### The impact of strategic knowledge on employee's innovation and Financial performance: a case of Maskan bank in Iran

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#### Abstract

The present paper has been conducted with the aim of studying the effect of strategic knowledge management on employee's innovation and financial performance in Maskan Bank of Iran. It is an applied and survey research. The research population includes all the employees of the branches of Maskan Bank in the west region of Tehran. For this purpose, closed questionnaires having 5 options (standard questionnaire of strategic knowledge management of Carolina Lopez and Angel Mirono containing 8 questions and the standard questionnaire of innovation of Dorabji et al. containing 50 questions and the standard questionnaire of financial performance containing 5 indices and 24 questions) have been used. For this purpose, close questionnaires with 5 options (strongly disagree, disagree, neutral, agree, strongly agree) have been used. The research questionnaire contained a total number of 81 closes questions. The validity of the present questionnaire has been tested based on content validity and its reliability has been calculated based on Cronbach's alpha which is equal to 95%. The sample volume has been calculated based on the Cochran's formula which is obtained to be equal to 244 employees of the branches of Maskan Bank of the west region of Tehran (including 181 male and 63 female employees) and the sample has been selected with the use of simple random sampling method. For analysis of the obtained data, descriptive statistics (frequency table) and inferential statistics (correlation coefficient and regression tests) have been used and the results indicate that there is a significant and positive correlation between the dual dimensions of strategic knowledge management, employee's innovation and financial performance. Also the dual dimensions of strategic knowledge management (coding strategy and privatization strategy) have an effective role on innovation and financial performance of the employees of Iran's Maskan Bank . In other words, dual dimensions of strategic knowledge management (coding strategy and privatization strategy) have a significant effect on innovation and financial performance of the employees Iran's Maskan Bank.

**Key words:** strategic knowledge management, employee's innovation and financial performance, Maskan Bank of Iran.

#### **Introduction:**

Today knowledge is known as one of the key and valuable wealth which is considered as the basis of sustainable growth and the secret to maintaining sustainable competitive advantage. In the current atmosphere of increasing universal competition there is no doubt regarding the values of knowledge and learning toward improving the organizational competencies (Parto and Ravilla, 2004) and knowledge is a strategic resource for an organization which has a fundamental role in creating sustainable competitive advantage (Grant, 1996). Many organizations use knowledge management as a fundamental strategy in line with gaining competitive advantage. Since the beginning of the 1990s knowledge management turned in to a critical factor for increasing the efficiency and productivity (Delong and Fahi, 2000). Knowledge management can have significant strategic outcomes for organizations, for example it can improve the competitive status of an entity, increase the productivity, improve the potential organizational agility, maximize the intellectual capital, increase customers' loyalty, improve organizational innovation, improve operational efficiency and increasing the stock value of firms (Wa, 2008). Therefore; the ability of management of this knowledge has turned into a very important skill in line with providing and supporting organizational success and maintaining its survival in the new knowledge based economy (Sing, 2008). The researcher in the present paper intends to study the effect of strategic knowledge management on employee's innovation and financial performance in Maskan Bank of Iran in Tehran. The following section has been allocated to literature review and then research methodology will be presented and in the end the findings will be discussed and recommendations are presented.

#### Strategic knowledge management:

The strategic position of an organization helps the knowledge management initiatives to be recognized which consequently results in supporting the mission, vision and goals of the organization and reinforces the competitive status of the organization as well as creates stockholder value. In other words , an organization who knows more about the relations of the customers, products, technology, market and the relationship between these can have a better performance. Due to this most of the executive managers try to define the relationship between the competitive strategy of their organization and their resources and intellectual capacities in transparent and clear way. Because they lack developed strategic models with which they can relate the processes, technologies and knowledge based structures to business strategy.

Therefore; there is an intense need of a proper model by them which can be called knowledge based strategy (Zack, 2000).

Categorization of Hanson et al. (1999) regarding the knowledge strategies have made distinction between privatization and regulated establishment of knowledge and this categorization is based on creating distinction between explicit and implicit knowledge (Grover & Davenport, 2001) and distinctive application of information technology. In this strategy of regulated establishment knowledge is established with application of individuals-documents method. Knowledge is extracted from a person who has developed it and it is made the use of the independent individual and is again made operational for various purposes. The companies involved in establishment of knowledge mainly made investment in information technology. On the other hand, privatization strategy deals with individuals discourse no with the subjects and topics in a database. In fact, it is considered as a person to person approach in which knowledge not only is shared face to face but as well is shard through telephone, electronic post and video conference which results in formation of networks among individuals (Lopez -Nicolas and Meronocerdan, 2006).

Categorization of Hanson et al. (1999) due to its lack of compatibility with the combination of regulated establishment and privatization has been criticized and also due to this reason that it has emphasized that

firms making effort in line with achieving perfection in both the strategies will be unsuccessful in both of them has been criticized. Some authors refer to the advise on "non- extravagance" as an entirely naïve and dangerous process. In the end, master Choi and et al. (2008) are in the process of publishing their findings resulting from a study regarding knowledge management strategies and their findings will prove that inclined strategies toward explicit knowledge (systems or regulated establishment) or toward implicit knowledge (human or privatization) with regards to organizational performance are non-complementary and therefore; support the ideas of Hanson and et al. (1999) regarding the risks of getting involved in between (Lopez -Nicolas and Merono-cerdan, 2006)

In implementation of knowledge management, the subject should be started with determination of knowledge strategy and its management and key choices the organization should make in these subjects. In other words, the first fundamental action in starting the implementation is creating the proper strategy (Afraze, 1386).

