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INVESTIGATE THE EFFECT OF CONVERSION CYCLE SECI KNOWLEDGE ON ORGANIZATIONAL STRATEGIC PERFORMANCE AT THE UNIVERSITY OF MEDICAL SCIENCES, BANDAR ABBAS

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Abstract:

Nowadays, knowledge is a key resource and has become the success factors of the economy. Despite numerous scientific papers discussed knowledge management and organizational performance, but little effort has been done to show this. This study aimed to investigate the relationship between the four dimensions of knowledge transfer and organizational strategic performance.

Strategic Performance Management is based on four dimensionsof Balanced Scorecard (financial, learning, internal processes and stakeholders) and measurement of knowledge conversion in accordance with Nonaka and Takeuchi (socialization of knowledge, external knowledge, internal knowledge and combining knowledge) in descriptive - surveymethod.

Statistical sample volume was determined using Cochran method anda questionnaire to collect data and reliability of the questionnaire was determined using Cronbach's alpha coefficient. Content validity was confirmed by experts in knowledge management. Research results of Pearson correlation test confirmed positive aspects of knowledge conversion with the four dimensions of organizational strategic performance.

Keywords: Knowledge, Knowledge Conversion Process, Strategic Performance, Bandar Abbas Medical Sciences University

Introduction:

Nowadays knowledge is known as a key competitive and valuable asset as a basis for sustainable growth and a key to sustainable competitive advantage in the organization. (Beam and Royla, 2004) If knowledge is considered as a vital resource and ensures the success of the organization, so like any other vital resource is required to be managed. (Hulsapel and Joshi, 2002)

Knowledge management is a process which helps organizations to identify, select, organize, publish and transmit important information and experience needed for activities such as problem solving, dynamic learning, strategic planning and decision-making. (Gupta et al., 2000)

Knowledge management allows organizations to use their intangible assets and the benefit of creating value through performance improvement organization. (Davenport and Prusak, 1998) or Knowledge management as such dependent on the personnel knowledge (tacit knowledge) to achieve better business performance in a way appropriate to use them. (Al-Alawi, Marzouqi Mohammad, 2007)

On the other hand, the knowledge-based economy of today's higher education institutions as centers of development of human resources play an important role in economic growth and development of nations (King, 1995) For this reason, strategic planning in these institutions is important. (Krimadis, 1997) leads in compliance with environmental and educational policies In order to achieve a better future. (Ketonen, 2006)

Universities in Iran face to internal and external pressure with increasing demand for raising the level of quality and responsiveness, so we should be looking for new ways to improve yield management and strategic performance evaluation, assist them in achieving their strategic objectives.

Due to recent developments in the area of strategic management systems in small and large organizations, an organizational performance evaluation system is inevitable to assess the implementation of the strategy. In the meantime, effective performance systems cover both financial and non-financial institutions of all sizes at once and the strategy based index. (Kiani and Ketabi: 2010)

Balanced Scorecard was developed by Kaplan and Norton in 1992 as a new method for evaluating the performance of business units that are directly associated with the mission and strategic objectives.

BSC represents the mission, values and vision and strategy for the objectives and measures in the four perspectives: financial, customer, internal processes and learning and growth. (Neon, 2003) One of the useful aspects of this method is that by providing decentralized manner through the hierarchy of the organization, ensuring that the strategic objectives of senior management within the organization are released. (Richard and Robert, 2003)

In 2000, BSC was used extensively in the public and private sector and the introduction of additional knowledge about the effective use of this method in public and private entities (such as universities). (Kaplan and Norton, 2000) In the strategy map of these organizations have required customers to the top of the BSC, because the effective delivery of services to customers indicate the presence of many government and non-profitagencies.

The main question in this study on the basis of the above arrangements is that "Is there any relationship between knowledge management and organizational strategic performance at Bandar Abbas the University of Medical Sciences?"

Theoretical foundations of research:

Knowledge management: In a knowledge-based economy, intangible assets based organizations increasingly become a competitive factor. Such assets such as reputation, brand and technical staff are the essence of competitive advantage. (Nahapiet and Ghoshal, 1998; Tis, 1998) Nowadays, managers keen to develop knowledge management systems in organizations with the aim of using the beneficial results.

