Int. J. Manag. Bus. Res., 2 (2), 136- 150, Spring 2012

Improving Performance of Customer Relationship Management through Applying Knowledge Management

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ABSTRACT: Customer Relationship Management (CRM) and Knowledge Management (KM) have become especial and strategic keys in the current competitive environment for all companies. The critical role of KM as the main determinant of the success of CRM has been the focal point of the previous researches; the present paper aimed at studying the impact of different KM factors- such as Customer Knowledge (CK), Staff Knowledge (SK), and Market Knowledge (MK)-on CRM. The data collection is done through participation of 113 experts in selected banks and through applying Structure Equation Modeling (SEM) and Factor Analysis the relationships between KM and selected parts of CRM improvement is examined. The Privatization in Iran has already affected the state banks in some areas such as competitiveness, customers, and reputation; therefore, it would be necessary to find a way to reduce this competitive gap in the banking sector. The findings of the present study indicated that the KM capabilities, which proved to be effective in more than 60% of the selected parts, could not be taken as the only factors contributing to CRM improvement; this is why KM factor can lead to improvement in CRM sub modules such as Service Management, Complain Management and Suggestion Management.

Keywords: *Customer relationship management, Knowledge management, Customer knowledge, Staff knowledge, Market knowledge*

INTRODUCTION

Many companies have understood the advantages of applying the Customer relationship management (CRM) as a measure to improve their market proportion in the recent years. These companies have established CRM systems to achieve customer's loyalty. Using CRM strategies create valuable marketing opportunities that increases customer value and enhances customer satisfaction, which are features of business excellence (Campbell, 2003) . As CRM is a 'customer facing' system (Lin et al., 2006) it is understood that the improvements in the contexts of CRM by using Knowledge Management (KM) decrease the time, satisfy customers, and creates a competitive environment. Unfortunately, many companies have focused on the CRM and take it as the most import things for progress and dismiss KM at the same time; while KM must be the main strategic tools in the companies- especially in the current competitive environment (Garrido-Moreno and Padilla-Meléndez, 2011).

The main approach of power customer service starts with receiving customer requests.

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In order to presenting the best customer service, staff needs to verify the identity of the customer and record his/her requests. Hence, the staff provides suggestions to resolve the customer queries based on his/her experience and knowledge. If the suggestions are accepted by the customers, the successful cases are documented for future references and reuse, if not staffs should register this knowledge, that is call staffs knowledge. It is interesting to note that the quality of customer services, completely depend on the experience and ability of the staff.

Since the knowledge in performing customer services is difficult to acquire, share and diffuse among the staff, it is time-consuming and costly to train up a well-experienced staff. The enterprise will suffer from the loss of the valuable knowledge of the staff when he/ she leaves (Guo and Niu, 2007). The marketing knowledge also plays a crucial rule in CRM as it enables the staff to propose the best suggestion for customers. Moreover, it is essential to make optimal reuse of knowledge of customer among various functional units of the enterprise to ensure that the customer service staff can access the updated knowledge that adjusts to the changing environment (Guo and Niu, 2007).

Building on the work of Huber (1991) and Nonaka (1994), Alavi and Leidner (2001) define knowledge as ‘‘a justified belief that increases an entity’s capacity for effective action’’ (p. 109). KM refers to the organizational processes which include the creation, storage, retrieval, and application of knowledge as they lead to the reuse of best procedures (Alavi and Leidner, 2001).

Knowledge and having a knowledge network (with customer, business partners, competitors) in business, environment has become an important strategic resources in organizations in the recent century. Therefore, KM capabilities enable organizations to achieve competitive and innovative position in the competitive environment. Many organizations which follow a purely technological vision implement customer relationship management systems instead of KM that works with the activities, processes, strategies and the coordination of staffing agencies. Given the increased competitive environment and the importance of keeping existing customers as well as attracting new customers, the implementation of a customer relationship management system is essential in the organizations; managers have already noticed that KM facilitates decision making by creating transparency on data collection, information processing speed , service quality as well as better reporting, which lead to more effective communication with customer, regular feedback and establishing customer relationship in the long run.

Many investigations have been made on the readiness of the customer relationship management systems and organizational readiness to implement CRM systems but these investigations have not focused on the role of KM in improving organizational performance. The present paper reviews the academic literature on CRM and KM by focusing on three dimension of CRM (Service Management, Complain Management and Suggestion Management) and three dimension of KM (Customer Knowledge, Staff Knowledge and Market Knowledge).