It should be noted that at late 1990s, the term "knowledge strategy" emerged or the first time in the management literature field as a response to this question that "what are the important knowledge for an organization?" For starting the implementation of knowledge strategy, managers require a framework with which they can identify the strategic areas of knowledge (strategic knowledge) and establish its plan. In line with this they should make use of business strategy (Zack, 1999). In other words, while establishing the knowledge strategy, the organization's knowledge is placed parallel and in the same direction with business strategy which has been predetermined (Jones, 2000). Some scholars believe that the concepts of "knowledge strategy" and "knowledge management strategy" are completely interdependent and no border should be drawn between them; because practically the identification stages of the organization's strategic knowledge and implementation of the executive processes of knowledge management are performed simultaneously (Kalahan, 2003).

Knowledge strategy management in an organization should reflect its competitive strategies. On the other hand, the competitive strategies also should have the potential of carrying out and completing the knowledge management strategy (Sivi, 2000). For this purpose, organizations first should implement a SWOT analysis based on knowledge and with this they should establish a proper plan for thier knowledge resources as well as their capabilities for confronting the existing strategic opportunities and risks so that they can identify their strength and weaknesses. Organizations can use these plans for the strategic direction of their knowledge management plans and reinforce their knowledge advantages and reduce their knowledge weaknesses. In this way they will be able to create value for their beneficiaries. The gap between the knowledge gap. This gap should be identified by knowledge management and should be removed (Zack, 1999).

Using knowledge for the creation of competitive advantage has been always emphasized as a significant part of the definitions of the strategic management and for knowledge management. In other words, there would be no knowledge management unless competitive advantage will be created in it. Hence; it is necessary to present and seek the magnitude of the relationship between knowledge management and competitive advantage as an empirical question. This relationship is related with strategy formulation and implementation (Afrazeh, 2007). In fact, some of the factors with which knowledge management can result in competitive advantage include:

Knowledge management can result in an innovative strategy which is not possible to gain without its implementation, for example; if a company with a better use of knowledge will use more appropriate

methods and software will gain higher productivity comparing to its competitors (DehghanNajm, 2009: 48-49);

Knowledge management can make possible the better implementation of an important but common strategy all across an industry. For example, studies have shown that factories with more active and innovative methods in knowledge creation, usually obtain larger profitability comparing to organizations with weaker knowledge strategy;

Companies can obtain advantage by adding knowledge to their products and services they are providing for sale. For example, the ability of reasoning and responding to the questions dependent to a certain situation in a website of service provision to customers or another specific topic;

Companies can also gain competitive advantage with the use of knowledge and knowledge management for good implementation of non-strategic processes, for example, using the dominant principles on knowledge management, like the policy of using the best type of operation in various activities of the organization such as: knowledge sharing processes, financial activities, and efficient promotion of knowledge about the human resources or information technology processes, are effective in creating advantage. In these cases also usually we can gain advantage in comparison to others (Martini and Palgrini, 2005).

The important point in relation with establishment of the organization's knowledge strategy is that those who are establishing it should have full mastery in the subject of knowledge management and identification of strategic opportunities, because as experience has shown that those companies that in them knowledge management is only discussed by middle managers and advisors, those who establish the organization strategy didn't have any role in this process, don't get the desirable opportunity to turn knowledge to strategic advantage. Hence; it is necessary that these two groups will have close and aligned cooperation and interaction in applying knowledge management (at strategic and operational levels) (Afrazeh, 2007).

Strategic planning of knowledge management should be a part of the overall strategy of the company, it should be proportional and consistent with the philosophy of the management of the goals and capabilities of the company and also should be designed with consideration of the risks, opportunities, strengths and weaknesses (SWOT) related to knowledge.

The necessary steps for determination of the strategic plan of knowledge management are as per the following:

- 1. Describing knowledge management perspectives ;
- 2. Understanding "customer's service pattern" for the company and the overall goals, visions of the company and creating a customer-specific service pattern through the knowledge perspective;
- 3. Determining the way knowledge management strategy and knowledge support the firm's strategy and the elements related to it;
- 4. Creating capabilities, such as research and development, strong corporate culture, information technology capabilities and supporting the organization's managers;
- 5. Understanding the overall value of the most important activities and steps of knowledge management which have been determined as a part of knowledge perspective planning;
- 6. Planning the priority of the goals dependent on knowledge, knowledge management activities and the concentration areas for specifying risks, opportunities, strengths and weaknesses (SWOT),
- 7. Designing and documenting the strategy in such as way that it will contain all the desirable elements and

8. Developing overall plans of knowledge management such as: overall functions, needs, infrastructures, planning design, budget, and coordination with the other activities of the organization and so on (Afrazeh, 2007).

### **Employee's innovation:**

In the literature the concepts of creativity, innovation and entrepreneurship have been used as synonyms (Martins and Terblanch, 2003; Moghimi, 2006). However; each of these concepts has a specific meaning. Cohen (1985) in regards to the difference between creativity and innovation states that creativity is creating something out of nothing, while, innovation turns that created thing into a service or product. Badavi (1998) also writes in this regard: creativity creates something new while, innovation uses something new (Coming, 1998). Entrepreneurship is a process in which people with innovation turn useless opportunities into situations of meeting a demand (Nandan, 2007). Hence; we can say that innovation is one of the fundamental and basic elements of entrepreneurship (Johnson and Elson, 2001; Nandan, 2007).

