to acquire IT in the industry, it does not lead to success in business strategies and does not confer competitive advantage by itself. This finding is the same with CRM technology. Companies can buy the same CRM technologies (e.g. CRM software) which their competitors use and not have the same results [6, 26].

By reviewing the IT and firm performance literature, we found out that to explain the productivity paradox of IT and to propose an integrated framework from CRM investment to customer retention in firms, some academicians have emphasized on considering the resource based view (RBV) of the organization. Also, some practitioners have applied process oriented approach in their studies to improve and develop this path [6]. Indeed, by using these two approaches, firms can be able to identify important resources in the CRM processes implementations and can find the appropriate mechanisms of CRM value creation [1, 4, 6].
The main purpose of this study is to propose a process-oriented framework to investigate the process from CRM investment to customer retention in e-banking in Iranian banks. Therefore we will:

1. Specify what resources are important for implementing CRM processes.
2. Investigate an integrated framework to show the relationship among CRM resources, CRM processes, customer retention programs of CRM (as the CRM process capabilities), and finally customer retention as the result of these programs.

Based upon the above discussion and on the limited amount of researches available about CRM and its impact on customer retention in electronic banking especially for Iranian banks, we have formulated the research problem of this study as follows: "What is the impact of CRM on customer retention in electronic banking in Iranian banks?" According to this research problem and the reviewed literatures in this study, the research hypotheses are formulated as:

**H1a.** There is positive and significant relationship between technological CRM resources and CRM processes.

**H1b.** There is positive and significant relationship between human CRM resources and CRM processes.

**H1c.** There is positive and significant relationship between organizational CRM resources and CRM processes.

**H2.** CRM processes have mediating effect between CRM resources and customer retention programs of CRM.

**H3.** Loyalty programs have a positive and significant impact on customer retention.

**H4.** Good customer services have positive and significant impact on customer retention.

**H5.** Creating a community of customers has positive and significant impact on customer retention.

**H6.** Customization of the products has positive and significant impact on customer retention.

Due to the structure of this research, the literature about IT, RBV, and process-oriented approach and their extension to CRM and customer retention is reviewed and discussed in the second section. Next, we propose the research framework and develop an appropriate model. The research methodology is explained in the fourth section. At the end, the conclusions drawn from this study will be presented.

---

2. Resource-based view and process-oriented approach in the CRM value creation model

In this section, we discuss theoretical backgrounds as well as adoption and extension of CRM and IT, resource based view of the firm (RBV), and the process oriented approach.

2.1. CRM and IT

In many recent papers on CRM, we found evident emphasizes on accepting CRM as a strategy. Indeed, CRM is a continuum which on one hand, is about implementing a technology solution (e.g. CRM software and ERP), and, on the other hand, is a strategy for managing the relationships with customers [6, 27]. Therefore CRM can be defined as a marketing strategy to develop beneficial relationships between the company and its customers with the help of IT [6, 26]. However, to answer this question of why investments in information technology do not lead to expected organizational outcome, some theories such as a theory based framework which is referred to as the resource based view (RBV) in the organizations have been developed [3, 6].

The attributes of RBV is relevant to CRM for some reasons. The first reason is that CRM is rooted in information systems and marketing. Indeed, we can claim that RBV has important roles in the both mentioned fields. First, in the field of IT, RBV has been applied to investigate the ability of IT in providing competitive advantage for organizations. Second, in the marketing field, using RBV, organizations are able to assess the competitive advantage provided by the processes which transform the resources to valuable results both for firms and customers [6]. The second reason for the relevance of RBV to CRM is that the ‘people’ aspect has gained considerable attention in the definition of CRM [6, 7] and RBV also stresses the importance of people in the field of strategic human resources management [6, 9, 26].

The above mentioned literature discusses the usefulness of RBV in the study of CRM. However, to understand why the RBV is better to use than other theories in this context, some researchers argue that the theory of RBV focuses on the main drivers of competitive advantage [6, 14] which is in the direction of the main objective of CRM that is creation of superior value for the firm and customers [6].

2.2. Resource-based view of the firm

Resource-based view of the firm (RBV) emphasizes on the firm resources and views them as valuable firm assets [6]. As mentioned,
technology can be easily purchased and duplicated by any entrants in the industry; therefore it can not provide competitive advantage for the organizations [4, 6, 19]. Many academicians believe that if firms want to achieve competitive advantage, they should compete on the basis of unique, rare and valuable corporate resources [4, 6, 19]. Thus, two main tangible and intangible resources which are complementary to IT namely as human and organizational resources are introduced by some researchers [6, 19].