Literature Review

Customer Relationship Management

Managers have already realized that the establishment of customer relation is the source of maintainable revenue growth due to changes in the roles of customer and product. CRM makes the companies able to meet requirements of their loyal customers and safeguards their satisfaction. Improving CRM can also create singular marketing opportunities which brings about business excellence (Guo and Niu, 2007).

The target of customer relationship management is to reach out to the customers who are spread across the world and supply them with satisfactory services in order to raise the economic status of organizations. All modern organizations such as banks have recognized that customers should receive more than basic need, demand oriented and customer friendly goods and services. The traditional communication and management tools and techniques cannot deliver goods/services in the age of information technology and competitive organizational development (Rouholamini and venkatesh 2011).

The economics of customer relationships are changing in fundamental ways and companies are facing the need to implement new solutions and strategies that address these changes. Many

companies are intent on developing stronger bonds with their customers, called Customer Relationship Management (CRM). This is the process of managing detailed information about individual customers and carefully managing all customer 'touch points' to maximize customer loyalty. A highly satisfied customer generally stays loyal, buys more as the company introduces new products and upgrades existing products, talks favorably about the company and its products, pays less attention to competing brands and is less sensitive to price, offers product or service ideas to the company, and costs less to serve them new customers because transactions are routine(Kotler and Kevin 2007). Even though CRM systems become a widely popular choice for implementation, success is becoming deceptive. Reviewing of 202 CRM projects found that just 30.7% of the organizations identified that they had achieved improvements in the way they sell to and serve customers (Mendoza et al., 2007) .

In this sense, only 3% of the companies are developing successful CRM projects; 17% are starting to see the projects from a holistic focus; 35% of the companies have started projects without any type of coordination; and 45% have not evaluated CRM (Kirby, 2001). Due to the complexity of starting a CRM strategy, encountered by several companies, some counseling companies and companies handling statistic data have observed the mistakes incurred in the past. They recommend some practices and considerations to be taken into account (Kirby, 2001; Light, 2001; Bull, 2003) .in this research, some way that cause the better performance of CRM and less failure are shown. We summarize the concept of CRM, from the literature review, as follows: CRM is a business strategy, that's purpose is establishing and developing value-creating relationships with customers based on knowledge. Using IT as an enabler, CRM requires a redesign of the organization and its processes to orient them to the customer, so that by personalizing its products and services, the firm can optimally satisfy customer needs and thereby generate long-term, mutually beneficial, loyalty relationships (Garrido-Moreno and Padilla-Meléndez, 2011).

Knowledge Management

Knowledge is explained as information that is pertinent, actionable, and based at least partially on experience in a business context (Leonard and Sensiper, 1998). Knowledge is arranged to tacit and explicit knowledge (Polanyi, 1997) . Opposite of explicit knowledge, codifying tacit knowledge is so difficult and it is tied to individuals (Polanyi, 1997). Knowledge is also tied to how individuals perform as a whole. In an innovative organization people usually work together to create something new that it cause their organization stay as a leader in competition: from a managerial view, the question is how to manage that individual knowledge efficiently in projects in order to satisfy customer requires (Probst et al., 2000). Knowledge can be categorized by its contents or by its applicability in projects (Lehtimäki et al., 2009). KM is a newfangled field that attracts all business attentions and support from the industrial community. Many organizations and most companies recently engage in using KM and collect both kind of knowledge, first their knowledge organization and externally about shareholders and customers (Lin et al., 2006). KM helps people and organization staff share and put knowledge into action by creating access, context, substructure, and concurrently reducing learning cycles (Davenport et al., 1998; O'Dell and Grayson, 1998; Davenport and Prusak, 1999) .