Knowledge sharing is one of the most common processes for knowledge management in different structures. Effective knowledge-sharing between members of the organization will lead to reduced costs in the production of knowledge, improve performance, improve service delivery and ensure the dissemination of best practices and organization of work within the organization to be able to solve problems. (Danaeefard, et al., 2011).

Knowledge management can integrate with the organization's knowledge capital in different sectors and have direct impact on concepts such as customer orientation, organizational learning, organizational culture, leadership and decision making smart, new knowledge and tacit knowledge to explicit conversion, promotion the activities and achieve the desired goals.

The main problem here stems from research Isfahan Municipality intends implementation of knowledge management, and to know whether position of organizational structure, infrastructure, information technology, and organizational culture for the implementation of knowledge management.

Knowledge gaps and weaknesses provides knowledge management for the establishment of the general response for the establishment of knowledge management is an entrepreneur and company managers. Accordingly, it can be said that the successful deployment of KMS requires that the Isfahan Municipality of proper infrastructure, organizational structure, information technology, organizational culture, operational, time, economic, legal and technical knowledge to take advantage of the establishment KMS.

Different researchers have identified different processes for managing knowledge creation, transmission and use (Spender, 1996), the acquisition, transfer and use (DeLong, 1997); to identify, acquire, develop, sharing / dissemination, use and maintenance (Probst et al., 2000). Alavi and Leidner (2001) examined the characteristics of the models and introduced four process creation, storage / retrieval, transfer and application.

Also, Shine and others (2001) Authors classified different terms to describe the merge their knowledge management processes and knowledge management processes for the creation, storage, dissemination and application. In recent years some authors concluded that the four dimensions of knowledge management processes, including knowledge acquisition, knowledge preservation, knowledge transfer and application of knowledge. (Gold et al., 2001; Park, 2006)

The concept of knowledge and classification of knowledge is important because development in the field of knowledge management affected by distinguishing between different kinds of knowledge. (Alavi and Linder, 2001) There are different opinions about the classification of knowledge, although knowledge divides into explicit knowledge and tacit common approach. The next obvious knowledge is knowledge that can be encrypted and transferred through official and systematic language. Tacit knowledge is personal knowledge of an official, or as it has been difficult to record and is stored in people's minds. (Taivana, 2002)

Hubert (1996) revealed that explicit knowledge expressed in details like the words, books, reports and the data is written, and tacit knowledge cannot be explained as such insights, attitudes, beliefs and values that shape the people as a result of their personal experiences. Nonaka and Takeuchi (1995) expressed the characteristics of tacit and explicit knowledge.

Features of explicit knowledge includes the following:

1. Formal and systematic
2. Rational knowledge
3. Expressed by words and numbers
4. Easy to form the hardware, formulated, codified procedures or general principles are transferred and shared.
5. Expressed by computer code, chemical formulas, and a set of general principles.

Tacit knowledge forms are:

1. Insight, insight and forecasts
2. Knowledge, experience
3. Loss of expression and view easily
4. Intensely personal, difficult to formulate and difficult to transfer and sharing with others
5. Rooted in the practices and experiences of people of ideas, values and feelings and emotions.

Hassan and Al-Hawari (2003) provided a broad concept of knowledge-based on Nonaka (1995), in which the classification added by Nonaka as semi-explicit and semi-implicit. These changes added four process knowledge

through knowledge management using this model can be recognized and developed. Semi-implicit has highest degree in the dispersion index the lowest degree in the encoding index.

On the other hand, semi-explicit has lowest degree in encoder index. According to Nonaka and Takeuchi (1995), four process of socialization, externalization and combination was introduced and Hasan and Al-Hawari added detailed internal process for the conversion of explicit knowledge in the form of semi-implicit, adoption for the conversion of semi-tacit knowledge into explicit; standardization of the conversion of tacit knowledge in the form of semi-explicit, systemization clearly to translate knowledge from semi-explicit to explicit form.

