
The Impact of Organizational Factors of Customer Relationship Management (CRM) on CRM Adoption in Tax Affairs Organization of Tehran

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ABSTRACT

The objective of the current study is the statement of the impact of organizational factors of customer relationship management (education-employee involvement-satisfaction) on CRM adoption in tax affairs organization. This research tries to evaluate the factors detected by the organization and offer the relationship between them under a conceptual model of CRM adoption and also using a technology acceptance model. This research is actually a correlating-study, but can be also considered as an applied research. It is cross-sectional in terms of time, is confined to Tehran in terms of place and is quantitative according to the type of data. The research instrument was a questionnaire whose degree of validity was determined by experts. Cronbach alpha is used for determining its reliability. The statistical population of this study consists of tax agents (employees) of the general office of large tax payers in Tehran. The statistical sample is chosen by a simple random sampling which according to Cochran's formula 140 persons were determined. Data analysis in the process of model formulation was done by the method of confirmatory factor analysis and structural equation, using LISREL software to assess its validity. According to the organizational factors of CRM (education-employee involvement-satisfaction), easy application and usefulness of customer relationship management has a positive and significant impact on CRM adoption which will lead to a better performance in the organization whenever the system is used. Research findings have shown that the adoption of CRM is confirmed in the study population and for this reason it has the potential to be used in the intended population; it was also revealed that in regard with the prioritization of variables, the easy application of customer relationship management will lead to its adoption by tax agents and expedite the performance of the organization.

Keywords: Customer Relationship Management, CRM, Education, Employee involvement, Satisfaction, CRM adoption, Technology acceptance.

Introduction

Government organizations and agencies in Iran play an integral role in providing much of the requirements of real and legal persons. Given the fact that governmental organizations are faced with a large number of people, demands, connections, rules and instructions, one can say that the activities of these organizations are very complex. Today, governmental agencies with an emphasis on new information technologies, are trying to change the organization in such a way to accomplish the mission of responding to people in the shortest time, with the best quality and the lowest cost; customer relationship management is the best possible way to achieve this goal. CRM clearly defines communications and relationships within and outside the organization. CRM deals with the improvement of the relationships with customers, concentration on the comprehensive picture of the quality of customer value integration, requirements, exceptions and behaviors through data analysis of the customer interactions. Using CRM, organizations can shorten the sales cycle, enhance the customers' loyalty for developing closer relations and also increase the income. Thus, a CRM system can be helpful in maintaining the existing customers and attracting the new ones. Organizations apply some methods like CRM, customer value analysis, organizational strategy and service mechanisms which improve the efficiency of customer relations.

Problem Statement

Since the application of information technology adoption provides a comprehensive view for the factors included in the present study, CRM adoption which is based on it will expedite work and improve the performance of organization around these factors. Due to the lack of a system for customer relationship management, this

research intends to create a function of CRM adoption in the tax affairs organization using technology acceptance model in order to be responsive to customer dissatisfactions; in today's world of business, customer is the main element, key to success and the axis of progress of each organization. So the survival and sustainability of organization activities depends on maintaining the existing customers and attracting the new ones. With the advancement of communication technology, organizations are faced with a multitude of different customers, on the other side customers also caused some changes in the market environment because of the awareness and easy access to information and having the right to choose; thus in today's world, customers are thought to be the main source of organization capabilities, as a result the organizations require a long-term relationship with customers.

Among these, the scholars of management field with respect to business trends, prescribe customer retention, correct techniques of customer relationship and establishment of a long-term relationship with them entitled CRM which is of various benefits and also an effective factor in the commerce of today's business.

Customer-oriented approach indicates that all of the organizational acts and activities should be defined and operated according to customer's demands and viewpoint. But one of the fundamental problems of the generator and supplier units of establishing an effective relationship with the customers, are the customer themselves, so CRM can be a proper and effective approach in creating a constructive interaction with customers.

CRM can create a competitive advantage through a better understanding, establishing an effective communication, providing proper services and expanding the relationships with the existing clients along with attracting and retaining new customers.

In other words, CRM is a business strategy for selection and managements of the relationships with valued customers. CRM requires an insight into the customer-oriented business for supporting the effective marketing processes, sales and services. If an organization benefits from a leadership, strategy and the right culture, the related actions of CRM technology will create an effective customer relationship management (Thompson, 2001). In regard with the above issue, the following questions are raised:

1. To what extent the organizational factors affect the CRM adoption?
2. To what extent the easy application of CRM affect the CRM adoption?
3. To what extent the usefulness of CRM affect the CRM adoption?