Most of the authors now unanimously agree that the new production process is "creation" and although creativity is an important perquisite for innovation these two concepts are not synonyms.

Of course, it should be mentioned that although creativity and innovation are different from each other however; they are related to each other and their relation can be described in this way:

Innovation is the successful implementation of creative ideas inside an organization. From this perspective, the creativity of individuals and teams is the starting point of innovation. In fact, creativity is the necessary condition for innovation but not the sufficient condition (Goyal and Akhilish, 2007).

Innovation is usually together with change and is considered as a new thing which results in change, however; not every change is innovation, because it doesn't included new ideas and doesn't lead to organizational improvement (Martins and Terblank, 2003).

Therefore; from the above mentioned definitions we can understand that the definition of the term innovation during years has gone under so much of changes. In 1960s and 1970s innovation was considered as a process of presenting a change. From the end of 1960s the definition of the term innovation apperantly included the concept of modification and success. This has been reflected in terms such as "effectively", "usefully" and "satisfied customers". This perception stabilization of the term "innovation" which includes the concept of successful business as well, probably has been due to the increases of business competition and development of concentration on customers which has been happened during the last 30 years.

Change in the concept and definition of innovation in which the concept of "success" is emphasized is apparent in the definitions emerged in the end and after 1960s including:

Innovation includes successful use of the new ideas. Therefore; it refers to two conditions: freshness and application (Mires and Marcus, 1969, cited by Alger, Lapirda and Shiva, 2006).

In the literature of innovation four different approaches can be named:

- 1. Individual-oriented
- 2. Structure-oriented
- 3. Interaction-oriented
- 4. Innovation-oriented systems

The individual-oriented perspective emphasizes on the role of the individualistic factors such as age, educational level, gender, cognitive style and creativity. Structural perspective concentrates on organizational characteristics. Interactive perspective which has received an increasing attention recently, emphasizes on this point that who it affects the innovation process structure. The fourth research school

which has received so much of attention during the recent years, studies he way regional and national innovative systems affect innovative activities in companies. The main concentration of which is on organization in environment, interactive learning, knowledge creation, practical use of knowledge and knowledge distribution (Johnson, Alsen and Lampkin, 2001).

Scholars and experts have named different dimensions to innovation which will be discussed below.

Daft (1994), has proposed a two cores model for innovation. These two cores include: technology innovation and administrative innovation. Kooper (1998), has proposed a multi-dimensional model for innovation and these dimensions are: radical innovation verses gradual innovation, technological innovation verses administrative innovation, productive innovation verses procedural innovation.

John distinguishes three innovations: productive innovation, procedural innovation and market innovation. Productive innovation provides a tool for production. Procedural innovation is a tool for maintaining and improving the quality and the cost savings. Market innovation is related to mixing with the targeted markets and that how to provide the market with services in the best way and its aim is to identify the new markets with better potential and to identify the new and better ways of service provision to the targeted markets (Ojalasu, 2008).

Damanpour and Gopalakrishnan have divided innovation into two groups: technology innovation and executive innovation. Technology innovation includes new technologies, products and services and itself is divided into two groups of 1- productive innovation and 2- procedural innovation. Administrative innovation refers to organizational new policies, procedures and forms (Jimens-Jimens, 2008).

#### **Financial performance:**

Dovini et al. (2004) define organizational performance as below:

Organizational performance includes effective external criteria (of an organization) which include three main domains:

- 1) Financial performance (profit, capital return, investment return and ...);
- 2) Market performance (sales, market share and ...); and
- 3) Return on equity (total return on equity, economical value added and ...).

Categorization of the organizational performance indices generally goes back to our way of defining organizational success. This definition also to some extent depends on the organization's performance and its interaction with the surrounding environment (Dovini et al., 2004: 92).

In one categorization, the organizational performance criteria are categorized first in terms of who are the beneficiaries of a certain criterion, second in terms of the time framework under which the criterion should be measured and third in terms of how the criterion should be measures, whether it is measured based on market or based on accounting data, whether it is financial or non-financial, subjective or objective.

Concerning the type of the main beneficiaries in the organization, the type of the organizational performance criteria differ. In consulting and legal organizations, the expert employees of the organization are the main groups of beneficiaries and in investment organizations the capital owners are the most important beneficiaries. Hence in each of them, certain criteria proportional with maintaining the interests of the relevant beneficiary group receives attention for maintaining the organization's survival. Regarding the net profit capital owners and consulting companies the satisfaction level of the expert employees of the organization is the most important organizational performance (Dovini et al., 2004: 89). In measurement of the organizational performance, experts have made a fundamental distinction between the indices based on market and indices based on financial performance. Although in most of the cases

there is a significant relationship between market share (one of the most important indices of market performance) and profitability, which is one of the most important indices of financial performance. However; in some of the cases such as influence condition in market, this relationship is not necessarily positive and significant. Therefore; contrary to most of the scholars who usually don't make distinction between these two groups, in the evaluation process of the organizational performance one of the most important actions which should be taken is making a distinction between market performance based indices (Dovini et al., 2004, cited from Frickcell& Barton, 1990 and Villard, 1983).

Financial performance is also adependent variable which is divided into five dimensions of stock return, equity return, investment return, and capital return and debt ratio. The definition of each of these dimensions has been presented below:

From long time ago till so far so many studies have been conducted for obtaining an appropriate criterion for evaluation of the firms and managers performance for ensuring the direction of the company with the interest of the potential investors and as a basis for making economical decisions of the potential investors and granting them credit. The criteria for firms' financial performance measurement can be divided into two categories of accounting and economical criteria as per the accounting and economical concepts. In the accounting criteria the firm's performance is evaluated with the use of accounting data, while, in the economical criteria the firm's performance is evaluated based on the power of acquiring the current assets profit and potential investment as well as return rate and capital cost rate (Jahankhani&Sajadi, 1995: 6, 5).