KM Capabilities and CRM Success

KM feature is the ability of an organization to take, manage and deliver real time authenticated customer, products and services information to improve customer response and provide faster decision-making based on believable information (Alavi and Leidner, 2001). therefore, CRM and KM initiatives are directed towards the same goal: the delivery of uninterrupted improvement towards customers (Dous et al., 2005). Additionally, it seems, the creation and transmission of knowledge is seen as strategically significant as one of the fundamental processes that identify the ability of organizational learning and innovation (Salmador and Bueno 2007). Owing to this, KM

will exercise a strong role when implementing CRM, as it includes a change the organizational vision and consequently a great deal of learning and innovation within the organization (Garrido-Moreno and Padilla-Meléndez, 2011). Furthermore, previously published empirical studies on the subject highlighted KM capabilities as the variable that has a more significant impact on CRM success (Croteau and Li, 2003; Sin et al., 2005; Love et al., 2009) . Consequently, we propose the following hypothesis:

✓ H1. KM capabilities are positively direct linked to CRM ability.

Customer Knowledge (CK)

Developing and maintaining profitable business relationships require a more complex stream of information about and from a peculiar customer than does product or transaction-driven marketing (Davenport et al., 2001; Helfert et al., 2002; Gebert et al., 2003). Moreover , companies can improve the development and provision of products and services, achieve shorter new product development cycles, facilitate and manage organizational innovation and learning, and, particularly, improve customer satisfaction and customer performance ,by managing and using customer information efficiently (Srinivasan and Lilien, 1999; Jayachandran et al., 2005).

KM gives power to Customer Relationship Management (CRM) to expand from its current mechanistic, technology-driven, data-oriented approach, towards more holistic, complex, and understanding ways of developing and using customer knowledge. Customer Knowledge Management (CKM) is described as an ongoing process of generating, disseminating and using customer knowledge within an organization and between an organization and its customer (Dewi Sofianti et al., 2009).

✓ H2. CK capabilities are positively indirect linked to CRM ability.

Staff Knowledge (SK)

Members are the most important resource for real knowledge of CRM. They must interact with each other in order to obtain and share knowledge. Generally the significance of social context to knowledge sharing has been accepted by researchers (Hall and Graham, 2004; Koh and Kim, 2004; Chiu et al., 2006; Hsu et al., 2007).

Incompliance with cognitive theories, knowledge has contributed by individuals, which is currently a part of CRM improvement. Thus there is so better that members with special knowledge have countenanced and to share knowledge with each other in CRM system. Thus knowledge relationship among members should be considered in investigating knowledge sharing in CRM, but this part was often neglected in previous studies on knowledge sharing in CRM.

Tacit knowledge is instinctive knowledge, unarticulated, non-verbalized. These are knowledge that is implanted in the social and administrative fabric of a company(Badaracco, 1991). Cannot be translated into a formula and usually would fall in the domain of subjective, cognitive and experiential learning. Explicit knowledge, in contrast, deals with more objectives, logical and technical knowledge. It is Segmentation knowledge, which can be specified orally or in writing such as organization structure, pattern, concepts or formulas. Explicit knowledge can be codified, and it tends to be easily documented and more available in public lecture (Hackley 1999). This kind of knowledge is easy to spread widely and less unique to the knowledge holder in terms of creating competitive advantage. In contrast, tacit knowledge is obtained by internal individual processes like experience, reflection, internalization or individual talents. It cannot be managed and taught in the same manner as explicit knowledge (Herrgard, 2000).staff knowledge contain both of them, and by managing them we can improve their CRM ability and make satisfaction customers for firms.

✓ H3. SK capabilities are positively indirect linked to CRM ability.

Market Knowledge (MK)

In competitive environment, having relation with the market is critical for companies and has completely changed the marketing strategies of firms to other more relational approach (Gronroos, 1994). Due to the expanding complexity of the innovation process in industries characterized by rapid innovation,

firms have to absorb, integrate, and reconfigure knowledge without stop to maintain competitive advantage over time. Although traditional empirical analyses in the field of management have indicated the fundamental role in developing new products faster, the role of market knowledge has not been disregarded. First, market knowledge is just as important as technical knowledge in nourishing the process of product development. Second, process of learning and managing market knowledge is highly complicated. Third, a better understanding of how firms manage market knowledge for innovation purposes could contribute to present better services or special product (Cillo, 2005).

When faced with profound competition, more and more firms realize that it is decisive to continuously acquire up-to-date market knowledge and monitor market trends, demands to improve their competitiveness. Therefore firms should take advantage of distribution channels to acquire valuable, timely, and accurate market knowledge, improve product or service innovation, reduce introduction time, and be motivated for increased performance (Liu et al., 2010) .

- ✓ H4. MK capabilities are positively indirect linked to CRM ability.

