Investigating the Relationship between Knowledge Management and Customer Relationship Management in Tejarat Banks in Isfahan

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Abstract
The purpose of the present study is "investigating the relationship between knowledge management and customer relationship management in Tejarat Banks in Isfahan". This descriptive - survey research is one of the field branches. Data were collected by using a questionnaire with the help of statistical software such as SPSS and statistical amos normality test, Pearson correlation test, T, F test and structural equation analysis are discussed. The study sample included the entire province included 450 are Tejarat banks; the sample was estimated using the 207formula. Findings suggest that research findings show that the customer relationship management in Tejarat banks is a significant positive relationship with knowledge transfer, store of knowledge, and knowledge acquisition but its significant association with the use of knowledge cannot be verified. The highest correlation is between knowledge transfer and the customer relationship management.

Keywords: knowledge management; customer relationship management; knowledge acquisition; knowledge storage; knowledge transfer; knowledge utilization; organizational variables

Introduction
Knowledge Management as an intangible asset in recent years was an important and decisive for the successful implementation of program management systems in such a way that the effectiveness of organizations to be related to invent, take advantage, transfer and application of knowledge (Benbya,2008). The 1970s and the rapid advancement of high technology in the world, especially in the field of computer science and communications, economic development pattern the world has changed radically and since 1990s knowledge, as the most important factor is replaced with physical and financial capital. Modern organizations offer goods and

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services that are determined by each individual customer. In recent years, knowledge as a tool to reduce the gap between developing countries and developed countries has been used, and management of such hidden assets has attracted considerable attention in recent centuries (Bohling,2006).

Today, the knowledge or the knowledge-based economy with such factors as increasing competition, technological innovation and global nature of the market is defined (California Siebel, 2002). In this society organizations and companies should focus their attention to knowledge during startup in their business, because this is a key factor for building a competitive advantage. Moreover, in recent years knowledge as an organizational resource is considered crucial and decisive, and always there is a growing interest around this situation and for this reason the knowledge management is a priority for research in the academic community and including areas that companies allocate more money to performance. Customer relationship management and knowledge management are considered as a key strategic tool for all organizations and companies especially in the current competitive environment. In such a situation, the implementation of an effective knowledge management strategy for an organization to become a knowledge-based organization is necessary condition for organizations during this era of knowledge-based economy. And organizations for their participation in competitive markets require that considerable attention to their customers as assets are shifted. Leading knowledge-based organizations and with its customer satisfaction, and marketing costs have reduced the cost of producing(Jashapara,2004).

Customer relationship management is beyond the traditional operational automation that has made technical procedures for the sales, marketing, supply chain or service, and customer service in a customer relationship management system is not restricted merely to the quality of customer service. And customer relationship management systems are systems that overall progress of the company and also how to deal with customers' plans. Customer relationship management is one of the most important concepts for banks. The overall goal of any organization is providing goods and services to customers. For organizations the satisfactory value and its continuity is far more than attracting new customers(Holsapple,2004). In recent years, the companies are integrated and focused their efforts on knowledge management and customer relationship management because found that knowledge management plays a critical role in the success of customer relationship management. Identifying high value customers is a complex science and seems to indicate that the company is the sum of current customers. Technology can help but the processing power of information technology to knowledge management is effectively used. Therefore, the customer relationship management process is based on a breadth of knowledge, and this research wants to solve the problem of the bank customer in connection with the development of effective knowledge management. In this study, the researcher wants to study the relationship between knowledge management and customer relationship management in Tejarat banks is Isfahan, therefore the main research question is whether a significant relationship between knowledge management and customer relationship management are there? Which one of the infrastructural factors of knowledge management affects more on customer relationship management?

Research Framework
Knowledge Management

Consequently become a strategic resource for competitiveness and survival of organizations and communities need to develop and peers on ways to create, share and its use is vital. The demand for knowledge leads in turn increase the demand for knowledge storage and distribution. Knowledge management is a set of processes for understanding and applying strategic knowledge resource in organizations(Lin,2004).