Organizational strategic performance:

Organizations use different processes for developing and leading the strategic management activities altogether. According to David, the strategic management process consists of three phases: planning, implementation and evaluation of strategies (David, 2008)

This term was used for the first time in 1976 by Beer and Rouh. Performance management is strategic and integrated process that improves the performance of those who work in organizations and with individual and group development capabilities, to provide sustainable success. (Armstrong, 2006)

Performance management system for using data to measure process performance, with the aim of creating effective and positive change in the culture, systems and processes, maintain or modify current strategies and policies, through assistance in setting goals, allocating and prioritizing resources and knowledge to managers. The final objective the performance management system is influence and create positive change in the organization. In general, the main pattern of the performance management system consists of three planning process performance measurement and improvement of performance. (Rajabi Ghiri, 2002)

The relationship between knowledge management and organizational strategic performance

Knowledge management is a process which helps organizations to identify, select, organize, publish and transmit important information and experience needed for activities such as problem solving, dynamic learning, strategic planning and decision-making. (Gupta et al, 2000: 17)

KM allows organizations to use their intangible assets and the benefit of creating value through performance improvement organization. (Davenport and Prusak, 1998) and or KM as such dependent on the personnel knowledge (tacit knowledge) to achieve better business performance in a way appropriate to use them. (Al-Alawi, Marzouqi Mohammad, 2007)

Lee and Choi (2003) in a study examined the relationship between enablers of knowledge management, knowledge management processes and organizational performance. Based on the results research, knowledge creation has a positive correlation with organizational creativity, which had a positive relationship with organizational performance.

Aarabi and Mousavi (2009) in a study entitled "Strategic Knowledge Management Model for performance improvement research centers" examined the model for knowledge management in research to improve their performance. The main hypothesis was confirmed by this study, was defined this way: harmony between strategy knowledge production and knowledge development, knowledge transfer and application of knowledge in research centers according to business strategies lead to improve the performance of research centers.

Rajaeepour and Rahimi (2008) investigate the relationship between the conversion process of knowledge management and performance of their faculty members. The purpose of this study was to investigate the relationship between the realization of the transformation process of knowledge management and performance of faculty members in 2006-2007. Results of this research showed that the conversion process of knowledge management and performance and there is a significant positive correlation.

History Research

Shahaei and Anvari (2007) in an article titled "Application of balanced score card in performance assessment of universities and higher education institutions" introducing a hypothetical model of how to develop and design a strategy map for universities and higher education institutions.

Rajaeepour and Rahimi (2008) investigate the relationship between the conversion process of knowledge management and performance of their faculty members. The purpose of this study was to investigate the relationship between the realization of the transformation process of knowledge management and performance of faculty members in the academic year 2005-2006. Results of this research showed there is a significant positive correlation between the conversion process of knowledge management and performance.

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Mehregan and Dehghan, Nayyeri (2009) using the balanced scorecard method in a study entitled "Strategic Assessment model of higher education institutions" to assess the performance of the top four Tehran University's

Faculty of Management. Fallah (2010) in his dissertation provided a model for performance management of a public university by combining BSC and data envelopment analysis.

Ketabi and Kiani (2010) in a study titled "Using integrated balanced scorecard and data envelopment analysis to evaluate the strategic performance management," which is a case study of a company, common goals such as achieving strategic goals and create a balance in performance evaluation is considered.

Dehghani (2011) in a study, evaluated the impact of knowledge management capabilities on the organizational effectiveness ingas and Oil Company atChahar Mahal Bakhtiyari province. In this research knowledge management capabilities include basic skills (culture, structure and technology) and process capabilities (acquisition, conversion, and application of knowledge preservation) and on three criteria: innovation, adaptability and efficiency is intended to measure organizational effectiveness.

Ahmadvand et al (2012) in article titled "Integrated Model of Balanced Scorecard excellence and to improve the performance"plotted strategic map of the Balanced Scorecard and related measures to improve the performance of the university in academic environment determined.

Jermaine (2001) in a study titled "Strategic Performance Evaluation: descriptive analysis and forecasting" has been developed a practical model for the evaluation of strategic performance through the Balanced Scorecard. Lawson (2003) in his doctoral dissertation examined the relationship between organizational culture and knowledge management for Lawson model is used to measure the knowledge management processes.