Table 1: Comparison of different dimensions CK & MK & SK & CRM

	CRM	SK	CK	MK
Knowledge sought in	Customer Database.	Employee, team, company, network of companies.	Customer Experience and satisfaction with product/services.	marketing
Axioms	Retention is cheaper than acquisition.	If only we knew that we know	If only knew what our customer know.	We knew everything that happen in market and competitor
Rationale	Mining knowledge about the customer in company's databases.	Unlock and integrate employees' knowledge about customers, sales processes, and R&D.	Gaining knowledge directly from the customer, as well as sharing and expanding this knowledge.	Gaining knowledge form market and competitors news
Objectives	Customer base nurturing, maintaining company's customer base.	Efficiency gains, cost saving, and avoidance of re-inventing the wheel.	Collaboration with customers for joint value creation.	Planning for compete according to others action in market
Metrics	Performance in terms of customer satisfaction and loyalty.	Performance against budget.	Performance against competitors in innovation and growth, contribution to customer success.	Performance against competitors in innovation and growth for attracting customer
Benefits	Customer retention.	Customer satisfaction. Keeping Knowledge in firms.	Customer success, innovation, organizational learning.	Organizational learning.
Recipient of Incentives	Customer.	Employee.	Customer.	Firm & Employee.
Role of customer	Captive, tied to product/ service by loyalty schemes.	Passive, recipient of product or services	Active, partner in value-creation process.	Active, choosing best company for giving services
Corporate role	Build lasting relationships with customers.	Encourage employees to share their knowledge with their colleagues.	Emancipate customers from passive recipients of products to active co creators of value.	Compete with other organization for keeping or attracting customer.

RESEARCH METHOD

Sampling

As KM features improve CRM systems, it helps firms to attract new customer or keep old customer loyalty. This paper aims at introducing a model based on improving CRM with KM and to explore the relationship among customer knowledge, staff knowledge, marketing knowledge and service management (SER), complaint management (COM), suggestion management (SUG) (See Figure 1).

The focus of this research is on bank and banking industry; therefore, it includes qualitative data, case study research and structure questionnaires as research method. The structured questionnaire survey is adopted because this is the most appropriate way to collect relevant primary data from expert people in a busy company such as bank, for analyzing the expressed relatedness among the three sub modules of the CRM and three part of KM according to the proposed model as reported by the respondents of Iranian bank's experts. Qualitative in-depth interviews with some experts from Iranian bank are used to augment and check the validity of the questionnaire findings. The collected data is further utilized to analyze the adhesion dependent and independent variants in terms of the presented model, and to analyze for the identification of important factors as reported by the respondents to have key impacts on improving CRMS in their settings.