Multiple and conflicting definitions of knowledge management are presented and because of this obstacle has been to provide a comprehensive definition of the concept; Because any person or organization from their perspective sees knowledge management based on a specific definition of knowledge management, it can also be defined. At the beginning of knowledge management as a process of applying a systematic approach for acquiring, structuring, management and distribution of knowledge across an organization to do things faster, re-use of best practices and reinventing are defined (Nonaka, 1994). Also, knowledge management is a structured approach procedure to identify, evaluate, organize, store, and use knowledge to meet the needs and establishes goals (Davenport and Prusak,1998).

But the definition of categories of knowledge management is introduced, which can assist us in understanding this concept. "Jones (2005)," believed that knowledge management is a systematic and integrated approach to identifying, managing, and sharing all intellectual property, including databases, documents, procedures, policies and practices in the individual's mind. "Chu (2005)," describes knowledge management in a framework that the structure and processes at individual, group and organizational practices so that the organization can learn what they need to gain new knowledge. This new knowledge creates value for its customers and stakeholders. Such a management framework integrates people, processes and technology in order to sustainable development(Gharibeh,2011).

Model of knowledge management processes Bukitz and Williams divided knowledge management into two parts: strategic and tactical. Tactical section includes the process of gaining the knowledge needed to operate, employing knowledge on value creation, learning, communication and knowledge sharing between individuals. Strategic process is to obtain a value from tactical process where the organization strategy with organizational objectives can be used. Jane Hiss Cook divides knowledge management definitions, into three categories:

1 – General definition of knowledge management is a multidisciplinary approach to achieve organizational objectives through the best application of knowledge creation in the organization.

2- Commercial definition of knowledge management which is the process of generating intellectual wealth.

3 - Define the information technology perspective of the view that knowledge management is a scientific discipline that promoted consistent approach to the identification, acquisition, evaluation and assessment and knowledge sharing in the organization.

Another dividing presents into two divergent perspectives on knowledge management that each of them leads to understand concept and the implementation of knowledge management in various perspectives: (Holsapple,2009).

1 - Focused on information technology: This perspective focuses tend to the construction of information systems and to involve experts who are familiar with computer and information sciences. This concept implies that the concept of knowledge or products that should exist independently of its source, identify, classify, store and distribute.

2 - Focused perspective on employees: The view will focus on the evaluation and development of a complex set of dynamic skills and techniques, which are variable. This approach looks for ways to encourage, intermediation and enable the exchange of knowledge with an emphasis on communication and interaction tools, and considers knowledge in relation to its sources which are its employees(Vizcaino,2009).

Despite these differences, researchers have presented different definitions of knowledge management:

• Knowledge management structure of a planned is the approach to the creation, sharing and use of knowledge as an asset and profit organization that is leading to the discovery of new opportunities .

• Knowledge management is the process of creating and sharing, transfer and retains knowledge so that it can be applied in an effective manner of organization .

• Burnett (2001) knows knowledge management in the process of creating, approving, presentation, dissemination and application of knowledge. According to him, knowledge management models shape the interaction between technologies and techniques. Accordingly, knowledge management on tools focuses practices and innovative approaches and systematic production management, acquisition, exchange, preservation, dissemination and utilization of knowledge, intellectual capital and intangible properties.

• O'Dell and Grayson (1998) stated that knowledge management is systematic approaches to find, understand and use this knowledge to create value applies(Benbya,2008).

Customer Relationship Management

-Some consider a customer relationship management strategy, technical, some other batch process and the information system (Thompson, 2004).

- Customer relationship management is a term for a set of methodologies, processes, software and systems to help organizations and companies in connection with their customers that are managed. (Burnett, 2001).

- Customer Relationship Management means creating and maintaining profitable customer relationships by identifying, through the appropriate use of information and communication technology (Davenport ,1995).

- Customer Relationship Management means to communicate with each of our valued customers through effective use of customer account information . (Lindgreen,2006)

In a process vision customer relationship management is considered as a set of business processes.