In this study, financial performance is the dependent variable and the following dimensions are used for its measurement:

Among the most popular presented ratios in the banking industry camel index can be mentioned that in 1988 has been recommended by National Credit Union Administration of United States of America (NCUA) and has been approved by Basel Committee on Banking Supervision as well. The term camel which is used as an Abbreviated name of an index is a term which is consisted from the following words: Capital; assets; management; earnings; liquidity

The elements of this index are:

#### 1. Capital adequacy

Enough and proper capital is one of the necessary conditions for maintaining the banking system health and every banks and credit institutions for gauranting the stability and sustainability of their activities should always establish a proper ratio between the existing capital and risk in their assets. This ratio results from dividing the base capital to the sum of the weighted risk assets. It should be noted that Basel Committee have considered the minimum amount of 8% for the ratio of capital adequacy of the Banks of the member countries of the Organization for Economic Cooperation and Development; however, for banks in Asian countries due to a weak credit monitoring system in place the minimum of this ratio has been announced to be 12%.

### base capital weighted risk assets

Weighted risk assets: weighted assets are obtained from the sum of individual asset items which have been multiplied to their risk factor of them.

#### 2. Assets quality:

Assets' quality in financial institutions is related to their financial performance. The value of the financial facilities of a bank depends on the value of the liquidity of their collaterals, while the value of their investments depends on the value of market. Banks for maintaining the quality of their assets should use stable assets in their portfolio and for compensating their value reduction should consider appropriate reserves and a scheduled plan.

Used indices for evaluation of assets' qualities:

1-2) asset to weighted risk assets ratio to sum of assets and liabilities

2-2) ratio of assets with income to the sum of assets (assets with income mainly including Interest receivable from loans granted, guaranteeing fund and receivable fees and ...).

3-2) ratio of non-current receivables to gross balance of loans

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(ذم م به مانده مطالبات غير جارى) the ratio of non-current receivables (

3. Management quality:

Considering the deciding role of management in the success of organizations and institutions Insights, professional integrity and competence of the management of financial institutions and has a special significant and in most of rankings a significant weight is allocated to it comparing to other indicators. However, due to the fact that the topic has a qualitative air to it, evaluating the performance of a management is so much difficult and some of the criteria for management performance evaluation will be mentioned in the following.

- 1-3) per capita of attracted deposits by manpower
- 2-3) per capita of granted loans by manpower
- 3-3) per capita of attracted deposits by branches
- 4-3) per capita of loans granted by branches
- 5-3) Intellectual capital (including includes human, organizational and communicational capitals).
- 4. Earnings:

The quality and trend of obtaining incomes in a financial institution has a close relationship with the way of its assets and liabilities management. Obtaining incomes in a financial institution is together with profitability, in such a way that it supports the growth of assets and the potential of making reserve in the organization so that it will result in increasing the value of shareholders' equity. Good income performance, leads to increasing the confidence of depositors, investors, lenders and public section toward the institution. The indicators being used for assessing the income status can be mentioned as follow:

1-4): ROA (Average return on assets): is obtained by dividing net profit to average of assets.

2-4) ROE (Return on Equity): this index is also known as return on special value) which is obtained by dividing net profit on equity.

3-4) ratio of net profit to total assets

4-4) ratio of operational costs to provided credits and loans: this ratio calculated cost as per every unit of money of the granted loan.

4-5) ratio of net profit to employees

4-6) ratio of net profit to fixed assets

4-7) ratio of fee-based revenues to total revenues

5. Capital adequacy (Liquidity):

Controlling liquidity is one of the most important duties of management of a bank. Using short-term funds in long-term investments will make the bank face some risks, because those who are having investment accounts might at any time decide to withdraw their funds and this will force the bank to sell some of its properties and therefore, a bank should have enough liquidity to respond to the demands of depositors and lenders so that it can earn the public confidence toward it. Banks require having an effective management and debt system to be able to minimize the inconsistency in due dates of assets and debts and optimize their returns. Also liquidity has a reverse relationship with profitability and therefore financial institutions should establish an appropriate balance between liquidity and profitability. A number of liquidity assessment criteria are as per following:

1-5) ratio of cash to total deposits

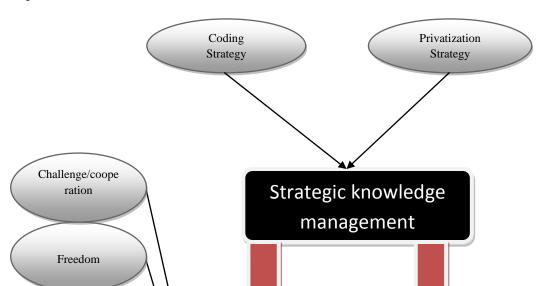
2-5) ratio of cash assetsto short-term debts

3-5) ratio of total deposits to total assets

4-5) ratio of 100 top deposits to total deposits

5-5) liquidity ratio: it is one of the most important indices in assessment of liquidity status which indicates to the minimum reserve of required liquidity and the minimum acceptable ratio is 3%.

Considering the aforementioned a summarization of the conceptual model of the present study is presented below:



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Hence the research hypotheses will be presented as the following:

H1: coding strategy has an effective role on innovation of the employees of Iran's Maskan Bank of Tehran.

