Investigating the effect of customer relationship management systems on the knowledge production of customer in the Tax Department South of Tehran

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Abstract

Present research aims to determine investigating the effect of customer relationship management systems on the knowledge production of customer in the Tax departments South of Tehran. Because of extensive study population on the one hand and on the other hand, since the number study population is unknown, to determine the minimum required sample size, the Cochran second formula is used. The instrument for gathering data was a questionnaire from the article of Khoda Karami and Chan, required information is adapted by the questionnaire-based on research model and is responded by 384 employees. The structural equation modeling (SEM) is used to analyze data and reliability through Cronbach’s alpha, which is 0.906 has been measured. The result of this study confirmed that earn, applying and diffusion of knowledge has a significant positive effect on customer relationship management. Results of the research showed that in general, customers relationship management systems on knowledge and its components including the creation and sharing in the population studied, had a positive and significant impact.

Keywords: Relationship management systems, knowledge creation, knowledge sharing.
Introduction

Today’s knowledge-based economy, competitive advantage, increasingly can be found in information trends facilitating of working instead of particular markets. So, the knowledge and intellectual capital as the primary basis for achieving core competencies and strategies for superior performance are proposed. To achieve sustainable competitive advantage, according to current knowledge, the effective use of that and create a structure for the use of new information and knowledge are essential and vital imperative that organizations should have paid special attention to it. Customer relationship management is an issues in today's global economy which evoked the organizations to rethink in the ways of communicating with wide range of customers and capture widespread knowledge. But it also could be emphasized that to establish effective communication with customers is not possible without the use of knowledge management. To increase efficiency and effectiveness of the organization and to ensure optimal presented of goods and customer services and gain their satisfaction we must manage our knowledge about customers. Therefore, knowledge management is inseparable component of customer relationship management.

Statement of Problem

Today's changing world requires that organizations seek for new tools so they can survive and growth. Knowledge management is one of the tools that can assist organizations to achieve their goals. Knowledge management is a process that helps organizations to find important information and knowledge then select, organize and publish. Knowledge management can improve a range of organizational performance features to “smarter function”.

Considering that researcher has several years experience at the Department of Economy and Finance, and he is aware about the importance of customers management relationship and the knowledge creation and sharing, it was the researcher concern that tax payers relationship management systems face with many problems. So with regard to the above mentioned items and also the vital importance of Tax Affairs General Department for the society, it seems necessary to investigating the role of customers’ relationship management systems on the amount of customers knowledge.

Literature Review

1. Customer Relationship Management:
There are many definitions of CRM, the most important include:
The definition provided by Galybrt and Rogers, CRM is defined as follows: Activities that a company do to identify, find, attract, develop and retain profitable customers loyalty by offering suitable goods and services to the right customers through appropriate channels at the proper time and cost, customer relationship management facilitates the relationships between companies and customers, business partners, suppliers and employees. Another definition is provided by the Hamilton that says: the process of storage and analysis of data mass that has provided by telephone sales and customer service center and real buyers, offers a more comprehensive understanding of customer behavior, CRM also allows companies with a variety of different customers have different behaviors. In other definitions provided by Swift, CRM is defined as follows: CRM is an enterprise approach to understand and influence customer behavior through in-depth communication, to improve customer acquisition and
retention of profitable customers. Customer relationship management isa comprehensive strategy and process management and data sharing with key customers to create higher values for the company and its customers (Chadhurishainesh, 2004). Deming believes that quality and customer satisfaction is the same and Juran believes, quality is suitability of the goods for consumption.

Customer relationship management process includes the following steps:

* Identify organization's customers
* Attract customers
* Prioritize customers during the absorption process.

Processes and customer relationship management applications based on the basic principles as follows (AHMAD & CAMAL, 2002):

* Target individual customers
* Attract and retain customer loyalty through personal communication
* Ongoing contacts with customers
* choose the customer based on the concept of the customer lifetime value

Customer relationship management targets include:

Neutral point of view:
* Identify the specific values for each segment of customers
* Understanding the relative importance of those needs for each customer segment.