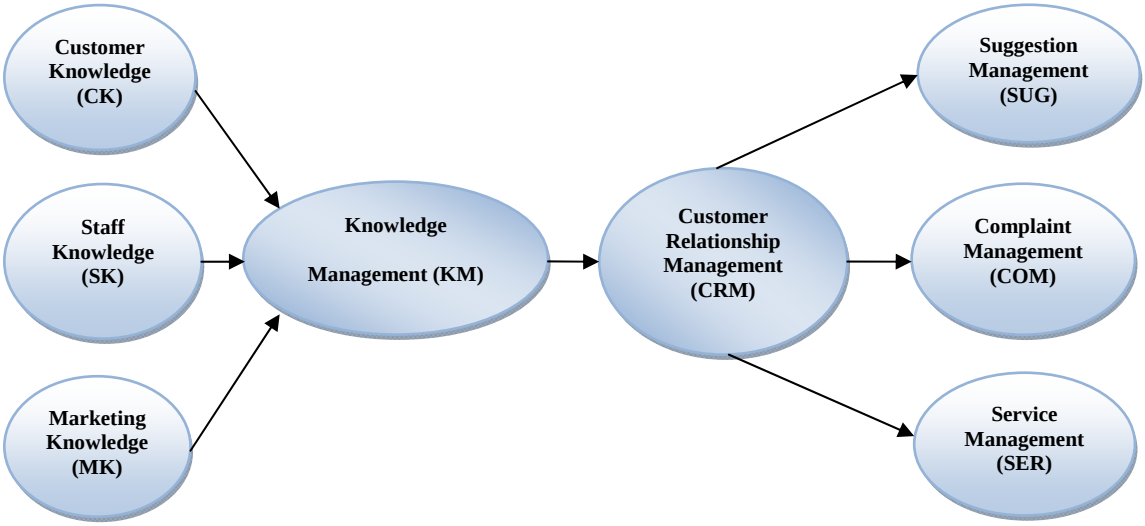

Figure 1: The proposed relationship among CRM & KM model

S.L. Chan and Ip (2011) provide some indicators to survive and succeed in the current business environment, that identify customer needs promote the constructive suggestions based on customer suggestions by meeting the real needs of the customer and rating the basic needs of the customer as well as identifying points of customer contact. As shown in table 3 Basically, knowledge about customer, staff and market must be integrated into a knowledge improve CRM system (Chan and Ip, 2011). The other indicator was obtained from interviews with bank experts and bank documents.

This field study focused on Iranian bank and Islamic banking (as mentioned earlier).The design of our questionnaire for CRM and KM Iranian bank sector. After the collecting, and using exploratory and confirmatory factor analyses the measurement scale of the proposed model was validated and refined. Finally, the structural equation methodology was applied to test the proposed evaluating the Performance Improvement CRM model empirically.

The target population for the empirical study consists of central department of Iranian Bank. The reason for choosing this sector was that CRM is extremely important in economic sector, sector, and in particular in the Banking sector due to the necessary close relation with customer (Garrido-Moreno and Padilla-Meléndez, 2011). 150 questionnaires contain 26 questions were sent to the group of experts in the different department in bank and 113 completed responses were received. As shown in table 2, the response rate was 90%.

Measurement Scale

To build the measurement scale for the model variables various studies were consulted and a list of 26 items to measure these variables was drawn up (see Table 3). This scale is validated empirically in the following subsections.

A 5-Point Likert scale (1=totally disagree, 5=totally agree) was used to measure the variable of model.

For individual variable or factor, descriptive statistics is used to describe the mean, variance and the categories and characteristics of data.

Table 2: Questionnaire response rate of the research

Sampling	Number of samples	Number of response	Response rate (%)
Bank Expert	130	113	87%

Table 3: Measurement scale items for model variables

Independent variants	Indicators
Customer Knowledge (Chan and Ip, 2011, Garrido-Moreno and Padilla-Meléndez, 2011)	Rate the basic needs of the customer. Identify points of customer contact. Curve customer lifetime duration and profitability Customers trust Identify key customers
Staff knowledge (Garrido-Moreno and Padilla-Meléndez, 2011, Marquardt, 2002)	Training programs are designed to help employees develop skills- needed to manage customer relationships appropriately. Access to global networks and the Internet, and using KB. Assemble electronic document management systems. Firm encourages employees to share knowledge Employee performance is measured and rewarded on basis of detection of customer needs and customer satisfaction with service received. Using expert and train staff.
Marketing knowledge (Chan and Ip, 2011, Garrido-Moreno and Padilla-Meléndez, 2011)	Rapid access to market information for business process. Support the use of newer and integrated technology competitor. Search and select the best strategy. Interactive relationships with research centers, universities and consultants to analyze market data.

Dependent variants	Indicators
Service management (Chan and Ip, 2011)	Minimize the volume of agent returns and request same service. Try to meet the real needs of the customer. Provide competitive service with other organizations. Improve the service system
Suggestion management (Chan and Ip, 2011)	Screening proposals in the shortest time. Analysis offers. Identifying and promoting the constructive suggestions. Accountability and performance evaluation experts.
Complain management (Expert)	Identify operating problems. Identifying blind spots to customer requirements using analysis of Complaints and Create an alert Report. Resolve the complaint issues in shortest time.

Analysis of Validity, Reliability, and Dimensionality of Measurement Scale

After substantiating that the data available were suitable for factor analysis, and in order to evaluate the measurement scale, the four basic aspects of the scale : its conceptual definition, validity, reliability, and dimensionality were analyzed (Garrido-Moreno and Padilla-Meléndez, 2011). The conceptual definition refers to the theoretical bases believing the scale development. The measurement scale here was built on the basis of a spreading analysis of the literature, considering research that explains the nature and structure of the concepts under analysis. The validity of a measurement scale refers to the extent to which the measurement process is error-free. The validity of the scale here was confirmed by considering the different modalities of the validity (content, construct, convergent, factor analyze).

