Evaluating CRM System and Its Challenges (A Case Study of ICT Organization in Tehran Municipality)

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Abstract

Today various agencies and organizations consider their own survival in creating mechanisms that by which the customer satisfaction is met. Therefore the primary goal of any organization is customer satisfaction. ICT Organization of Tehran Municipality takes steps in this direction and to reach this quality with respect to the changes in the field of ICT, has considered CRM customer relationship management as an important approach to business, and given that each employee satisfaction has a direct impact on organizational performance and ultimately customer satisfaction, this organization has decided to institutionalize CRM to obtain satisfaction of internal customers (employees) and external customers (referring to the organization and subscribers). In order to do so, it would try to discover the factors contributing to satisfaction for both groups, and the criteria laid out in the form of a questionnaire survey. It also analyzes the experiences of organizations with similar functions, and has dealt with analysis of the results. Finally, using customer feedback and interviews with a number of experts and leaders of the organization, ways to increase the efficiency and productivity of each of the groups have been concluded.

Keywords: Customer Relationship Management**,** Municipalities, ICT, Customer Satisfaction

1. Introduction

One component of management is considering the company's customer satisfaction that is considered as one of the main factors of efficient evaluation and development, and measures such as speed, accuracy in the affairs of clients, the quality of the works are among the factors that increase the satisfaction of the people in connection with the services and trust and higher productivity. Besides this issue, the staff satisfaction that is service providers is very important and customer relationship management must be established so that these principal organs of the organization are with high satisfaction. Given that this subject has not been researched in the organization up to date, this study seems necessary.

1.1 Importance of the topic for the organization

Organizations are generally of two types of programs designed to serve the customer. Reactive services are applied in cases that the customer calls to resolve a problem or defect in the product or when he has a question and usually organizations provide them with the services such as email, phone, etc. that if any of this has already come up they can contact. Other state of services, is designed and managed so that the organizational factors are waiting bilateral contacts and before filing a complaint on behalf of a client the solution is provided and in which the staff of the organization in other sections are interacting with customers and this is one of the important steps towards creating the right customer relationship management.

Since ICT Organization of Tehran Municipality attempts has taken action to create an internal and ultra-structural connection for more than 1,400 buildings and connect them to Tehran Municipality therefore, network support, acceptance of new orders of creating communication, requires an accurate and comprehensive management in relationship with the customers and it requires the use of CRM system at the operational level as well as the analytical management of relationships with customers, and also cooperative management.

At first step, we deal with some part of the definitions of the main components of the paper:

Municipality is established according to the principle of administrative decentralization and in order to administer local affairs, including development and prosperity, city health and welfare of the inhabitants of the city.

1.2 Dimensions of Tehran Municipality

In Tehran Municipality, there are 15 deputy department, 23 organizations, 23 companies, 12 bureaus and 22 zones that the Information and Communication Technology Agency is a subsidiary organization of the Department of planning and coordination.

ICT Organization of Tehran Municipality:

It provides The ICT services for the municipality zones and its subordinate units, in accordance with the ISO9001:2000 and it is in line with the macroeconomic policy of Tehran Municipality ant its aims include: creating 1. Suitable infrastructure for the development of ICT to provide quality services to the citizens and subsection of the Municipality of Tehran. 2. Attention to the strategic approach to investing in ICT, in order to take advantage of technology, in order to provide a proper services of the municipality to the citizens. 3. Continuous improvement of organization processes in order to increase the effectiveness in the quality management system and achieving greater productivity. 4. Integrated urban information to facilitate strategic and operational decisions in the municipality of Tehran.

Department of network and security:

It consists of network offices and network security monitoring and ... that in this study is the main focus of studies of network office.

Creating intranet network infrastructure for all buildings connected to this network via wireless links, as well as through the process of fiber communication is among the tasks of the organization. So in this study we seek to examine the factors of creation of satisfaction or dissatisfaction of two important groups of the customers of the organization (staff and administrators of the zones sites or managers of the organizations supported by the network of Tehran Municipality), and we will try to improve these factors.

2. Literature Review

2.1 Customer Relationship Management

Customer relationship management as a new term was introduced in the mid-1990s. Although CRM is one of the most important issues of e-commerce, but there is no common and clear definition of it. Some definitions of CRM by specialists and analysts are as follows:

Kodwel In 1998 defines CRM as a combination of processes and task technologies for the customer. Kala Kuta and Robinson in 2000 introduce CRM as the integration of strategies for sales, marketing and services and consider it is a factor to avoid creating a single view of the customer and refer the integration role of the various processes and departments in the implementation of CRM to increase customer-related services. Dodas in 2001, states that CRM is about providing better service to customers at all levels of the organization. Sufider in 2001 defines CRM as an organizational approach to understand and the impact of customer behavior in his relationship with the organization, to improve the recruitment, retention, loyalty and customer profitability. Shet & Parvatiyar in 2001, define CRM as a "comprehensive strategy and process to attract, retain and engage with selected customers to create higher value for the customer and organization, which includes the integration of sections of marketing, sales,

customer services and supply chain of organization to achieve greater efficiency and effectiveness in delivering value to the customer".