Significance of the Research

To stay competitive, paying attention to customers who are the main elements of any organization's survival is very essential. An effective step will be taken toward the accomplishment of organization activities by applying the CRM system and adopting an appropriate cooperation of employees with that system, which as a result leads to profitability and success of the organization. Therefore, considering the explanation of effective factors in CRM adoption is necessary in tax organizations of the whole country. But since no serious inquiry has been conducted in the field of customer relationship as well as the effective factors in CRM adoption in public and private organizations of Iran, the investigation of such research seems to be necessary.

In this study which has been implemented empirically, we dealt with model testing and application of CRM adoption model and the impact of its predictor variables. This research is an applied one which uses statistical documents for research in the field of CRM adoption model application in the organization.

Research Hypotheses

H1: It seems that organizational factors may have an influence on the easy application of CRM.

H2: It seems that organizational factors may have an influence on the usefulness of CRM.

H3: It seems that easy application of CRM may have an influence on CRM adoption.

H4: It seems that the usefulness of CRM may have an influence on CRM adoption.

Research Background

In a research, Kaboli & Azarbayjani (2008) investigated the impact of CRM on customer survival, their further reference and finally their satisfaction. In this study, the clients of Ghaem Reza industry complex were asked to express their opinions about the impact of CRM on these three categories in the form of a questionnaire. Research findings have shown that there is a direct relationship between the application of CRM and the survival of customers, types of customers (being an advisor or an employer) and their industry can also have an effect on the customers' perspective. There is a direct relationship between the application of CRM and the further reference of the customers and in this case the type of the customer and their industry can also have an effect on the customers' perspectives. Moreover, there is a relationship between the application of CRM and customers' satisfaction, but in this case only the type of industry can have an effect on customers' perspectives.

A research entitled "A review of the dimensions of organizational structure and customer relationship management in Keshavarzi Bank" was conducted by Farzaneh Moazzami, PNU graduate student of Economic and Social Sciences in June 2010. In addition to evaluating the significance, necessity and objectives of the project, the concepts, principles and skills of CRM in relation to organizational structure have

been also investigated in this research. Research findings have shown that there is a direct and positive relationship between the dimensions of organizational structure in Keshavarzi Bank (centralization, complexity and formality) and CRM which have the greatest impact on CRM in Keshavarzi Bank after centralization.

A research entitled "CRM assessment in Bank Saderat Iran from the viewpoint of customers" was presented by Masoumeh Nafari in September 2009. In this study which has the statistical population of 151 Saderat Bank clients, attempts were made not only to identify the effective factors on customer attraction and retention, but also to make a survey on Bank Saderat Iran; moreover, customers' satisfaction and loyalty and their relation with CRM were assessed after examining the quality of services. As a result, Bank Saderat can achieve a desired outcome by a 21% promotion of any variables of CRM, quality of services, loyalty and satisfaction; so generally by the implementation and ongoing reform of CRM processes in banks, we will have more satisfied customers who are considered to be the most important assets of banks.

A research entitled "Prerequisites and results of technology acceptance of CRM in sales force" was conducted by George Avlonitis and Nicholas Panagopoulos in 2005 (Athens University of Economics and Business). In this study, the impact of three variables of social, organizational and individual factors on the two components of perceived ease of use and perceived usefulness was examined, and then the impact of these two components on staff satisfaction, CRM adoption and finally the performance of sales force has been evaluated. It was found that individual factors have the greatest impact on CRM adoption and eventually perceived usefulness will also have the greater impact on the performance of sales force.

A research entitled "The investigation of organizational features and the stages of CRM adoption" was published in a research journal of business by Eunju Ko, Sook Hyun Kim, Myung sookim and Jiyoung Woo in June 2008. The purpose of this study was to identify the position of CRM adoption and explore the effects of organizational features on the process of CRM adoption in design industry (fashion) of Korea. In this research Rogers' innovative-decision process model was used as a conceptual model. The statistical population consisted of 94 Korean design companies in which the motivation, decision making and implementation of CRM adoption steps were examined. Organizational features were regarded as company features (size, strategy, availability of information database), product features (design status group, their seasonality) and characteristics of top managers (age and education). Empirical findings have confirmed the conceptual model of Rogers, so design companies can apply the CRM adoption model in their strategic planning and raise the degree of their CRM adoption strategy.