H2: Privatization strategy has an effective role on innovation of the employees of Iran's Maskan Bank of Tehran.

H3: Coding strategy has an effective role on financial performance of Iran's Maskan Bank of Tehran.

H4: Privatization strategy has an effective role on financial performance of Iran's Maskan Bank of Tehran.

Research methodology

The present research is an applied research from aim point of view and from the point of view of the method of gathering data is a descriptive (non-empirical) research which is one of the types of field studies and since in this research the author seeks to specify and study the role of strategic knowledge management on innovation and financial performance of Iran's Maskan Bank of Tehran, this research is a correlation research with regards to its methodology and the conduce method of it is survey which the most important advantage of it is the possibility of generalization of the found results.

**Variables:**Strategic knowledge management has been considered as independent variable and employee's innovation and financial performance have been considered as dependent variables.

Research population and sample: the population of the present research include all the employees of the branches of Maskan Bank of the west region of Tehran; which are a total number of 662 employees.

For determining the minimum required sample size, 1<sup>st</sup> formula of Cochran for limited and certain population has been used and therefore; the minimum size of the required samples is determined to be 244 individuals which has been used as the basis for analysis. Since the sample under study is consisted from a group of the employees of the branches of Maskan Bank of the west region of Tehran, therefore it

is homogeneous and simple random sampling method has been used. The demographic characteristics of the respondents are as per the following table:

		end er	e	larit al atus		Ed	ucatio			Emplo ent ty	-		А	ge				Wo erie	rk ence	
	Μ	F	S	M	D	A	В	Μ	G	S	C	2	2	3	4	1	5	]	1	2
	al	e	in	ar	ipl	S	ach	ast	0	e	0	4	5	5	5			0	5	0
	e	m	gl	rie	0	S	elo	er	v	mi	n	у	t	t	а	t	t		to	У
		al	e	d	m	0	r	an	er	-	tr	ea	0	0	n	0	0	t	2	e
		e			а	с		d	n	go	а	rs	3	4	d	5	1	0	0	а
						i		hi	m	ve	C	a	4	4	m	У	0	1	У	r
Respondents						a +		gh er	e nt	rn m	t u	n d			0 r	e o	y e	1 5	ea rs	s
characteristics						t e		er	e m	en	u a	u le			r e	a r	e a	5	18	a n
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F	1	6	3	2	2	1	1	6	1	4	1	1	7	7		7			5	8
Frequency	8	3	2	12	4	0	44	6	8 8	4	2	2	3	8	1		1	1	9	5
	1	2	1	0	1	4	5	2	-	1	ہے	5	2	2	2	2	1	_	2	2
Percentage	7 4	2 6	1 3	8 7	1 0	4	5 9	2 7	7 7	1 8	5	5	3 0	3 2	3 3	3	1 7	1	2 4	3 5

Table (1): The respondents' characteristics

**Data collection:** data collection has been done through questionnaires. 244 questionnaires have been distributed and collected during 3 weeks in face to face among the research sample. The respondents were assured that their name and the name of their organizations will be treated confidentially and will not be reveals to anyone or anywhere.

**Measurement scale, validity and reliability:** the present research questionnaire contains 63 closes questions. The validity of the questionnaire has been tested based on content validity and its reliability has been calculated with the use of Cronbach's alpha which is equal to 92%. The validity of the questionnaire has been tested based on content validity and determining the content validity index. The content validity index which is shown in abbreviation as CVI, is the average values of the retained numbers in the model of CVR which has been tested. CVI indicate to the comprehensive judgments about the validity or the possibility of implementing the model and is a final model or too as much as the CVI value of content validity closes to 99% and the contrary is also true.

Content validity index:  $CVI = \frac{\sum_{n=1}^{1} CVR}{Retained numbers}$ 

CVR : is the linear and direct transformation of the panel's group members who has chosen the necessary phrase.

Retained number: the number of retained items

It should be mentioned hat with replacing in the above equation, the content validity index is obtained to be equal to 0.7 (70%) which indicates to the content validity of the questionnaire. Also, each question in the questionnaire includes five options (strongly disagree, disagree, neutral, agree and strongly agree) and the respondents should choose from these options.

#### Analysis and findings:

For studying the effect of strategic knowledge management on employee's innovation and financial performance in Maskan Bank of Iran data analysis has been sued and the findings are as per the following:

First for determining the correlation between the variables, correlation coefficient has been used and that software output has been presented in the below table:

Variables	Coding strategy	Privatizatio n strategy	Innovati on	Capita 1 adequa cy	Assets quality	Manageme nt quality	Earnin gs	Liquid ity	Financial performa nce
Coding strategy	1								
Privatizat ion strategy	.000 0.475	1							
Innovatio n	.000 0.779	.000 0.822	1						
Capital adequacy	.000 0.482	.000 0.487	.000 0.719	1					
Assets quality	.000 0.405	.000 0.615	.000 0.747	.000 0.728	1				
Managem ent quality	.000 0.402	.000 0.551	.000 0.689	.000 0.678	.000 0.628	1			
Earnings	.000	.000	.000	.000	.000	.000	1		

Table (2): Software output for the correlation coefficient between the variables

	0.442	0.600	0.763	0.858	0.910	0.666			
	.000	.000	.000	.000	.000	.000	.000		
Liquidity	0.437	0.527	0.683	0.747	0.746	0.573	0.797	1	
Financial	.000	.000	.000	.000	.000	.000	.000		
performa nce	0.480	0.653	0.811	0.881	0.921	0.791	0.963	1	

1<sup>st</sup>Research hypothesis test:Coding strategy has an effective role on employee's innovation in Maskan Bank of Iran.

