



**Effect of Knowledge Management on Organizational Performance and  
Relation between Scales of Knowledge Management**

**(Case Study: Health Insurance)**

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**Abstract**

During current years, knowledge management is so considered as one of the most prevalent words in organizations. This system emphasizes upon obtaining knowledge from staff, rivals and organizations products. The aim of the research is to discuss knowledge management on organisational performance and relations between scales of knowledge management (knowledge sources, procedures of knowledge management and factors of knowledge management) in health insurance of Fars province. The method is as descriptive-measurement and simple sampling method. Thus, 196 questionnaires have been distributed. In order to describe data and test research hypothesis, inferential statistics and structural equations method have been used which analysed by AMOS software. The results showed that knowledge sources, procedures of knowledge management and factors have significant effect on organizational performance. This case shows that taking knowledge management, procedures of knowledge management and factors of knowledge management increase organizational performance. Also, the results show that production sources, procedures of knowledge management and its factors have significant meaningful relation.

**Keywords:** Knowledge Management, Organizational Performance, Knowledge Resource, Process of Knowledge Management, Factors of Knowledge Management

**Introduction**

Knowledge is main resource of survival of business and its development as base of competition. Thus, knowledge management has converted to one of the most subjects in companies. Knowledge management is competitive strategy that can have more benefits for companies. (Gunasekaran and Nagi<sup>1</sup>, 2007).

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1. Gunasakeran and Nagi

During current years, knowledge management was considered as one of the most prevalent words in organizations. This system emphasizes upon obtaining knowledge about customer from staff, rivals and products (Gibert and et al<sup>2</sup>, 2002), in other words, knowledge management is to encourage staff to share knowledge (subscribe it) in order to increase added value of products (Chease<sup>3</sup>, 2007). Therefore, scope of knowledge management is inter-organization and its advantage is to satisfy customer on better

products and services. In any case, when organization is developing its capability in knowledge management and uses to obtain its aims, extends its vision and considers new resources which not locate on organizational borders (Paquette<sup>4</sup>, 2006)

Today, in competitive area, the businesses are trying to prosper by making competitive advantage by promoting organizational performance and compare with changes, much past studies showed that the performances were based on financial performances, although, financial indicators don't correlate with long term business aims and cannot make advantage for organizations (Civi<sup>5</sup>, 2010), little studies discussed relation between knowledge and performance empirically (Tseng<sup>6</sup>, 2006), thus, there is studying gap about how and under what situations, actions of knowledge management terminates to better results (López-Nicolás& mer~no-Cerdán<sup>8</sup>, 2011). Many researchers consider financial performance about organization performance. If non-financial results like procedural results develop new services restore ability to attract, education and development are so important (Safarzadeh and et al, 2012)

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<sup>2</sup>Gibbert et al

<sup>3</sup>Chase

<sup>4</sup> Paquette

<sup>5</sup>Civi

<sup>6</sup> Tseng

<sup>7</sup>López-Nicolás&mer~no-Cerdán

<sup>8</sup> Lopez –Nicolas, Merono-Serdan

Thus, it feels perfect collection of knowledge management which covers its necessary aspects. Till today, little researcher offered perfect collection of the scales in which the resources, processes and factors are states each other (Wang and et al, 2015). To now, the relations between scales and its relation with knowledge management have been discussed by Tan and Wang<sup>9</sup> (2015). Thus, this research tries to recognize relation between scales of knowledge management and organizational performance and discusses clearer image about relation between them and relation between scales of knowledge management in health insurance organization of Fars province. Also, this scale tries to consider gap of previous studies and fill it by determination of comprehensive collection of knowledge management in terms of three scales (knowledge resource, processes of knowledge resource and factors of knowledge resource).

### **Research hypothesis and conceptual Model**

H1: covariance between knowledge resource and process of knowledge management is significant.

H2: covariance between knowledge management and factors of knowledge management is significant.