Macro and micro organizational processes can be made of a lot of sub-processes. The overall process, customer relationship management as a macro process include all internal activities which aims to create a long-term and profitable relationships with customers is done. and longer customer relationship management process, deals to manage the organization's

interactions with customers, with the aim of establishing and maintaining long-term relationships with customers, customer relationship management is based on feedback and recognition as a capability represents the ability to adapt and change their behavior versus individual clients that the organization is in different situations and at different times .Customer relationship management helps the organization as a strategy to with which customers communicate. In fact by this view, the organization divides our customers. And to decide that how much money should be spending for each part. Customer Relationship Management is a business strategy that is followed customer segmentation, customer-driven processes to implement his satisfaction (how), valuable results such as profitability, income and customer satisfaction (what and why) and Founded customers with quality data and to be empowered through information technology(Shiah,2005).

- Principles of Customer Relationship Management
Processes and customer relationship management applications based on the basic principles are as follows:

• Setting goals for every single customer:
One of the principles of customer relationship management is that customers have many choices and each requires its own customer service and customer relationship management based on customers' preferences and behaviors are treated separately.

• Customer choice based on the concept of customer lifetime value:
Customer relationship management which is considered in this article is that different customers have different value to the organization, so it must be profitable to attract and retain them.
One can distinguish the organization from its limited resources to allocate to earn better returns.
In summary, product customization, customer loyalty, and their selection is based on the concept of life-long basic principles are implementing customer relationship management (Gray and byun,2001).

• Understanding the goals of customer relationship management
Customer relationship management should be aimed at increasing customer loyalty over time to achieve it. According to the pyramid presented by the Kane Cold (2007), a time cannot reach afford to tip of the pyramid (loyalty program). Until the bottom of the pyramid at all levels of the organization is established. Basically for customer relationship management, making a series of important structural changes in the organization and project management information systems and business processes and employee behavior are required.
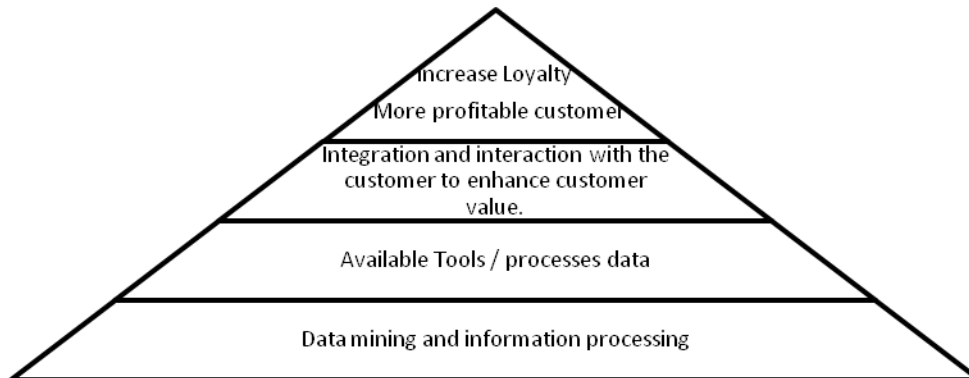
HRMARS
Exploring Intellectual Capital

Figure 2-10 aimed at understanding customer relationship management (Davenport & Beers , 1995)

Mr. Thomas Davenport, professor at Boston University, states that customer relationship management has been at the forefront for two reasons:

1- Public intense competition has increased, and the products are hard to tell apart and distinguish between them and the companies from a product-oriented approach, the focus will move to the client.

2- - Technology has reached the point of customer information from all firms that can be easily collected and placed in a single system. Professor Davenport says until recently we do not have the ability to manage a complex combination of information about customers. Because the data were stored in 20 different systems, but with the advancement of technology, Internet and networking, software, customer relationship management has found its place in the world.(Davenport & Beers , 1995)

- Relationship of Knowledge Management and Customer Relationship Management

Companies to improve their relationship with valuable customers, trying to help the customer loyalty and gain knowledge management that do not easily go down rival companies so that can gain competitive advantage. So the company as the acquisition of knowledge and expertise to the collective intelligence of an organization through the use of continuous organizational learning is conducive to innovation. Since a substantial part of the expertise achieved, then the customer is concerned, so the two concepts of knowledge management and customer relationship management are completely out of the relationship. Therefore, knowledge management organizations and customer relationship management systems must strengthen themselves. In addition to having a successful customer relationship management, it is necessary for companies to communicate with their customers in savings resulting from customer relationship management to integrate, and yet it's clear they have an obvious strategy. Therefore, the acquisition of customer knowledge must be aligned with business goals; otherwise it is futile and costly task. Despite the organizational concepts and solutions, customer relationship management or organizational process automation to improve organizational performance cannot run fast. Customer relationship management is a combination of several methods that can be developed within organizations to intelligently manage customer relationships; therefore, knowledge of customer requires companies to help customers better understand and communicate more effectively with our customers to manage. On the other hand, knowledge management, creating new ideas for the development