The details of the regression fit model between the coding strategy dimension of the variables of strategic knowledge management and employee's innovation have been presented in table 3.

Parameter	Regression factor	Estimate error	Standard coefficient	T-test	Significan ce level		
The role of coding strategy on innovation	0.581	0.03	0. 779	19.327	0.000		
Variance analysis to		Model's significance level: 0.000					
Determining fact		Modified determining factor: 0.605					

Table (3): The results of regression fit for 1<sup>st</sup> research hypothesis

The modified determining factor obtained from table 3 shows that the regression model can explain up to 60.5% of the existing changes on innovation variable. The results of the variance analysis test in the table also indicate that the explained changes rate of the innovation variable in this model is significant at the first type error level of 0.05.

Due to the obtained significance level, H0 hypothesis is rejected. Therefore; coding strategy dimension of the strategic knowledge management has a significant effect on innovation of the employees of the Maskan Bank of Iran and this hypothesis is accepted at the first type error level of 0.05. the regression coefficient of the coding strategy dimension of the strategic knowledge management is equal to 0.581 which means for each one unit change in the dimension of coding strategy of the strategic knowledge management variable we will have an increase equal to 0.581 of a unit in the variable of employee's innovation. The fitted regression model can be shown as the following in brief:

# Employee's innovation = 0.581 (coding strategy dimension of strategic knowledge management variable) + error

2<sup>nd</sup>Research hypothesis test: privatization strategy has an effective role on employee's innovation in Maskan Bank of Iran.

The details of the regression model fit between the privatization strategy dimension of strategic knowledge management and employee's innovation variables have been presented in table 4.

Parameter	Regression factor	Estimate error	Standard coefficient	T-test	Significan ce level
The role of privatization strategy on innovation	0.575	0.026	0. 822	22.423	0.000

Table (4): The results of regression fit for 2<sup>nd</sup>research hypothesis

Variance analysis test: 502.779	Model's significance level: 0.000
Determining factor: 0.675	Modified determining factor: 0.674

The modified determining factor obtained from table 4 shows that the regression model can explain up to 67.4% of the existing changes in the innovation variable. The results of the variance analysis test in the table also indicate that the explained changes rate of the innovation variable in this model is significant at the first type error level of 0.05.

Due to the obtained significance level, the H0 hypothesis is rejected. Therefore; privatization strategy dimension of the strategic knowledge management variable has a significant effect on innovation of the employees of the Maskan Bank of Iran and this hypothesis is accepted at the first type error level of 0.05. the regression coefficient of the privatization strategy dimension of the strategic knowledge management variable is equal to 0.575 which means for each one unit change in the dimension of privatization strategy of the strategic knowledge management variable we will have an increase equal to 0.575 of a unit in the variable of employee's innovation. The fitted regression model can be shown as the following in brief:

## Employee's innovation = 0.575 (privatization strategy dimension of strategic knowledge management variable) + error

**3<sup>rd</sup> Research hypothesis test:**coding strategy has an effective role on financial performance ofMaskan Bank of Iran.

The details of the regression model fit between the coding strategy dimension of strategic knowledge management and financial performance variable have been presented in table 5.

Parameter	Regression factor	Estimate error	Standard coefficient	T-test	Significan ce level		
The role of coding strategy on financial performance	0.427	0.05	0. 480	8.515	0.000		
Variance analysis t		Model's significance level: 0.000					
Determining fact		Modified determining factor: 0.227					

Table (5): The results of regression fit for 3<sup>nd</sup> research hypothesis

The modified determining factor obtained from table 5 shows that the regression model can explain up to 22.7% of the existing changes in the financial performance variable. The results of the variance analysis test in the table also indicate that the explained changes rate of the financial performance variable in this model is significant at the first type error level of 0.05.

Due to the obtained significance level, the H0 hypothesis is rejected. Therefore; coding strategy dimension of the strategic knowledge management variable has a significant effect on financial performance of Maskan Bank of Iran and this hypothesis is accepted at the first type error level of 0.05. the regression coefficient of the coding strategy dimension of the strategic knowledge management variable is equal to 0.427 which means for each one unit change in the dimension of coding strategy of the strategic knowledge management variable we will have an increase equal to 0.427 of a unit in the variable of financial performance. The fitted regression model can be shown as the following in brief:

# Financial performance = 0.427 (coding strategy dimension of strategic knowledge management variable) + error

Also the details of the results of the regression model fit between the coding strategy of strategic knowledge management variables and the five dimensions of financial performance variable can be presented as per table 6.

Table (6): results of regression model fit for 5 dimension of financial performance variables

parameter	regression coefficient	Estimation error	Standard coefficient	Determining factor	Sig. level
Role of coding strategy on capital adequacy	0.579	0.068	0.482	0.232	.000
Role of coding strategy on assets quality	0.417	0.601	0.405	0.164	.000
Role of coding strategy on management quality	0.382	0.056	0.402	0.161	.000
Role of coding strategy on earnings	0.434	0.957	0.442	0.195	.000
Role of coding strategy on liquidity	0.414	0.055	0.437	0.191	.000

Considering the obtained significance level at the first type error level of 0.05 it can be claimed that the effect of the dimension of coding strategy of strategic knowledge management variable on 5 dimensions of financial performance of Maskan Bank of Iran is significant. Also, based on the comparison of the regression coefficient of each of the five dimensions of financial performance variable it can be stated that the dimension of coding strategy of strategic knowledge management variable have the largest effect on the dimension of capital adequacy of financial performance and the smallest effect on the management quality dimension of financial performance.