H3: covariance between knowledge resource and factors of knowledge management is significant.

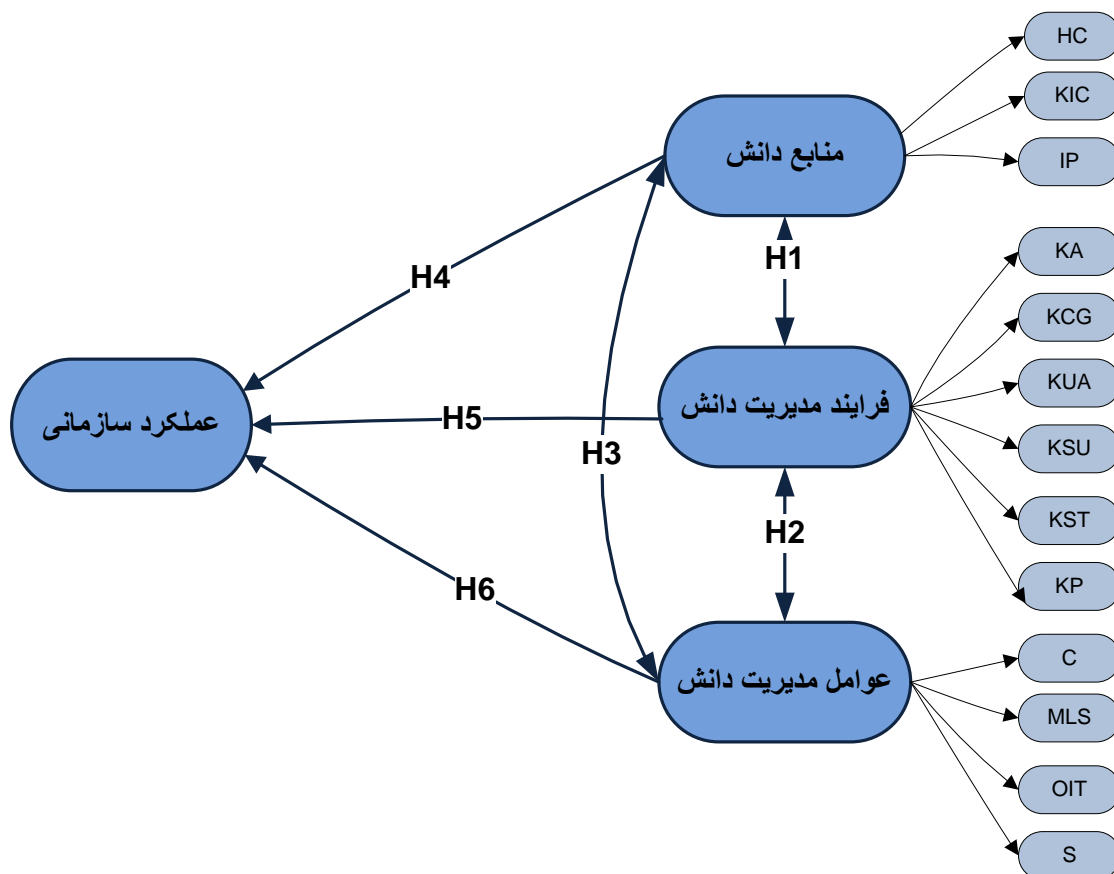
H4: knowledge resource has direct and significant effect on organizational performance.

H5: processes of knowledge management have direct and significant effect on organizational performance.

H6: factors of knowledge management have direct and significant effect on organizational performance.

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9. Tan and Wong



Organizational Performance Knowledge Resource, Process of Knowledge Management

Factors of Knowledge Management

Figure 1: conceptual model derived from Tan and Wong (2015)

### Methodology

The researches have been classified as fundamental, applied and based on research from aim point of view (Pasha Sharifi and Sharifi, 2004). The current method is applied which its results are used in process of promotion of organization performance and methods in any business. The researchers are classified to experimental and non-experimental from control on variables, in non-experimental research, the relation between variables are studied and consists of casual-comparative post event and correlative research. In correlative research, the relation between two or some variables are studied and the researcher will be able to discuss relation between them (Same, 100, 90). Based on it, the present method is descriptive-correlative.