To ensure content validity, a pretest of the questionnaire was made by three experts (two researchers in management and a business consultant). Regarding construct validity, the measurement scale used constructs that had been identified and used in previous studies and theories. To ensure the factor validity, the KMO and Bartlett's Test between variables of the questionnaire was more than 0.6 showing that the number of population was enough. To ensure the, convergent validity first construct Reliability (CR) has calculated, according to frame (1), the content of CR is more than 0.7 and the content of average (0.75) is more than 0.5 as an indication that this model has construct Reliability. The test results (CR>0.7, CR>AVE, AVE>0.5) showed the convergent validity of the model; the correlation between testes was low so divergent diagnostic test is validated. To calculate this validity, this condition (AVE>ASV[1], AVE>MSV[2]) should be indefeasible; as this model conforms the condition, so the model has Divergent validity.

$$CR=\frac{\sum(\boldsymbol{\lambda})^{\mathbf{2}}}{(\sum_{\mathbf{1}}^{\boldsymbol{n}}\boldsymbol{\lambda})+(\boldsymbol{\varepsilon})}=\frac{\mathbf{2.16^2}}{\mathbf{2.16+2.69}}=0.96$$

(1) Construct Reliability

We used a reliability coefficient -the Cronbach's Alpha- to analyze the reliability of the scale. This coefficient evaluates the consistency of the entire scale, and is the most commonly used measure.

The value of Cronbach's Alpha and Item to total correlation is assumed to examine the internal stability and credibility of all factors.

1- Average shared squared variance
2- Maximum shared squared variance

Table 4: Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.921	0.921	26

For high reliability, the value of Cronbach's Alpha should be more than 0.7; reliability is incredible if its value is less than 0.3. For high reliability, the value of Item to Total correlation should be greater than 0.6; reliability is low if its value is less than 0.3. The Cronbach's Alpha is 0.921 for all the variables, which confirms the scale reliability.

Finally, in order to analyze the dimensionality a principal components exploratory factor analysis was carried out. This analysis resulted in a factor model composing of 6 factors made up of the 26 observed variables. Thus both KM and CRM results are three dimensional. The three dimensionality of CRM results was foreseen at the theoretical level as the concept included SER, COM, and SUG. A number of different studies considered KM as a multidimensional concept (Garrido-Moreno and Padilla-Meléndez, 2011). The empirical results of the present study also showed the concept to be three dimensional, so KM was divided into three groups of factors, SK, CK, and MK.

Structural Model Testing

A confirmatory factor analysis was carried out to refine the measurement scale definitively. This analysis resulted in a scale consisting of 26 indicators, which shows higher levels of validity and reliability than the scale proposed initial. In order to test the proposed hypotheses, a structural equation methodology was applied to evaluate the appropriately of the theoretical model under analysis with respect to the empirical data, and examine the significance of specific hypotheses. Lisrel 8.5 software was used to estimate the SEM model.

First an introductory model which contained only the direct effects of the variables of KM was estimated. Secondly, with the aim of improving the model the CK, SK, MK variables as KM factors that shown the effect of KM on CRM improvement were introduced. Table 5 summarizes the measures used and the overall fit of the improved model. RMSEA measures the average of difference between observed data and modeled data, and refers to the mean square error.

Finally, evaluating the fit of the structural model, it was observed that all the coefficients estimated in these equations were significant in this case. Figure 2 shows the estimations of the standardized regression coefficients. All the t-values (critical ratios) exceed the reference value of 1.96 (figure 3) for a significance level of 0.05, which means that the estimated coefficients were completely significant (robust statistics were used in these calculations). Moreover, the coefficient of determination of CRM improving rises to 0.83, which means that 83% of the variability of them was explained by the improved model.