Barnett point of view:
* Increased revenue from sales
* Improve the success rate
* Increase Profits
* Increased customer satisfaction
* Reduce the costs of administrative, marketing and sales general expenses.

Swift point of view:

* Improve the relationship with real customers
* Provide the right products to each customer
* Provide the right products to each customer through the right channels.
* Providing the right product at the right time to each customer.

Kalakvta and Robinson's point of view:
* Use of communication with existing customers to increase revenue
* Introduction of repeated consistent processes and procedures
* Use of integrated information for better service.

2. Customers knowledge level

The knowledge flows in the process of customer relationship management

For a tangible concept of customer knowledge management we specify three types of knowledge that play vital role in the interplay between companies and customers: Knowledge for, from and about the customer. In the first stage, to support customers in their buying cycle, a continuous flow of knowledge that guided from the company to its customers (knowledge for the customer) is prerequisite. Knowledge for customers contains information about products, markets and suppliers. This dimension of knowledge also influences on customer service quality perception (Bahi, 1383).
Capturing the customer knowledge and involving them in innovation process can be achieved in several ways. For example, knowledge about products, customers, suppliers and market trends can bemused through appropriate feedback mechanisms for providing a systematic improvement and innovation of products. Collect and analyze the knowledge about the customer, definitely is one of the oldest forms of KM activities in the field of CRM. In addition, the raw data of customers and transactions the knowledge about the customer, the customer's current needs, future aspirations, relationships, shopping activities, and their financial ability is considered. Knowledge about customers is collected in support process and CRM services and is analyzed in the CRM process (Farzaneh, 1385).

Customer knowledge management

CKM at first glance may seem it is just another name for CRM or KM. But in some aspects of customer knowledge managers, requires a different approach from traditional method in KM and CRM (Tiwana, 2000). CRM as a feature customer relations manager before all focuses on customer knowledge until the knowledge of the customer. In other words, Smart organizations have found that customers are more aware from the employees that search the knowledge through direct interaction with customers and also query the knowledge about customers from sales representatives. Customer knowledge managers exploring opportunities for partnerships with customers as the organization value creators. This is in contrast with the maintain desire and develop existing customer in CRMbase.CRM proverb is remembered that says "keep the customer is cheaper than finding". Unfortunately, in this period which the products of competitors are often imitated, customer retention is extremely difficult. Therefore, customer knowledge managers are less concerned about customer retention. In return, they focus on the development organization by obtaining new customers and increase their value of by using active discussion. How does the customer knowledge managers, creating innovation and development? So that they have discovered knowledge is not only in the staffs, it there is in the customers too that guides us to create value from innovation and development (Davenport, 1998).

Knowledge management technologies, Put the processes at the disposal of organization, such the exchange place of knowledge is very secure(Massey, 2001). Application of knowledge management processes, knowledge management systems are structured in such a way that all the basic knowledge and a subset of the required fields to be available easily and thus lead to added value for the organization. Knowledge management provides tools, processes and backgrounds for the employees to share knowledge based on customer needs. Employees with Knowledge management, realize the customers integrated value and in this way they can offer a better service to valuable customers. Therefore, Knowledge management as a means of a tool deliver service in customer relationship management environment.

Looking at the above discussion it can be concluded that our expectations from customer Knowledge management, is created the maximum value of knowledge and Knowledge management is in a strategic level.

CRM strategy is based on four operational objective:

1. Encourage other company’s customers or potential customers to have first purchase from company.

2. To encourage customers who had first purchase from company to later purchases.
3. Turn the temporarily customers into loyal customers.

4. Provide the top utility services for loyal customers such that be an advertiser for company.
In fact, customer relationship management is all of the processes and technologies that the
organization applies for identifying, selecting, encouraging, developing, and maintaining the
customers. Customer relationship management will enable managers to use from customer
knowledge to raise the sales, and development the services (Broad vision, 2000)

**Theoretical Framework of the Research**

In this research, for investigating customers relationship management systems, Khoda Karami
and Chan questionnaire (2013) based on three dimensions of operational relationship
management with customers, analytical relationship management with customers and
interactive relationship management with customers has been used and for investigating
amount of customers knowledge, Khoda Karami and Chan questionnaire (2013) based on two
dimensions of knowledge creation and knowledge sharing has been used. According to that,
research conceptual model based on research subject is as following.