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of new products and services to help customer knowledge allowing organizations to derive from customer relationship management and related tools. Using obtained customer knowledge such as customer behavior, expectations, needs, buying patterns, and a good sense of communication products, even if it is negative, and organizations will be able to raise their sales, find a better position for itself in the market and ultimately increase customer satisfaction, improve overall communication with customers.

Customer relationship management is about managing customer knowledge to better understand and better serve their firm. (Mendoza ,2006), customer relationship management is definitely related to the knowledge management discipline; Thus, adequate and continuous updating of customer knowledge for effective customer relationship management system is very important(Swift,2001). According to the current important role play of customer-based knowledge management system in the business environment; there is a lack of a simple and general framework to integrate the functions of traditional customer relationship management, customer management and use of knowledge (Mendoza ,2006). In addition Zabla and colleagues know knowledge management as the main sub-process of customer relationship management. Because for effective management of customer relationship management, companies need the ability to develop customer knowledge management processes. Because imitate of these capabilities are difficult, they can become a source of competitive advantage. From a resource-based view, knowledge of the customer is a rare and precious asset for business that allows you to respond quickly to customer needs and can adapt to changing markets . As the search for competitive advantage is a key factor in the ongoing strategic management, we should notice that we are collecting information about clients in the areas of communications and display those customers that a superior value proposition based on this knowledge, a key advantage that can hardly be imitated. At this point, it is interesting to note that unlike the data or information, knowledge is embedded in people and not in information technology (Davenport, and Prusak,1998). The way through which the agency received the knowledge accumulated in the reservoir, share and strategic business and operational activities to maintain their competitive advantage is very important (Muazu ,2007). In this sense matters relating to personnel management rather than information technology development, knowledge management center limits have been raised. They have claimed that there is too much emphasis on the management of information technology in knowledge management literature and knowledge management requires a combination of employee skills, business processes and information technology. In summary, the relationship between the discipline of of customer relationship management and knowledge management and technological capabilities has already been recognized as an important research area that guarantees the need of more research (Mendoza, and Marius ,2006) . In addition, the authors believe that while the majority of customer relationship management research was conducted focusing on the technological aspects, important role in knowledge management is being recognized in research. In conclusion, we can say that the relationship between of customer relationship management and knowledge management is an important issue in research and management (Shiah, 2005).

Hypothesis

1 - Between generation of knowledge and of customer relationship management (CRM) database connection exists in bank.

2- Between saving of knowledge and customer relationship management (CRM) database connection exists in bank.

3- Between transmission of knowledge and customer relationship management (CRM) database connection exists in bank.

4- Between implementation of knowledge and customer relationship management (CRM) database connection exists in bank.

Research Methodology
Present study is on the base of the research method of descriptive - survey of field branch.

Statistical Society
The statistical society included the entire Isfahan province is more than 450 Tejarat banks, the sample was calculated using the 207 formula.

Data collection tools
Data collection methods associated with hypotheses and tools used by the census are questionnaires, interviews, library, internet and document study.