The results showed that organizational culture has a positive correlation with KM. Lee and Choi (2003) in a study examined the relationship between knowledge management enablers, processes and organizational performance. Based on the results research, knowledge creation has a positive correlation with organizational creativity, which had a positive relationship with organizational performance.

Al-jarvan (2004) presented a study entitled "Implementing the Balanced Scorecard as an effective tool to evaluate the strategic performance in public companies". Gray Gorodiset al (2012) in a study titled "Strategic Performance Evaluation in healthcare organizationssuggested a multiple critical method based on the balanced scorecard" approach to assess points for each of the perspectives of the balanced scorecard.

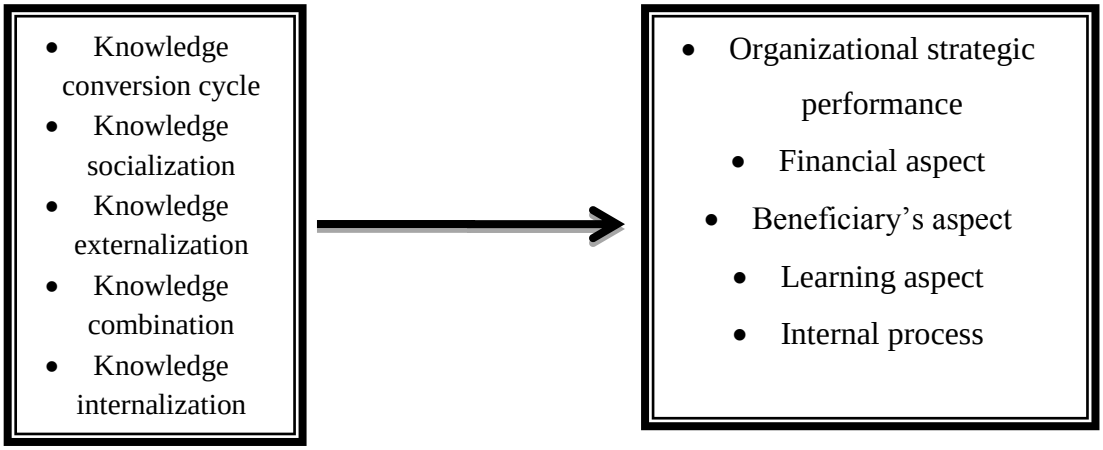
Research method:

Research method is applied and descriptive and correlational in term of nature. In this study, researchers sought to explore the relationship between two variables since the conversion cycle is randomly knowledge and organizational strategic performance.

Statistical society includes 822 staff ofBandar Abbas University of Medical Sciences.

All of society is not required to be observed and assessed in an object, but in most cases it is sufficient details. In other words, most of the studies, the researchers will do sampling. In this study, random sampling is used. Reliability of the tool Data collection was approved by 75 hundredths.

Total sample in this research, which is equivalent to 104 people in level of 9%, thus, 130 questionnaires were distributed and 111 valid questionnaires collected in this research, so total of 111 people. To collect the standard two-part questionnaire which its validity by experts and its reliability by Cronbach's alpha is approved. Following the conceptual model are:



Reliability of the questionnaire was 93 hundredths using Cronbach's alpha.

Findings Analysis

Descriptive Statistic

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
	Women	62	55.9	55.9	55.9
	Men	49	44.1	44.1	100.0
	Total	111	100.0	100.0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	9	8.1	8.1	8.1
	BA	70	63.1	63.1	71.2
	MA	20	18.0	18.0	89.2
	Ph.D.	12	10.8	10.8	100.0
	Total	111	100.0	100.0	

Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lower 5 years	17	15.3	15.3	15.3
	5-15 years	32	28.8	28.8	44.1
	15-25	14	12.6	12.6	56.8
	Over 25 years	48	43.2	43.2	100.0
	Total	111	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lower 30	20	18.0	18.0	18.0
	30-35	24	21.6	21.6	39.6
	35-40	15	13.5	13.5	53.2
	Over 40 years old	52	46.8	46.8	100.0
	Total	111	100.0	100.0	

Inferential statistics:

Test mean performance strategic

$H_{\circ}$: Performance Mean is equal to3.