2.3. Process-oriented approach
Despite being accepted and developed, RBV has some limitations in use, for example, it says little about the mechanism of applying and best ways of managing the resources [6, 11, 16, 22]. In this situation, the process-oriented approach examines the impact of IT on intermediate business process [6, 25]. Indeed, a process management orientation is a necessity for a CRM program to be successful; therefore, to ensure the efficient use of organizational resources toward the creation of expected firm performance, managers must focus on CRM processes effectively [6, 11, 16, 22].

3. Research Methodology

The article survey was done from April to June 2010. To propose a process-oriented framework for investigating the impact of CRM on customer retention, we reviewed previous studies linking CRM to firm performance such as customer retention. CRM, e-Banking, customer retention, and model, were the most used keywords to search the needed literatures. To find the appropriate theories and models for this study we used a two-stage process of classifying the searched literatures. First, we selected the articles related to the effects of CRM on customer retention by reviewing their titles and abstracts. Then, we extended our research and found studies done with different views about the impact of CRM on customer retention in banks and other firms.

This research applies quantitative approach because of the concern about the representativeness and also to test and measure the research hypothesizes. Also a small qualitative study in the extent of interview with experts will be done. Since we are going to focus on contemporary events and also there is no requirement to control over behavioral events, survey appears as the most suitable research strategy for this study. The population of this study is Iranian banks and the sample respondent will be chosen through bank experts of two personal and two governmental banks. Sampling method would be simple random and the sample size is determined by statistical methods. The data would be gathered by questionnaire and interview and will be analyzed by statistical techniques to find out which CRM resources have the greatest impact on CRM processes and also to investigate the path from CRM investment to customer retention (as organizational performance).

4. Research Framework
In this section, by gaining insight from the RBV and process-oriented approach, we are going to explore the value generation process of CRM, which could enhance the customer retention in firms. In doing so, we propose a simple process-oriented framework to investigate the relationship among CRM resources, CRM processes, customer retention programs of CRM, and finally customer retention as the result of these relationships. Below, we have specified the dimensions of each of the constructs.

4.1. Technological CRM resources
CRM technologies are the medium and tools which enable the firms to get the appropriate information to the right person at the right time and are divided into three parts of ‘communicational’, ‘operational’ and ‘analytical’ technologies. In the communicational part, firms provide the communicational means to make a two way communication between themselves and their customers. These technologies also enable suppliers and partners to collaborate with each other more effectively. On the other hand, customer facing applications are discussed in operational CRM which automate customer service, marketing, and sales. A crucial activity in operational CRM is collecting customer data through all possible touch points such as contact center, web, and sales force and then storing these data in a database. Using this database, tracking any customer's information becomes easier and more efficient [6, 19, 22]. Finally, analytical technologies use analytical tools
to optimize information sources to better gaining insight of customer behavior patterns, support customer segmentations, and then make more personalized contact with them [6, 17, 19].

4.2. Infrastructural CRM resources
CRM is a marketing strategy and technology is its non-strategic aspect. On the other hand, the infrastructure of CRM is formed based on the non-technological CRM resources which are called the ‘infrastructural CRM resources’ and are classified into ‘human CRM resources’ and ‘organizational CRM resources’ [19].

4.2.1. Human CRM resources
Human CRM resources are about customer facing and non-customer facing employees' attitudes, technical skills, and ability to convert customer data to knowledge [6, 7, 26]. Academic researchers claim that among all CRM resources, human resources are the most important ones because on one hand, customers would rather communicate with employees than electronic systems and on the other hand, since the employees have the most contact with customers, their attitudes is one of the most important information sources in building customer-oriented philosophy [6, 7].

4.2.2. Organizational CRM resources
As mentioned before, CRM is a program not a project. Indeed, to implement a successful CRM program, some elements are required including setting CRM goals, defining incentive systems, having a customer centric philosophy, training the employees, and top management commitment [6, 8].