4<sup>th</sup> Research hypothesis test: privatization strategy has an effective role on financial performance of Maskan Bank of Iran.

The details of the regression model fit between the privatization strategy dimension of strategic knowledge management and financial performance variables have been presented in table 7.

		\$		51		
Parameter	Regression coefficient	Estimation error	Standardized coefficient	t-test	Sig. value	
Role of privatization strategy on financial performance	0.531	0.041	0.635	12.802	.000	
Variance analysis test: 163.883			Model's significance level: 0.000			
Determining factor: 0.404			Modified determining factor: 0.401			

Table (7): Results of regression model fit for 4<sup>th</sup> research hypothesis

The modified determining factor obtained from table 7 shows that the regression model can explain up to 40.1% of the existing changes in the financial performance variable. The results of the variance analysis test in the table also indicate that the explained changes rate of the financial performance variable in this model is significant at the first type error level of 0.05.

Due to the obtained significance level, the H0 hypothesis is rejected. Therefore; privatization strategy dimension of the strategic knowledge management variable has a significant effect on financial performance of Maskan Bank of Iran and this hypothesis is accepted at the first type error level of 0.05. the regression coefficient of the privatization strategy dimension of the strategic knowledge management variable is equal to 0.531 which means for each one unit change in the dimension of privatization strategy of the strategic knowledge management variable we will have an increase equal to 0.531 of a unit in the variable of financial performance. The fitted regression model can be shown as the following in brief:

# Financial performance = 0.531 (privatization strategy dimension of strategic knowledge management variable) + error

Also, the results of the regression model fit details between privatization strategy dimension of strategic knowledge management and 5 dimensions of financial performance can be presented as table 8 below.

Parameter	Regression coefficient	Estimation error	Standardized factor	Determining coefficient	Sig. level
Role of privatization strategy on capital adequacy	0.550	0.063	0.487	0.238	.000
Role of privatization strategy on assets quality	0.594	0.049	0.615	0.378	.000
Role of privatization strategy on management quality	0.491	0.048	0.551	0.303	.000
Role of privatization strategy on earnings	0.553	0.048	0.600	0.359	.000
Role of privatization strategy on liquidity	0.469	0.049	0.527	0.278	.000

Considering the obtained results at the first type error level of 0.05 it can be claimed that privatization strategy dimension of strategic knowledge management variable has a significant effect on 5 dimensions of financial performance of Maskan Bank of Iran. Also, based on the comparison of the regression coefficient of each of the five dimensions of financial performance variable it can be stated that the dimension of privatization strategy dimension of strategic knowledge management variable has the largest effect on the dimension of earnings of financial performance and has the smallest effect on liquidity dimension of financial performance.

#### **Discussion and conclusion**

The obtained results from the present research which seeks to study the effect of strategic knowledge management on employee's innovation and financial performance in Maskan Bank of Iran will be summarized as below:

The regression test results indicate that the dual dimensions of strategic knowledge management (coding strategy and privatization strategy) have an effective role in employee's innovation and financial performance (and 5 dimensions of financial performance) inMaskan Bank of Iran in Tehran. In other words, the dual dimensions of strategic knowledge management (coding strategy and privatization strategy) have a significant effect on employee's innovation and financial performance (and 5 dimensions of financial performance) inMaskan Bank of Iran in Tehran.

In the age of communications and information technology, knowledge is considered as the fundamental factor and critical sources of the organizations in the field of competition for gaining sustainable competitive advantage. In line with changing from an industry based economy to a knowledge based economy, organizations have also tried to increase their competitive power with relying on knowledge and information and applying it in the business process. In this situation, organizations have been able to keep their strong competitive status for years. They would have create or maximize value through the optimization process (or saving process). Organizations with good performance would have optimized their production with reducing the production time, improving the product quality and reducing the number of employees. Therefore; creating more value mostly was dependant on the industrial capacity and capital budgeting- tangible and financial assets. This is while in the knowledge based economy this approach is not feasible due to some reasons. First, considering the short lifespan of knowledge and high level of innovation it is not possible anymore to maintain the competitive status for a long period of time. Optimization in the same way as a process is so much important in the knowledge based economy, however; alone it cannot create or maximize value. The only way of creating value in the knowledge based economy is accepting innovation as a business process. The ability of an organization for creating value depends on innovation process, intellectual resources and human resources creativity (intellectual assets).

Also the knowledge strategy is a special method for optimization of knowledge creation and transformation to competitive advantage in an organization. From Mr. Zack's point of view (Zack, 1999), knowledge strategy is established for filling the gaps between the existing knowledge and the required knowledge. The aim of knowledge strategy is to respond to strategic questions which emphasize on competition intelligence and internal knowledge retrieval systems. As soon as sufficient knowledge will be available to an organization, strategistscan create coordination between strengths, weaknesses, opportunities and risks. Generally, making any effort in the field of knowledge management should be a part of the process of formulating the business strategy of the organization and should move in line with future directions of the organization and its goals. Innovative knowledge is a knowledge which enables an organization to take the control of the industry leadership and its competitors and distinguishes itself considerably from its competitors. Innovative knowledge often enables an organization to be effective on the existing business regulations and to sometimes change these regulations. The point to be noted is that knowledge is not static, hence; the knowledge which is innovative today will be advanced knowledge in a far future and advanced knowledge is basic knowledge. In knowledge management studies, the concepts related to strategic perspective of knowledge management are new and innovative concepts. Regarding the definition of the two concepts of "knowledge management strategy" and "knowledge strategy" a disagreement exists between the experts which especially should be considered in the translations of these

texts by the translators of this field. Some of the experts has considered one meaning for these two concepts and based on this have provided their definition. However; considering the difference in the nature and function of these two concepts in organizations, most of the experts and authors of the first hand sources of this field have provided different definitions for these two concepts. Based on the findings of the conducted studies in the present research, it is necessary to make a distinction between these two concepts.