Table 5: Indicator's goodness of improved model

Indicator	Value	Recommended Value
RMSEA	0.099	≤ 0.1
RMSEA confidence interval	0.18	Narrow
RFI	0.93	≥ 0.9
NNFI	0.96	≥ 0.9
IFI	0.98	≥ 0.9
CFI	0.98	≥ 0.9
Model AIC	91.28	Small value

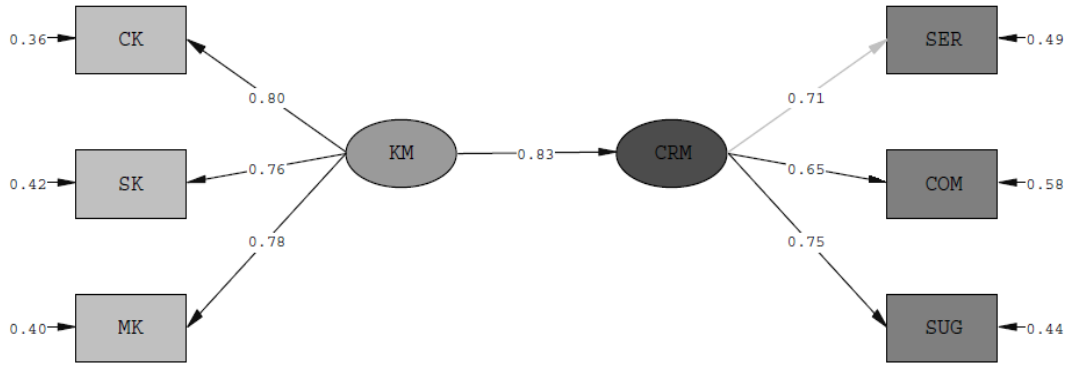

Figure 2: Estimations of the standardized regression coefficients

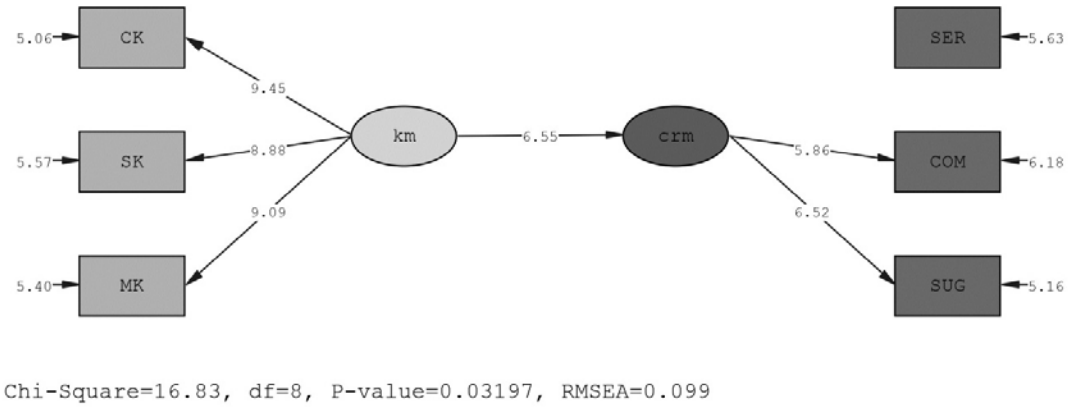

Figure 3: Estimations of the t-value (critical ratios)

Analysis of Results

The application of One-Sample Test in SPSS software on the data Iranian bank's current position showed the following disappointing results (table 6).

The value of sig. of seven factors is less than 0.05 and the value of lower and upper limitation are negative, but complaint management factor sig. is more than 0.05, that it cause the condition of this factor change to middle, the other factors' position in all of dimension of CRM and KM is undesirable.

After recognizing bank position, all hypotheses were tested. Generally, the findings indicated a positive influence in improving CRM System of all proposed factors (SK, CK ,MK, in one world KM).However, according to result in the Table 9, KM capabilities are positively direct linked to CRM ability (H1), CK capabilities are positively indirect linked to CRM ability (H2), SK capabilities are positively indirect linked to CRM ability (H3), MK capabilities are positively indirect linked to CRM ability (H4), so all hypothesis were accepted. This LISREL consequence absolutely matched on regression analysis in SPSS, The value of R Square, Beta and sig. in Table 9 supported LISREL result.

In ANOVA table, the Sig. is less than 0.05, so the model is elegant. The R Square value of KM factor is about 0.407 that is mean 40% of the KM variability is explained by the independent variable (CRM), so thirty three, twenty seven, twenty nine percent of the CK, SK, MK variability is explained by the CRM (table 7).

In coefficients table, the table of regression analysis, the value of "t" is not zero and sig less than 0.05, so KM and CRM communicated with each other. With regard to the Beta that is equal to 0.638, after changing one unit of knowledge management, the 0.64 unit Change in customer relationship management is created (table 8).