A research entitled "A review of multiple approaches for implementing CRM" was presented by David J.Finnegan and Wendy L.Currie in the European Journal of Management (2007). Studies indicate that many companies have found the implementation of CRM strategy a difficult task. This paper have been prepared on the basis of research reports conducted over the last 5 years which is stating about the understanding of the way organizations can develop a successful CRM strategy and implement it. Here, a multi-approach structure has been used for a better understanding of internal communications between the key factors in the implementation of CRM strategy. Evidence obtained from the three case studies show that a multi-approach or multi-disciplinary

structure can help companies in developing CRM strategies and give them a better understanding of this point that a variety of factors can continually modify their environment through interacting with each other.

Kwaku Obeng (2006) in his MA thesis entitled "The implementation of CRM: A case study in two service companies" investigated the methods of customer relationship management. The objective of the study was the expression of reasons, benefits and key components and elements of the implementation of CRM. To achieve this goal, a case study has been conducted in two Swedish service companies. Both companies have the components of CRM, but implement it in different ways, because the mode of implementation is different with regard to particular circumstances as well as time and the environment within the organization.

Both companies see CRM beyond its strategic view and this is due to their kind of attitude and being one of the components of CRM. Both companies claim that CRM enables them to identify profitable customer and establish a better relationship with them. An important conclusion which can be obtained from this study is that for successful implementation of CRM and achievement of objectives, service companies should give attention to all of its key factors such as strategy, leadership and integrity within the organization.

The Conceptual Model of Research

The conceptual model of this study has been formulated according to Davis' technology acceptance model with an emphasis on the role of external variables and is shown in figure 1:

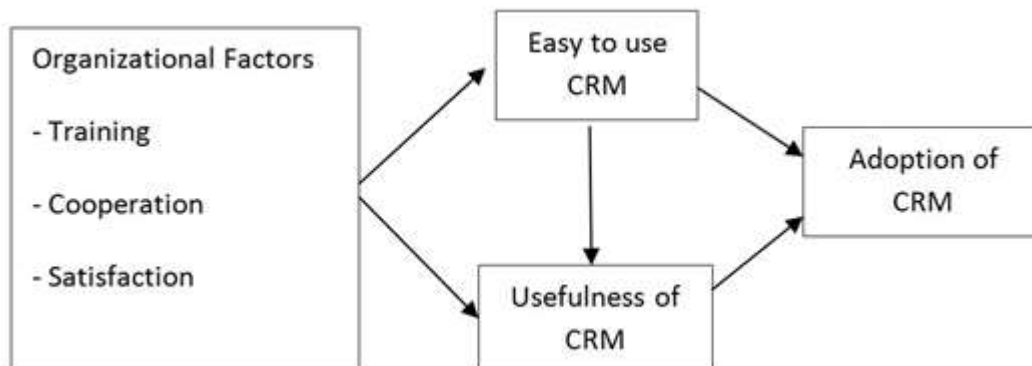


Figure 1. The conceptual model diagram

Research Methodology

This research is a correlating-study and is applied in terms of objective. It is cross-sectional in terms of time, is confined to Tehran in terms of place and is quantitative according to the type of data. The research instrument was a questionnaire whose degree of validity was determined by experts and Cronbach alpha is used for determining its reliability. The statistical population of this

study consists of tax agents (employees) of the general office of large tax payers in Tehran which is chosen by a simple random sampling based on Cochran's formula. Data analysis in the process of model formulation was done by the method of confirmatory factor analysis and structural equation, using LISREL software to assess its validity. The reliability of questionnaire was also confirmed according to Table 1.

Table 1. The alpha level for each of research indicators

Variables	Cronbach's Alpha Coefficient
Organizational factors	0.845
Usefulness of CRM	0.912
CRM adoption	0.816
Easy application of CRM	0.712

Research Findings

Description of the demographic variables

The features of under test statistical samples are presented in Table 2.

Table 2. Distribution of under review sample

Variable	Frequency	Percentage Distribution
Gender		
Female		
Male		
Diploma		
Associate degree		
BA		
MA	19	13.6
Education	121	86.4
Expert		
Master of taxation		0.7
Head of taxation	1	7.1
department	10	67.9
Head of tax affairs	95	24.3
Deputy director	34	
Administrative		
assistant		
others		
Organizational post		
	10	7.1
	47	33.6
	49	35
	17	12.1
	4	2.9
	1	1.7
	12	8.6

Inferential Analysis of Data

For testing research hypothesis, a correlation test is used. The first condition is to assess the

normality of data distribution. For evaluating the normality of data distribution related to research variables, Kolmogorov-smirnov test

was used the results of which are presented in Table 3.