![Figure 1: Research conceptual model](image)

**Methodology of the Research**

Present research is a descriptive-survey research. Statistical universe includes all customers in
Tax departments South of Tehran. Because of extensive research universe 384 ones of them
were selected by second Cochran formula. In order to gather data, a questionnaire has been
used. The questionnaire consists of two parts. In the first part demographic information such as
gender, education level, age, marital status and amount of income were allocated. In the second
part, 10 questions were allocated to customers’ relationship management systems and 10
questions were allocated to knowledge production and they were confirmed by vote taking and
consultation with experts and decision-makers and then after investigating its reliability and
validity, it has dealt with data gathering. The questions were in closed type and Likert scale has
been used that includes five points of strongly disagree, disagree, partially, agree, strongly
agree. The way of scoring choices is from strongly disagree (1) to strongly agree (5). It is worth
explaining that the questionnaire was investigated by experts and its reliability and validity
were examined and they confirmed.

The main hypothesis of this research is customers’ relationship management systems have
significant impact on knowledge production in the Tax Affairs General Department of Tehran
city. In addition, sub-hypotheses of the research are as follows:
1. Operational relationship management systems have significant impact on knowledge creation in the Tax departments South of Tehran.
2. Analytical relationship management systems have significant impact on knowledge creation in the Tax departments South of Tehran.
3. Interactive relationship management systems have significant impact on knowledge creation in the Tax departments South of Tehran.
4. Operational relationship management systems have significant impact on knowledge sharing in the Tax departments South of Tehran.
5. Analytical relationship management systems have significant impact on knowledge sharing in the Tax departments South of Tehran.
6. Interactive relationship management systems have significant impact on knowledge sharing in the Tax departments South of Tehran.

Analyzing the Data of the Research:

In this research, independent variable is customers’ relationship management systems and its dimensions and dependent variable is amount of customers’ knowledge. In following, results of research data analysis is presented: according to the analytical research model and for hypotheses examination related to the relationship between dependent and independent variables, the structural equation modeling (SEM) by LISREL 8.8 software have been used.

- **Kolmogorov-Smirnov test:**
  With respect to, one of the default assumptions of the Pearson correlation test is observations normally distributed, first, to ensure normality of the variables, we used the KS test.

<table>
<thead>
<tr>
<th>Component</th>
<th>KS statistic</th>
<th>Significant level</th>
<th>result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Relationship Management</td>
<td>0.852</td>
<td>0.562</td>
<td>Normal</td>
</tr>
<tr>
<td>Analytical Relationship Management</td>
<td>0.821</td>
<td>0.510</td>
<td>Normal</td>
</tr>
<tr>
<td>Interactive Relationship Management</td>
<td>0.988</td>
<td>0.283</td>
<td>Normal</td>
</tr>
<tr>
<td>Knowledge creation</td>
<td>1.265</td>
<td>0.082</td>
<td>Normal</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>1.312</td>
<td>0.051</td>
<td>Normal</td>
</tr>
</tbody>
</table>

- **The theoretical model is based on software LISREL output**
  To test the hypothesis and validity of theoretical research model and influence coefficients Structural equation modeling method was used.
  LISREL Software was used to check the main research model. Finally, the model with the necessary corrections comes in below:
Figure 2: The research model based on the t-Value

For Estimation of main model, maximum likelihood method and to evaluate the model goodness, the chi-square index (X2), the ratio of the chi-square on degree of freedom (X2/df) normalized fit index (NFI), non-normed Fit Index (NNFI), root Mean Square Error of approximation (RMSEA) and Root Mean Square Residual (RMR) were used.