Armstrang in 2004 defines CRM: "The general process of creating and maintaining relationships with profitable customers by providing more value to the customers and obtaining their more satisfaction. In fact, CRM is a design process of an organization around customers so that the needs of the customer are considered as the main focus in the organization's decision making. In CRM, the challenge of the organization is customer. The purpose of creating a customer-focused organization is to increase the mutual value of customer and organizations in relation with him. According to the organization this value is the improvement rate of customer retention and increase of revenue and at the same time, greater efficiency and control of costs. With Use of CRM we can identify customer's needs and desires, even before they are expressed and using this advantage, organizations can increase customer loyalty, create income and reduce service and operating costs.

Although CRM is a new concept, but the principles of it dated back to distant past. Marketers have always promoted a close relationship with customers. Customer profitability has been dramatically considered for many years; because many organizations are based on the product or lines of communication channel that are placed in front of the customer. Similarly, the concept of mass customization has been around for nearly a decade in the literature. Essentially all of the said items, had been remained in the theoretical concepts in the form of dreams and not a commercial reality but today, because of advances in information and communication technology, and individual communications, customer value analysis and mass customization is possible. CRM is a customer-focused business strategy that increases his loyalty by providing more personalized services to every customer. Some see CRM as a management approach; that it includes identify, attract, develop and maintain successful relationships with customers for ever, in order to increase profitability. Studies have shown that it would result in a five percent increase in customer retention and a ninety-five percent increase in the value for the organization.

CRM used the leverage of technology to coordinate organization's interactions with the goal of creating long-term loyalty. Technological advances in the past decade, has changed business into relationships with customer. CRM is a good strategy that uses the power of technology to integrate all aspects of the company to build long-term customer loyalty. In Iran, extensive researches have been done in this field. Abdul-Mohammad et al. (2012) examined the aspects of customer relationship management on employee performance. The results of this study indicate a positive and significant relationship between CRM and performance of employees. Also, Eesa-zadeh and colleagues (1389) also examined the relationship between the dimensions of CRM performance in 4 and 5 star hotels of Tehran. This study also confirms the relationship between a focus on key customers and their satisfaction. At the same time, the studies by Mehrabi et al.

(1388) deal with providing an integration model of CRM concept in Bank Mellat and finally ends with the conclusion that cultural changes, technological changes and changes in the organization structure have a positive and significant impact on successful implementation of customer relationship management. Among other studies conducted in Iran, we can name the one by Yazdanian (1387) that examines the impact of CRM in Bank Saderat. According to this study, there is a direct and significant relationship between the use of CRM and customer satisfaction. Finally, the study of Aryanpur (1385) in the field of measuring and comparing the level of using customer relationship management in Xerox and Samsung Companies showed that the rate of establishing of customer value in the fields of retaining customers, predicting the future behavior of customers, reducing cost of sales has been high and very high, and in the fields of better identification of clients, registering complaints, effective relationship and a particular product has been too low and very low.

3. Research Methodology

3.1 Data Collection

The data was collected using a questionnaire distributed among employees and clients of IT Organization of Tehran Municipality. 200 questionnaires were distributed among employees and the method of selecting the samples was a random one. The questionnaire is derived of the study of doctor Moqimi and consists of 13 items that based on a 5-point Likert scale deals with the opinions of each of the respondents. Since the questionnaire has already been used by another statistical study, the experts test and the relevant pre-tests were skipped.

3.2 Data Analysis

To analyze the data to determine, the method of confirmatory factor analysis, structural equations of SEM and t-test were used. Factor analysis can either be exploratory and confirmatory. Which one of these two methods should be used in the factor analysis is based on objective of data analysis. The important distinction between exploratory and confirmatory analysis techniques are in this regard that exploratory method defines the most effective common variance explanation method underlying the correlation matrix. But the confirmatory methods (hypothesis testing) determine that whether the data is consistent with the structure of a certain factor (that is in the hypothesis).

On the other hand, most of the studies may be partly exploratory and also confirmatory because they include known variables and some unknown variables. Known variables should be chosen with great care so that as much as possible we obtain more information about the unknown variables. It is better that the hypothesis that is developed by the exploratory analysis methods is approved or rejected through exposure to more accurate statistical methods. Exploratory analysis

requires a large volume of samples. The important distinction between exploratory and confirmatory analysis techniques is this that exploratory method defines the most effective common variance explanation method underlying the correlation matrix. But the confirmatory methods (hypothesis testing) determine that whether the data is consistent with the structure of a certain factor (that is in the hypothesis). Confirmatory factor analysis is in this way that during which the researcher expects to test a certain plan of the hidden factors beyond the variables. In this case, the variables are expected to have a special arrangement. In this method the researcher tests specific hypotheses about the structure of a certain factor. In this analysis, the researchers seeks to develop a model that is supposed it would describe explain or justify the empirical data on the basis of several relatively little parameters.