H_1: Strategic performance Mean is not equal to 3.

Given the significant level and T coefficient obtained, we conclude the null hypothesis is rejected and the mean strategic performance is not equal to 3. Since the upper limit for a negative number and a negative number is too low, we conclude mean strategic performance of the testis less than number three.

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Strategic performance	111	2.7294	.93780	.08901

One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Strategic performance	-3.040	110	.003	-.27059	-.4470	-.0942

Test of correlation:

The results of this analysis have been obtained in accordance with the following table shows that due to the fact that less than 0.05 significance level test results and taking into account the correlation between the four dimensions of knowledge into positive and significant relationship with organizational strategic performance can be seen. Correlation analysis showed that the four-dimensional organizational strategic performance with four-dimensional are positively associated to knowledge transfer.

Because a significant factor is less than five hundredths concluded obtained all communications are significant.

The highest positive correlation statistically and dimension socialization of knowledge and strategic performance is 918 thousandth and the minimum value of the relationship between the two inner dimension of knowledge and dimension internal process of organizational strategic performance is the amount of 398 thousandth. Dimension socialization of knowledge to the amount of 864 thousandth of the most positive and significant relationship with organizational strategic performance.

		Sociability	External	Combination	Internal
Strategic performance	Pearson Correlation	.864**	.726**	.777**	.694**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	111	111	111	111

		Financial	Beneficiaries	Learning	Internal
Sociability	Pearson Correlation	.918**	.811**	.732**	.603**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	111	111	111	111
External	Pearson Correlation	.794**	.691**	.662**	.427**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	111	111	111	111
Combination	Pearson Correlation	.812**	.724**	.737**	.480**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	111	111	111	111
Internal	Pearson Correlation	.646**	.777**	.631**	.398**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	111	111	111	111

Multivariate logistic regression analysis:

According to the table below, we conclude that the three dimensions of the knowledge society, combining the

knowledge and assimilation of knowledge on organizational strategic performance impact achieved significant results and also correlation coefficient obtained confirms the existence of such influences and relationships. In this study, multiple regression analysis to understand the impact of the four dimensions is used to convert knowledge on organizational strategic performance. These multiple regression analysis are shown in the following table. Beta positive values in the table below shows a model that is: $Y = 0.561x1 + 0.310x3 + 0.210x4 + \varepsilon$, which represents dimension socialization of knowledge in this regard x1, x2 and x3 represents dimension combined knowledge represents the inner dimension of knowledge. The following table is a multivariate regression model that we see the results in the table below.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.292	4	19.073	98.864	.000[b]
	Residual	20.450	106	.193		
	Total	96.742	110			

a. Dependent Variable: strategic performance

b. Predictors: (Constant), internal , combination, external , sociability

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.216	.202		-1.068	.288
	Sociability	.561	.082	.566	6.804	.000
	External	.002	.091	.002	.021	.983
	Combination	.310	.107	.232	2.902	.005
	Internal	.210	.077	.170	2.718	.008

a. Dependent Variable: Strategic Performance

Conclusion:

This study aims to investigate the relationship between knowledge management and organizational strategic performance in Bandar Abbas University of Medical Sciences. The results showed that the four dimensions of knowledge into organizational strategic performance there is a significant positive correlation and also between the four dimensions of knowledge into a strategic relationship with the four dimensions of performance are positive.

Average test showed that the organizational strategic performance of the test, the average is lower and also three dimensions of the knowledge society, the internal composition of the students and their effects on organizational strategic performance.

Organization samples in this study were the University of Medical Sciences, Bandar Abbas. However, due to structural differences, cultural and other organizations to extend absolute individual results to other organizations is not without drawbacks.

Also lack of reliable scientific sources such as books, journals, theses and articles that have examined the relationship between researches is one of the main limitations of this study. Investigation of structural barriers, legal, humanitarian and cultural in the way of the realization of each of the processes of knowledge management and organizational strategic performance evaluation Bandar Abbas University of Medical Sciences using fuzzy logic and its relationship to knowledge management for future research is recommended.

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