As can be observed, the significant number of chi-square is above 0.05 thresholds that shows excellent goodness of model. On the other hand, if the ratio of the chi-square on degree of freedom be less than 3, show excellent goodness. If the RMSEA index is smaller than 0.05, it shows excellent goodness of model too. In this model NFI and NNFI index is respectively equal to 0.99&0.98, RMSEA & SRMR index is respectively equal 0.076& 0.032 that confirm the estimated optimal goodness fit of model.
Hypotheses Test
In this section, by using structural equation modeling, the research hypotheses are discussed. According to discussed hypotheses, all analyzes have been done in the level of error 0.05 and confidence of 95%. To verify and accept the hypothesis, significant number of t-value should be larger than 1.96.

In the hypothesis, H0 assuming no correlation between variables and H1 confirmed positive correlation and significant relationship between the variables.

First hypothesis: Operational relationship management systems have significant impact on knowledge creation.
It value is 0.23 that achieve from multiplication between the pathway of Operational relationship management and knowledge creation (0.59*0.62*0.64=0.23). It shows significant and positive correlation and confirms the hypothesis.

Second hypothesis: Analytical relationship management systems have significant impact on knowledge creation.
It value is 0.26 that achieve from multiplication between the pathway of Analytical relationship management and knowledge creation (0.59*0.64*0.69=0.26). It shows significant and positive correlation and confirms the hypothesis.

Third hypothesis: Interactive relationship management systems have significant impact on knowledge creation.
It value is 0.25 that achieve from multiplication between the pathway of Interactive relationship management and knowledge creation (0.59*0.64*0.67=0.25). It shows significant and positive correlation and confirms the hypothesis.

Fourth hypothesis: Operational relationship management systems have significant impact on knowledge sharing.
It value is 0.22 that achieve from multiplication between the pathway of Operational relationship management and knowledge sharing (0.56*0.64*0.62=0.22). It shows significant and positive correlation and confirms the hypothesis.

Fifth hypothesis: Analytical relationship management systems have significant impact on knowledge sharing.
It value is 0.26 that achieve from multiplication between the pathway of Analytical relationship management and knowledge sharing (0.59*0.64*0.69=0.26). It shows significant and positive correlation and confirms the hypothesis.

Sixth hypothesis: Interactive relationship management systems have significant impact on knowledge sharing.
It value is 0.25 that achieve from multiplication between the pathway of Interactive relationship management and knowledge sharing (0.59*0.64*0.67=0.25). It shows significant and positive correlation and confirms the hypothesis.
Conclusion And Suggestions

The aim of this research was to Investigating the effect of customer relationship management systems on the knowledge production of customer. Results of the research showed that customer relationship management systems influence on knowledge production. The obtained results confirmed the positive impact of relationship management system son customers’ knowledge creation. Some experts believe that this characteristic is the most important element of knowledge management. The obtained result confirmed positive impact of customers’ relationship management systems on customers knowledge sharing.

According to studies conducted in the research process and the results of statistical analysis of research data can be offered the following suggestions:

- In order to enhance the operational communication with customers use from ICT and electronic systems to provide tax statements, pay taxes, follow-up processes and transactions tax.
- To promote interaction with payers, use from the intelligent systems and on-line communications and through this diminish the constraints time that imposed by referral presence.
- To enhance and improve analytical communications with customers, use tax advisory systems to create awareness in payers and does a field research to cover deficiencies information in the statements and also provide special facilities for inclusion payers.
- To increase awareness of the taxpayer from favorable outcomes paying tax and adverse consequences, use from suitable multimedia teaching tools or benefiting through presence visits and short-term training and create a face interaction with the taxpayer.
- Increase citizens and the taxpayer’s knowledge about the tax by using the available tools.
- To increase the efficiency of tax administration facilities and electronic systems, considered component of knowledge management particularly knowledge sharing between employees.
- Achieved knowledge from various projects, be available for all customers.
- The employees be encouraged to sharing knowledge.

- **The other research suggestions**
  - It is recommended that future researchers to use from this model in other organizations and compare the results with this research.
  - It is recommended that future researchers to use from other models.
  - It is recommended that future researchers to use Mediating variables such as organization resources.

- **Limitations of the research**
  - Some people do not cooperate in completing the questionnaire.
  - The lack of a standard questionnaire for survey the research purposes.
  - Lack of scientific sources about this subject.
  - Time-limited for further investigation.
References


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