In addition, the researchers classified in terms of period course as occasional and longitude ones (Delavar, 2004). Thus the present research is regarded as occasional by discussion data pertain to period of time. The research is located on domain of knowledge management on organizational performance and relation between scales of it. Spatial domain of research is Fars province and from time point of view, it was on fourth three months of year 2015.

### Statistical Society and Sampling Method

In a suitable definition on statistical society, it can be regarded as hypothetical or real members of research (Delavar, 2006, 112). In this research, domain of statics society is all staff of health insurance

organization of Fars province which regarded as limited society. In this research, Kokran sample has been used in order to determine sample (Azar, 200)

$$n = \frac{Z_{\alpha}^2 p(1-p)}{\varepsilon^2} = 196$$

N: statistical society

$Z_{\alpha/2}$ =confidence coefficient to results

P= rate of non-confidence in statistical sample which is considered as 0/5

E= estimation precision (maximum acceptable error and equals to 0/06

Since statistical society pertain to staff of health insurance of Fars province is discussed, 220 questionnaires have been distributed as for professors and advisors and 196 questionnaires have been returned and analysed.

### Tools collecting Data

The researcher used Tan and et al (2015) questionnaire in order to perform research which consists of 58 questions as standard ones and designed and analysed as 5 points Lickert scales. Generally, the questions have been divided in 4 sections and have been used in order to estimate variables, since the questionnaire was standard after confirmation validity; they have been used in questionnaire. Manner of classification and the relation between questions are stated in table 1.

Table 1: manner of classification and relation of questions to hypothesizes

Row	Variable	Number of indicators without consideration sub-factors
1	Knowledge management	1-12
2	Process of knowledge management	13-36
3	Factors of knowledge management	37-54
4	Organizational performance	55-58

### Validity and Justifiability of Estimation Tools

Justifiability is derived from justification means permission and accurate and justifiability means to be correct and accurate. Its purpose is to estimate specification (khaki, 2007, 288)

Since Tan and et al standard tools have been used in the research, thus, estimation tools have suitable validity and in fact, its validity is obtained by conceptual.

### Estimation Reliability (Confidence Capability)<sup>10</sup>

In order to ensure about lacking ambiguity in questions and localize scales and compare with statistical society more, first studies and reliability have been performed. By first distribution of 30 questions, reliability coefficient which had 58 questions was 0/799. Since minimum reliability coefficient was 0/70, it was displayed that alpha Cronbach coefficient was measured and the results were in table 3-3.

Table 2, Coefficients pertain to alpha Cronbach

Row	Indicators estimated	Alpha Cronbach
1	Knowledge resource	0/739
2	Process of knowledge management	0/719
3	Factors of knowledge management	0/724
4	Organizational performance	0/775
	Total questionnaire	0/840

### Analysis Data

In this research, inferential statistics and structural equivalence method have been used in order to describe data and test of hypothesis. Structural equivalence modelling is multi variable technique from regression multi variable family and is extension of general liner model<sup>11</sup> which enables the researchers test regression equations as simultaneously. Structural equations modelling are comprehensive statistical method in order to test hypotheses.