Table 3. A review of the normality of research variables distribution

variable	Organization al factors	Easy application of CRM	Usefulness of CRM	CRM adoption
Z	0.978	1.053	0.354	0.978
Level of significance	0.294	0.217	0.663	0.294

The significance level of Kolmogorov-smirnov test is higher than 0/05 and it can be concluded from the table that the distribution of variables data is at the normal level. The

correlation matrix not only investigates the effect of independent variables on each other, but also shows that all the studied variables had a positive effect on CRM adoption.

Table 4. The correlation matrix between research variables

The name of the variable	Organizational factors	Easy application of CRM	Usefulness of CRM	CRM adoption
Organizational factors	1			
Easy application of CRM	0.541**	1		
Usefulness of CRM	0.426**	0.608**	1	
CRM adoption	0.629**	0.569**	0.622**	1

Significant at the 0.01 level (two-tailed test)**

If the significant correlation coefficients are between ($0 - \pm 0/3$), then the relationship will be weak, if they are between $— \pm 0/6$) ($\pm 0/3$, the relationship will be moderate and finally if they are between ($\pm 0/6 - \pm 1$), the relationship will be strong. It should be noted that relationship direction is determined by the sign of the correlation coefficient, so that if the correlation coefficient between the two variables is positive, the relationship between them will be direct and positive and if it is negative, the relationship between the two variables will be negative and reverse.

Testing of the Research Conceptual Model

In this part, the validity of the research conceptual model is assessed by confirmatory factor analysis method and software of structural equation model (LISREL) which is a comprehensive statistical approach for hypothesis testing of the relationships between observed and latent variables. Standardized coefficients at LISREL output are listed in figure 2 and the diagram of significant level of each path coefficient is shown in figure 3, the results of this procedure are also presented in table 5.