Research variables
Variables in this study include:
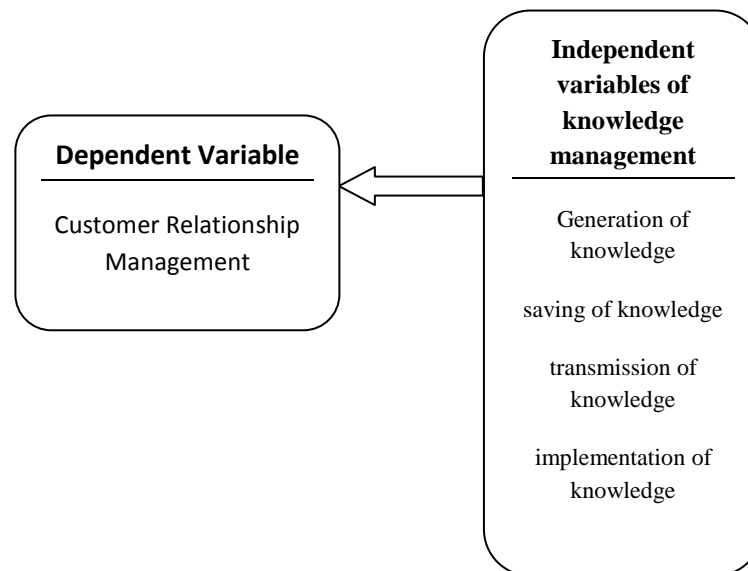
Reliability and Validity
In this study, the questionnaire which used is researcher constructed to assess the relationship between knowledge management and customer relationship management. In this study, the face validity is used. In accordance with these principles in order to get the validity of professors and experts were asked to study the question of reform apply in the questionnaire, collecting opinions and conclusions and apply them again to give questionnaires given after run

again, finally the questionnaire was confirmed by experts and professors. And to determine the reliability of the questionnaire, the Cronbach's Alpha was used.

$$r_a = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum \delta_j^2}{\delta^2}\right)$$

Alpha value for each factor was calculated from the output of statistical SPSS software. Since Cronbach alpha values obtained by questionnaire of customer relationship management is 81/0, and for questions of knowledge management is 83/0, and greater than 7. Test of reliability is acceptable.

Methods of data analysis
By Kolmogorov - Smirnov test, we investigated the normal distribution of variables, and by Pearson's correlation test between the variables the effectiveness in this study is investigated. Both descriptive and inferential analysis of the data was examined.

First hypothesis: the acquisition of knowledge and of customer relationship management at Isfahan province Tejarat Bank is significant.

Table: Correlation test of the first hypothesis

Customer Relationship Management	Generation of knowledge		
0.406	1	The Pearson correlation coefficient	**Generation of knowledge**
0.000	-	Sig	
207	207	N	
1	0.406	The Pearson correlation coefficient	**Customer Relationship Management**
-	0.000	Sig	
207	207	N	

According to SPSS output table, it indicates that the correlation between knowledge and of customer relationship management in banks is equal to 406/0. The differences between them by this number (sig) as the level of significance are shown. In the above table, the significance

level equal to 000/0 is obtained. And this means it is smaller than 05/0 and the significance level of 05/0 H0 hypothesis is rejected and accepted hypothesis H_1, this means that there is no significant correlation between knowledge and of customer relationship management in banks.

Second hypothesis: the saving knowledge of customer relationship management at Isfahan province Tejarat Bank is significant.

Table: Correlation test of the second hypothesis

Customer Relationship Management	saving knowledge		
0503	1	The Pearson correlation coefficient	saving knowledge
0.000	-	Sig	
207	207	N	
1	0.503	The Pearson correlation coefficient	Customer Relationship Management
-	0.000	Sig	
207	207	N	

According to SPSS output table, it indicates that the correlation coefficient between stored knowledge and customer relationship management in banks is equal to 503/0. The differences between them are shown by this number (sig) as the level of significance. In the above table, the significance level equal to 000/0 is obtained. And this means it is smaller than the 05/0; the significance level of 05/0 H0 hypothesis is rejected and accepted hypothesis H_1. This means that there is a significant correlation between stored knowledge and of customer relationship management in banks.

Third hypothesis: the implementation of knowledge and customer relationship management in Isfahan province Tejarat banks is significant.

Table: Correlation test of the third hypothesis

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Customer Relationship Management	implementation of knowledge		
0.112	1	The Pearson correlation coefficient	**implementation of knowledge**
0.108	-	Sig	
207	207	N	
1	0.112	The Pearson correlation coefficient	**Customer Relationship Management**
-	0.108	Sig	
207	207	N	

According to SPSS output table it indicates that the correlation between knowledge and customer relationship management using is equal to 112/0. The difference between them by this number (sig) as the level of significance is shown. In the above table, the significance level equal to 108/0 is obtained. And this means that 05/0 is bigger and at a significance level of 05/0 H0 hypothesis is accepted, meaning that there is no significant correlation between knowledge and use of customer relationship management in banks.