#### 10. Reliability

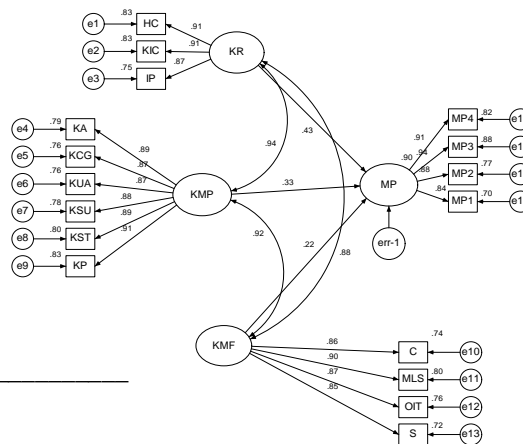
#### 11. General Liner Model (GLM)

And it is recognized that it named as covariance analysis and casual modelling. But dominant idiom is structural equation modelling or SEM<sup>12</sup> (Houman, 2008, 11), the calculation were done by AMOS software.

### Results derived from analysis Data

In this section, we investigate meaningful numbers of model, in relation to meaningful numbers, it shall be said that since the confidence level is on 0/95 or error 0/05, for z test, the numbers will be meaningful that are greater than -1/96 and +1/96. It means, if each number will be between -1/96 and +1/96 in z test, it will be meaningless. In following model (chart 1), the numbers are meaningful for z test and we can consider casual relation (estimation indicators with variable) and its effects and they have suitable indicators.

Chart 1: standardized coefficient of research by AMOS software



#### 12. Structural Equation Models

Table 3, covariance numbers between research variables

			Estimation value	Error	Z statistics	Significant level
Knowledge source	< -->	Process of knowledge management	1/246	0/145	8/614	0/000
Process of knowledge management	< -->	Factors of knowledge management	1/078	0/131	8/241	0/000
Knowledge resource	< -->	Process of knowledge management	1/073	0/132	8/144	0/000

Table 4, results of hypothesis

Hypothesis	Coefficient	Z statistics	Result
H1: covariance is significant between knowledge resource and process of knowledge resource	1/246	8/614	+
H2: covariance is significant between process of knowledge management and factors of it	1/078	8/241	+
H3: Covariance is significant between knowledge resources and factors of it	1/076	8/144	+
H4: knowledge resource has direct and significant effect on organizational performance	0/242	3/170	+
H5: process of knowledge management has direct and significant effect on organizational performance	3/334	2/041	+
H6: factors of knowledge management has direct and significant effect on organizational performance	0/261	2/169	+

### Conclusion

This study used structural equation modelling to discuss significant effect of knowledge management on organizational performance. As evident from analysis data, knowledge management, process of knowledge management and factors of it has significant and direct effect on organizational performance in health insurance organization; this case shows that obtaining knowledge resource and its factors increase organizational performance directly. The results conform to previous results. For example, Kisling and et al (2009) found that knowledge management has positive effect on performance from innovations, inventions and development staff. Rasul and et al (2012) emphasized that performance in financial aspect, innovations and learning is due to knowledge management. Based on results, factors of knowledge management help organizational performance development because covers factors which provide necessary situations in terms of work environment, management logistics and organizational infrastructure and can help to create effective environment. Knowledge resources are the second factors. Especially, staff and knowledge capitals play important role in administering and facilitating daily activities. In fact, organizations need capable staff and knowledge capital to increase their performance and overcome their rivals. The organizations are hard to maintain their performance without knowledge sources. The most important factor is processes of knowledge management. Effective process of knowledge management can offer many advantages including obtain update information for organization, solve problems in short time and restore services process. Thus, these three factors have positive effect on organization performance absolutely (Tan and et al, 2015). Also, the results showed that knowledge resources, process of knowledge management and factors have meaningful relation each other and can be subsets of knowledge management.

### Suggestions for Future Research

- Since this study discusses relation between knowledge management and organizational performance, it is suggested that future studies consider relation between knowledge management and production performance.

- Scales of knowledge management can be used as shared language in estimation of knowledge management and provide new horizon for future researches
- Also, discussion of scales of knowledge management (factors, processes and resources) with organizational innovation can be regarded as bed for future researches
- The future researches can collect data as longitude and by perfect interview and observation
- It is suggested that the researcher discusses in other geographical regions and organizations because, it is possible different regions show different results because of variety culture.

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