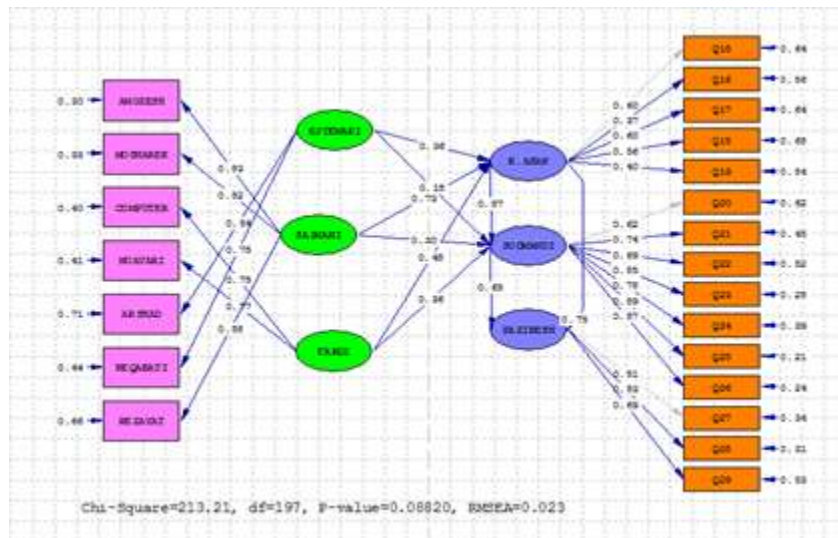


Figure 2. Lisrel output in a standard position

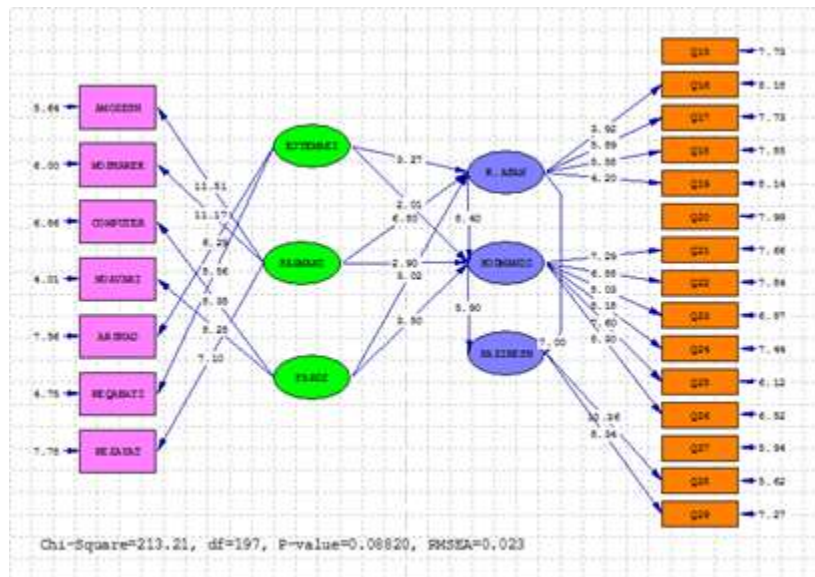


Figure 3. Lisrel output at a significant level

Table 5. Results from the implementation of structural model of the effective factors on CRM adoption

relationship	standard coefficient(β)	t-value
Organizational factors/easy application of CRM	0.73 0.30	6.80
Organizational factors/usefulness of CRM		2.90
Easy application of CRM/usefulness of CRM	0.87	8.40
Easy application of CRM/CRM adoption		
Usefulness of CRM/CRM adoption	0.75 0.65	7 5.90

df = 197 RMSEA = 0/023 GFI = 0/95 AGFI = 0/93 CFI = 0/92 NFI = 0/95 RMR=0/023

In table 5, since t-values were not at the interval of (1/96 -1/96), we can say that all

the hypotheses related to research conceptual model will be confirmed.

According to LISREL output which is offered on the above table, the calculated value of χ^2/df is 1.08; a χ^2/df which is smaller than 3 indicates the good fit of the model. Moreover, the root mean error of approximation should be less than 0/08, which in the proposed model this value is equal to 0/023. The rate of *GFI*, *AGFI*, *NFI* and *CFI* components should also be higher than 0.09 which in the under study model are respectively; *PRM* value should be also smaller than 0.05 which is equal to 0.023 in the model under consideration.

In regard with the parameters and outputs of LISREL software, we can say that data are relatively consistent with the model; furthermore, the presented parameters indicate that the proposed model is generally an appropriate, so empirical data are well adapted to it.

Conclusion

Research findings have revealed that organizational factors of CRM which are influencing CRM adoption (education, employee involvement, satisfaction) are a confirmation of hypothesis acceptance besides having a positive and direct impact.

Results also showed that the impact of easy application on CRM adoption in the present research corresponds with the studies of scholars like Davis, Chilavert, Anandra-John. This parameter is of particular importance in the organization environment and has received the first rank; therefore, it is recommended to choose a system which is more compatible with organization activities and also give attention to easy application of system from the viewpoint of staff.

Results indicate that the impact of easy application on CRM adoption in the present research corresponds with the studies of scholars like Avlonitis & Nicholas Panagopoulos, Venkatesh & Davis, Robert & Henderson. In this study, easy application has been introduced as the second effective variable on CRM adoption. Thus, it is recommended that managers should be aware of their staff's informational needs and provide

the necessary infrastructure for the implementation of a proper CRM system in the organization in order to facilitate the level of system acceptance by employees through the exchange of information and knowledge.

The impact of organizational factors on CRM adoption in the present research, corresponds with the studies of scholars like Avlonitis & Nicholas Panagopoulos, Davis and Salimzadeh. This is the third variable, so it is recommended that the manager of an organization should take action on establishing inservice classes in order to familiarize the staff with CRM system and teach them how to use it properly in their daily tasks.

Results also revealed that the impact of usefulness on CRM adoption in the present research corresponds with the studies of scholars like Venkatesh, Davis, Sue & Chiu, Abasalt Khorasani. This is the fourth variable, so it is recommended that organizations should focus on the creation of precise expectations about system use and its advantages in order to clarify the management expectations and advantages of their implementation for CRM system users.

Suggestions

Given the fact that one of the reasons of tax evasion is the taxpayers lack of information, there are CRM system in tax affairs organizations which can prevent these tax evasions; so taxpayers will be notified about their required information, cope with organizations with much more satisfaction and pay their taxes easily.

It is recommended that the manager of an organization should involve staff in designing of systems and their implementation, because in the latter case staff resistance to system acceptance will be reduced, they will be more willing to use the system and their expectations from the system will be real and reasonable.

It is recommended that the manager of an organization should pay special attention to capability and innovation at the time of recruiting; also it is best to pay more attention to demographics at this certain time, because it

is expected that younger and educated people be more familiar with new technology tools.

For further research, other CRM factors such as social and individual factors should also be used

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