3.3 Research Hypotheses

- Use of CRM software would reduce time-wasting and help to save time for receiving the confirmation of the contractors' factor.

- Institutionalizing customer relationship management by the CRM system has a positive impact through interaction of the employees with customers.

- CRM leads to better service to customers.

- CRM faceplates the involvement of the steps of the duty on the behalf of the customer and on the behalf of the organization's staff.

4. Results and Findings

As mentioned in previous chapter, the structural model at the state of standard estimation and the significant coefficients were discussed to test the main hypotheses of the research. Null hypothesis and hypothesis one to confirm or refute the hypotheses are as follows:

1. H_0, there is no significant between the two variables.

2. H_1, there is a significant between the two variables.

If the significant number of test (coefficients of T) is greater than 1.96 at regression test, the null hypothesis is rejected and hypothesis one is confirmed and vice versa. The following Table shows the Approval or rejection of the relations between the variables in short:

Table 1: the relationship between different aspects of CRM performance

Ease in doing	Better service	Interaction	Saving Time	Items

the task		**with customer**		
-	-	-	*1*	**Saving Time**
-	-	*1*	*(10.26) 0.58*	**Interaction with customer**
-	*1*	*(15.14)0.69*	*(17.38) 0.84*	**Better service**
1	*(23.90) 0.82*	*(27.45) 0.80*	*(23.39) 0.74*	**Ease in doing the task**

The above table suggests that:

1. There is a significant relationship between satisfaction and competence according to the standard coefficient rate (standard factor loading) 0/58

2. There is a significant relationship between aspects of competence and finance, the rate of standard coefficient (standard factor loading) 0/74

3. There is a significant relationship between aspects of competence and internal processes, the rate of standard coefficient (standard factor loading) 0/74

4. There is a significant relationship between customer satisfaction and financial aspects, the standard coefficient rate (standard factor loading) 0/69

5. There is a significant relationship between aspects of customer satisfaction and internal processes, the rate of standard coefficient (standard factor loading) 0/80

6. There is a significant relationship between aspects of finance and internal processes, the rate of standard coefficient (standard factor loading) 0/83

As the results indicate there is a significant and positive relationship between these aspects.

Table 2: examination of the summary of relationships between variables

Confirmation or rejection	T significance	The direct effect (standard estimation)	Effect rate

Confirmed	2.85	0.23	Use of CRM software would reduce time-wasting and help to save time for receiving the confirmation of the contractors' factor.
Reject	1.05	0.09	Institutionalizing customer relationship management by the CRM system has a positive impact through interaction of the employees with customers.
Confirmed	2.30	0.22	CRM leads to better service to customers
Confirmed	3.41	0.44	CRM faceplates the involvement of the steps of the duty on the behalf of the customer and on the behalf of the organization's staff.

The above table indicates the following:

Saving time on organization performance (IT Organization of Tehran Municipality is equal to 0.23 and the statistic value (T) is equal to 2.85 that the above hypothesis is confirmed.

Interaction with the customer on organization performance (IT Organization of Tehran Municipality is equal to 0.09 and the statistic value (T) is equal to 2.05 that the above hypothesis is confirmed.

Ease in doing the task on organization performance (IT Organization of Tehran Municipality is equal to 0.22 and the statistic value (T) is equal to 2.30 that the above hypothesis is confirmed.

Better service on organization performance (IT Organization of Tehran Municipality is equal to 0.44 and the statistic value (T) is equal to 3.41 that the above hypothesis is confirmed.

5. Conclusion

CRM is a business strategy for the most valuable behavior with client. Customer orientation is the culture base and existence philosophy of this strategy that effectively supports the processes of marketing, sales and after-sales services. CRM software systems may be able to develop an

effective capability in client relationship management and prepare a development organization with the right leadership, effective strategy and organizational culture. The two Main components of CRM systems:

1. A set of procedures that allow the organization to have an accurate understanding of the behavior of the customer.

2. Another set of procedures that allow the organization, through various channels to converse with the customers, identify their needs and encourage them for more profitability.

On the other hand, customer relationship management systems are the systems that are changing the whole of the organizations and their look to customers. Customer relationship management is the strategy for acquiring the competitive advantage and philosophy and ideals of change about the competitive method of the business in the twenty-first century. We can say that customer relationship management is the basic building block of a successful organization. Therefore, managers should first of all have a good understanding of the CRM philosophy, and then they should pass it to the body of the organization and solve the critical problems successfully by a plan.

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