Fourth hypothesis: transmission of knowledge and customer relationship management in banks is significant.

Table: Correlation test of the forth hypothesis

Customer Relationship Management	transmission of knowledge		
0.544	1	The Pearson correlation coefficient	**transmission of knowledge**
0.000	-	Sig	
207	207	N	

			Customer Relationship Management
1	0.544	The Pearson correlation coefficient	
-	0.000	Sig	
207	207	N	

According to SPSS output table, it indicates that the correlation between knowledge transfer and customer relationship management is equal to 544/0, and the differences between are shown them by this number (sig) as the level of significance. In the above table, the significance level equal to 000/0 is obtained. And this means it is smaller than 05/0 and it is accepted that the significance level of 05/0 reject H0 hypothesis H_1 hypothesis, this means that a significant correlation exists between knowledge transfer and customer relationship management.

Table: The relationship between knowledge management and customer relationship management
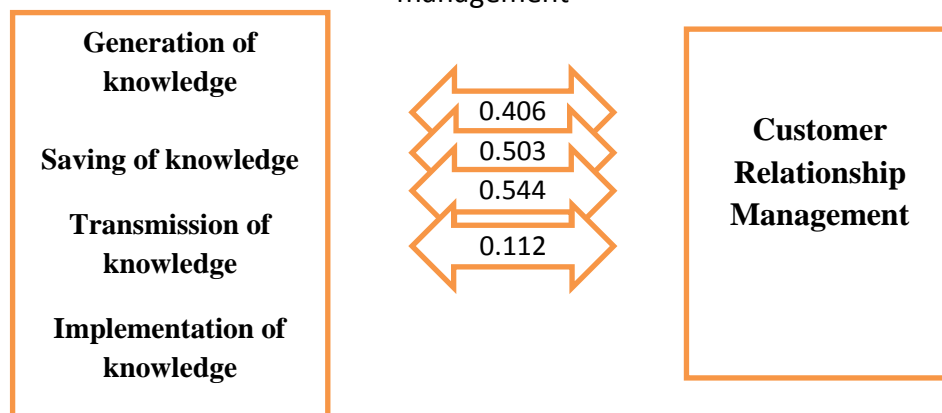
Research findings show that customer relationship management in Tejarat banks have shown significant positive relationship with knowledge transfer, and store of knowledge, but significant association with the use of knowledge cannot be verified. The highest correlation is between knowledge transfer and customer relationship management. The following suggestions for improving the Tejarat Bank knowledge management and customer relationship management systems are offered:

• Understanding customer knowledge as a valuable source of product innovation and process improvement processes to harness the potential of knowledge management and customer relationship management by senior management

• implementing and integrating knowledge management activities CRM processes and moving toward full implementation of Customer knowledge management

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• develop an integrated knowledge repository within the organization in order to overcome regional boundaries and separation between units and building integrated view of customer-related data as well as a set of related systems

• Change management - encourage the capture and dissemination of knowledge for customer relationship management

• Senior management efforts to encourage an organizational culture in which employees are motivated to apply knowledge, "for, of and about" customers with each other and to use the knowledge provided by others

• Improvement and applied startup Forums alleviate such tools as virtual think tank for the acquisition and application of knowledge to improve

• Creating evaluation systems to identify weaknesses in knowledge management and customer relationship management systems and reviewing and making any necessary modifications

• Making good communication between units, the flow of information to customers, market changes and information services of the best methods for optimal use of available information and knowledge

• The use of means of communication and interaction in the application and use of knowledge resources (suggestions opinion of customers, competitors, markets) in improving processes

• Training courses for those units customer relationship management and customer complaints toward strengthening their acquisition and use of knowledge resources and also establishes policies in respect of senior managers and also to identify the knowledge needed to develop the knowledge to improve the quantity and quality of bank

• Establish a system of performance-based pay and bonuses relating to customers, employees, customer value and customer orientation to the world of competitive.

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