According to R Square value, Coefficient correlation between independent variable (KM) and dependent variable CRM), %41 CRM variation was created by KM balance.

Table 6: One-Sample test

Factor Analysis	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CRM	-4.405	112	0.000	-0.26032	-0.3774	-0.1432
KM	-8.107	112	0.000	-0.44528	-0.5541	-0.3365
SER	-5.076	112	0.000	-0.33407	-0.4645	-0.2037
SUG	-3.443	112	0.001	-0.26991	-0.4252	-0.1146
COM	-2.438	112	0.016	-0.17699	-0.3208	-0.0332
CK	-5.584	112	0.000	-0.37345	-0.5060	-0.2409
SK	-7.540	112	0.000	-0.43363	-0.5476	-0.3197
MK	-7.872	112	0.000	-0.52876	-0.6618	-0.3957

Table7: ANOVA (Dependent Variable: CRM)

	Model	Sum of Squares	Df.	R Square	F	Sig.
KM	Regression	17.967	1		76.027	0.000[a]
	Residual	26.231	111			
	Total	44.198		0.407		
CK	Regression	14.714	1		55.396	0.000[a]
	Residual	29.484	111			
	Total	44.198	112	0.333		
SK	Regression	11.972	1		41.239	0.000[a]
	Residual	32.225	111			
	Total	44.198	112	0.271		
MK	Regression	13.080	1		46.658	0.000[a]
	Residual	31.118	111			
	Total	44.198	112	0.296		

Table 8: Coefficients (Dependent Variable: CRM)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
KM	0.686	0.079	0.638	8.719	0.000
CK	0.510	0.069	0.577	7.443	0.000
SK	0.535	0.083	0.520	6.422	0.000
MK	0.479	0.070	0.544	6.831	0.000

Table 9: Hypothesis analysis

Hypothesis	H1	H2	H3	H4	Recommended Value	Analyze kind
R Square	0.407	0.333	0.271	0.296	-	
Beta	0.638	0.577	0.520	0.544	-	**Coefficients**
Sig.	0.000[a]	0.000[a]	0.000[a]	0.000[a]	0.05≤	**"ANOVA"**
IFI	0.98	1.00	0.97	0.97	≥ 0.9	
CFI	0.98	0.96	0.97	0.97	≥ 0.9	
NFI	0.96	0.97	0.91	0.94	≥ 0.9	**SEM**
NNFI	0.96	1.00	0.95	0.94	≥ 0.9	**" LISREL"**
RMSEA	0.09	0.01	0.05	0.09	≤ 0.1	
CONFERM	Yes	Yes	Yes	Yes	-	-

CONCLUSION

In order to provide high quality of customer relationship management, and achieving better customer's satisfactions, knowledge management system is much needed. By integrating the KM factors and priority of them, a knowledge-based CRM is proposed. In this paper we discussed about three factors of KM that have especial effect on CRM.

Results of the empirical test of the model confirm the fundamental role of these factors (CK, SK, MK) in the improvement of CRM. the literature has emphasized the role of KM as the key determinant of CRM success, Zabelah, Bellenger and Johnston in their paper addressed customer knowledge as an important knowledge that CRM need for success (Zablah et al., 2004) and Moreno, Melendez stated that the main factors of KM such as customer orientation, employee knowledge and customer knowledge that caused CRM success (Garrido-Moreno and Padilla-Meléndez, 2011), According to Mendoza, Marius, Prez (2007), managing the relationship with the client, understanding the client 's need, knowing the client buying habits, are all activates with in marketing process and s source of information that must be shared with the whole organization, because one of important knowledge for CRM success is marketing knowledge (Mendoza et al., 2007). The present study showed that the effect of KM on CRM improvement is more than fifty percent. It was also concluded that CK factor effect was more than the others but this distance was not egregious.

These findings show that if the bank carries out KM initiatives it leads to better customer relation, complain and suggestion managements. Managing CK also affects service management. May be best way for this bank for escape from this crucial situation is executed each KM factors in turn. First priority was CK, so first choice is CK, after that MK and at last SK. This KM factors priority helps organization for better KM implementation when they want to improve CRMs.With having priority of KM factors and computing their cost, the firm would be able to decrease budget spending for improving CRM and by improving CRM, customer satisfaction, and customer life-cycle would be increased and organization advantage should be enlarged.

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