4.3. CRM processes
A CRM process can be defined in three levels of functional, customer facing, and company wide. To specify the CRM activities under each one more efficiently, some academicians divide CRM processes into operational CRM processes and management CRM processes. According to this classification, those customer processes found at the operational level of the business are called operational CRM processes which themselves are classified into operational knowledge processes and operational interaction processes. The first subprocess involves the tasks related to customer knowledge at the operational level. Collecting customer data through different channels and disseminating customer knowledge between the firms and their customers is an important example for this process [5, 6, 7, 12, 21]. On the other hand, using operational interaction processes, firms become able to consider the available intelligence to establish and develop relationships with customers. Management CRM processes are about all the activities which refer to the activities programmed to create market intelligence and improve decision making in allocating the resources, developing new products, and so on are explained in the context of management CRM processes. An important example of these activities in this context is the realization of customer behavioral pattern which has significant effects on decision making and therefore on the firm performance [6, 7, 12, 21].

4.4. Customer retention programs of CRM
Process capabilities have mediating effect between firm's resources and performance to meet a specific objective [6]; therefore, if firms want to efficiently retain their profitable customers, they need to implement a comprehensive set of relationship programs (as the considered CRM process capabilities in this study) which are explained below.

- **Loyalty Program:** Loyalty programs provide rewards to targeted customers in order to encourage them to purchase repeatedly. However, loyalty programs can work more effectively if firms increase customer switching costs and build barriers to entry [1, 5, 20].

- **Customer Service:** There are two types of services including reactive and proactive services by which companies can enhance their customer service. Reactive services are where a customer faces problem such as product failure, product return or question about a bill and contacts the company to solve it or get more information about it. Reactive services are the situations where the firms do not wait for customers to contact them and are determined to hold a dialogue with their customers prior to use a reactive solution such as complaint handling [5, 13, 14, 15, 25]. However, this can be done well where all the employees dealing with the customers are trained well. Today, a number of systems leveraging the Internet assist both of these two types of services [5, 14, 25].

- **Community:** Using the Web, both online and offline companies can build online networks of customers in which they are able to exchange information about the products and also can interact between themselves and the company easier and more personally. This network of customers is called community [5].
Customization: Customization is about the creation of products and services based on individual customer’s taste. In this way, customers are able to choose a product from a list provided in company’s website or order the item they really want [5].

In the previous sections, we presented a literature survey of several studies linking CRM to customer retention. Based on the research problem and these models, two models of references [5] and [6] appear as the most suitable ones for this study. In fact, in comparison with other studies, they enable the researcher to test all CRM resources and comprehensive set of customer retention programs with regard to firm performance and most importantly customer retention. Our proposed research model which is the combination of these two models is shown in figure 1. This figure illustrates the mediating effect of CRM processes between CRM resources and customer retention programs of CRM which themselves have direct effect on customer retention.

Figure 1: Proposal Framework

5. Conclusion

The purpose of this study is to align different studies that address the CRM value generation process and its impact on customer retention in a simple integrated framework which is not directly discussed in other literature especially in the context of e-banking. Using the RBV and process-oriented approach, the study finds the mediating effect of CRM processes between CRM resources and customer retention programs of CRM which themselves have direct effect on customer retention.

To collect empirical data for this research and to test out the formulated research hypotheses; some questionnaires will be designed and then distributed to banks experts by e-mail. Since interviewing can help the researchers to collect reliable and valid data, some interviews also will be done with Iranian e-banking experts and managers. The collected data gained from the answered questionnaires will be analyzed by statistical techniques and using statistical tools such as SPSS and STATISTICA for data input and analysis to find out which CRM resources have the most impact on customer retention and also to investigate a process-oriented framework showing the path in which CRM affects customer retention in e-banking of Iranian banks.

In order to measure the reliability of this research, we will calculate the Cronbach’s Alpha. Also, to ensure its validity the questionnaire will be reviewed by bank experts to remove and correct problems before sending them to the respondents. In addition, to check the construct validity of the questionnaire and also to find out if all indicators of each variable (construct) measure what is expected, statistical “factor analysis” will be used.

The most important limitation of this study is that it does not consider the customers' views about the organizations. Indeed, CRM benefits are perceived by both the organizations and their customers. Therefore, using the customers' opinions, researchers are able to get more accurate results.

CRM is an evolving phenomenon; therefore, its benefits, processes, and characteristics will change in the future. Thus, future researches can be focused on them. On the other hand, since more research efforts can further test the accuracy of this study; it is useful that future researches focus on other industries, too.

References