With reviewing the conducted studies in the domains of knowledge strategy and knowledge management strategies we can describe the difference between these two concepts as below:

In general it can be said that knowledge management strategy is defined based on knowledge classification to two types of explicit and implicit knowledge. Knowledge management strategy states that for the management of knowledge assets and implementation of knowledge management (including obtaining, creating and apply knowledge), with what volume of investment an organization can have control on knowledge assets and how it should use the existing explicit and implicit knowledge in the organization and on what type of knowledge it should concentrate more.

While establishing knowledge strategy in the Knowledge Management Process helps the organization to specify that it should obtain what knowledge, with what depth, from what source, by whom and through what way for supporting its strategic plan.

Considering the above stated difference, if knowledge manamgnet want to remain in organizations and will not be only considered as a temporary entertainment, it should relate economical value creation to competitive advantage. Therefore; organizations for efficient and effective implementation of the knowledge management process should first considering the existing implicit and explicit knowledge in the organization they should select their knowledge management strategy so that the main direction of the organization will be determined for investment in knowledge management field. Based on this organizations before taking any action in line with establishing the knowledge management should specify their desirable use of the explicit and implicit knowledge capitals and assets in long timer with establishment of the knowledge management strategy which in turn should be with consideration of their work nature and existing and related knowledge to their business.

In the next step, organizations for successful and sustainable competition based on the required knowledge should align the business strategy with what the organization knows or should determine the required knowledge development and intellectual capabilities for supporting their desirable business strategy. Organizations should evaluate their strategic sources and their knowledge capabilities and should specify their knowledge strategy extensively for concentrating on the gaps between what the organization knows and what it should know. Therefore; the knowledge strategy of organizations should make use of creation, sharing and application processes of knowledge for filling this gap and supporting the organization's competitive strategy.

#### **Recommendations:**

Based on the above stated conclusions, the following recommendations are presented:

- establishing a center or deputy of knowledge management in the organizational structure of department of education for having a trustee in this regard and designing and implementing the necessary mechanism for directing and registering the processes of creating, sharing, applying, saving and transferring knowledge. For example, designing a website like Wikipedia in which the employees can have the possibility to enter and record their mental and objective knowledge.
- 2. To provide the employees with opportunities to apply the acquired knowledge in the workplace and allow them to make risks and in case of mistake commitment they should not be blamed. In

other words, they should be given the chance to learn from their mistakes. Also, necessary actions should be taken for development of individuals capabilities, so that their potential capabilities will turn to actual capabilities and will reach the maximum innovative maturity.

- 3. It is recommended that managers welcome the employees' ideas and also the authorities will provide the manager with some operational and applied solutions such as authority delegation for equipping managers with systematic attitude and thinking as well as rational and transformational decision making styles in establishing the regulations and job descriptions of the managers of Maskan Bank.
- 4. Considering Vision, mission and objectives of the Bank in the year of 2013, employees should become more familiarized with these through the application of some methods such as distribution of Brochure among them, Boards installed in all branches, branch managements / General Offices, holding justification classes and ....
- 5. It is recommended to form an encouraging supportive system for promotion of cooperative spirit among the employees especially regarding decision making free of any criticism and defensive atmosphere against their ideas and recommendations.
- 6. It is recommended that managers themselves be the leaders of innovation and creativity and always seek to use new working methods and also try to provide an environment for the employees to become innovative and creative as well.
- 7. Promotion of meritocratic spirit at different levels with an approach of the proportion between the job and the individual who is doing it in order to increase the bank's productivity as well as establishment and implementation of an encouraging system for comprehensive promotion of the employees motivation.
- 8. Currently organizational performance and human resource appraisal system is leaded in a scattered way in such a way that assessment of the employees' performance is performed by the office of the employees' affair, assessment of the performance of the general offices by the general office of the performance assessment and branch assessment is performance by the general office of program and design and there is no line between them. It is recommended that the assessment of the organization and human resource assessment would perform through a single office and their result become integrated.
- 9. Holding training at work (especially for employees with bachelor or above degrees) and using encouragement and punishment tools for increasing their accountability, responsiveness and authority delegation.
- 10. It is recommended to design the feedback system which increases the attention and sensitivity of employees toward the business processes and causes more cooperation among them and it is as well recommended to appreciate those creative employees who use new methods for performing their works. For example for encouraging individuals and creating a competitive environment every month an employee can be introduced as the role model of creativity and can be appreciated and rewarded.
- 11. Higher improvement and support from the general office of research and planning through attracting specialists and researchers as well as improving the core of studies and creating research experts in managements of branches of provinces / regions with the aim of continuous modeling the latest achievements, experiences and ideas from successful originations in order to reach the best methods of improving individual, team and organizational learning opportunities.

12. It is recommended to remind the level of efficiency and usefulness of the employees (the effect of their behaviors and thoughts) in the growth and success of the bank and providing all the required facilities for employees so that they can reach the highest level of financial performance with relying on their self-efficiency capabilities.

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