



The Effect of Structured Knowledge on the Performance of an Organization

Mohammad Reza Fathi^{1*}, Seyed Mohammad Sobhani¹, Mahdi Nasrollahi², Mohammad Abdollahi Nejat³

¹Department of Management and Accounting, College of Farabi, University of Tehran, Qom, Iran

²Department of Industrial Management, Imam Khomeini International University (IKIU), Qazvin, Iran

³Faculty of Management and Accounting, Qazvin Islamic Azad University, Qazvin, Iran

Abstract

Introduction: In today's world, agility is considered as a vital factor influencing organizational performance due to business inconsistency and various organizational potentials. On the one hand, the organization has recently realized the high importance of customers to the organization that can have substantial impacts on the organizations using their knowledge and behavior. The purpose of this study was to investigate the mediating role of structured knowledge on organizational performance regarding organizational agility and customer knowledge management. The impact of three factors, including knowledge acquirement, knowledge conversion, and knowledge application, on organizational performance regarding the role of customer knowledge and agility were taken into account.

Methods: This is a practical study using descriptive data collection in a survey research mode. The structural-equations method was also the analysis method used in the current study. The statistical population of this research included the entire personnel of Faghihi Hospital in Shiraz, Iran. The research data were collected through standard questionnaires, including 25 questions, distributed among 248 personnel considering the Morgan Table, and the collected data was analyzed using PLS.

Results: According to the findings, the procedure of knowledge acquirement did not have a significant impact on organizational performance. Furthermore, structured knowledge had a significant impact on positive customers' knowledge and awareness amongst the various structured knowledge components. Moreover, the knowledge application process had a significant and positive impact on the customers' knowledge management in the organization.

Conclusion: This study contributes to the literature by being the first to investigate the mediating role of structured knowledge on organizational performance regarding organizational agility and customer knowledge management.

Keywords: Knowledge, Organization, Customer knowledge management, Work performance

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*Correspondence to:

Mohammad Reza Fathi,
Assistant Professor, Department
of Management and Accounting,
College of Farabi, University of
Tehran, Qom, Iran
Email: Reza.Fathi@ut.ac.ir

Introduction

The world's current human life is encountering substantial changes. Organizations, as a subset of human life, should encounter these substantial mutations to pursue survival and development. Today, knowledge, as our intangible and spiritual asset, is considered a vital factor; in other words, some organizations could develop and improve knowledge through changes (1). Currently, the crucial importance of data, information, and knowledge is obvious to everyone. Customer knowledge management is proposed as an approach to acquire a competitive advantage (2). Also, the organizational agility which was initially proposed for manufacturing and industrial sectors is under concentration for all companies these days. The

technological changing pace and the customers' increasing needs persuade the organizations to participate in the rivalry of attracting the customers' satisfaction. Therefore, agility is a novel paradigm that is able to meet the whole customers' needs (3). This study was an attempt to respond to the question of whether or not the structured knowledge process regarding the role of organizational agility and knowledge management could affect the performance of Faghihi Hospital. Research carried out by Filsoofian et al. (4) reveals that the main activity in knowledge management is the process of knowledge sharing since employees can play a role in the pursuance of competitive competence improvement. Information was collected using 58 distributed questionnaires, and they indicated that the tendency had a significant

impact on intention, and intention had a significant impact on behavior. Moreover, knowledge sharing is comparatively influential in space organization performance. Also, results indicated that any financial, procedural, and internal performances significantly and positively influence space organizations. Research conducted by Rezaie et al. (5) was a descriptive correlation research. Results of this research showed that the knowledge management and its components such as creation, submission, transmission and the application of knowledge were of positive and significant effect (0.01% level) on the dependant variable and specified a total of 54% of the organizational performance variance. The findings of Safarzade et al. (6) showed that knowledge and knowledge customization were in direct relationship with innovation and performance. Moreover, innovation and organizational performance were in direct relationship with knowledge customization. In Rezaie et al.'s study (7), the relationship between knowledge management and organizational agility activities in the Publishing Industry of Zahedan, Iran, was analyzed. The results showed a high and significant relationship among the components. Another research by Chen and Liang (8) indicated that the rapid growth of electronic business provided a context for a much faster change in organizational knowledge. Knowledge progression is a process in which the organizational knowledge assets change as time passes to overcome the pressure of environmental change. Results of a study by Birasnav (9) showed that transformational leadership significantly and positively influenced the knowledge management process and organizational performance; additionally, this knowledge management process was fairly a mediator in the relationship between transformational leadership and organizational performance. In a study by Mehdibeigi et al. (10) cluster sampling was used, and also the data were analyzed using the Smart PLS, resulting in the significant and positive effect of customers' knowledge management on the organizational agility and efficiency. Another investigation was carried out by Patil and Kant (11) based on the Balanced Scorecard (BSC), examining the financial/nonfinancial performance. This study utilized the performance results prior to and after the utilization of knowledge management and also used the Fuzzy ANP, which has finally resulted in significant and positive effects of knowledge management in performance. The main issue of this research is The Effect of Structured Knowledge on the Performance of an Organization.

The research's hypotheses are presented as follows:

1. Structured knowledge has a significant impact on organizational performance.
2. Structured knowledge has a significant impact on knowledge management.
3. Structured knowledge has a significant impact on organizational agility.
4. Structured knowledge has a significant impact on organizational performance based on organizational agility mediator.
5. Structured knowledge has a significant impact on organizational performance based on knowledge management mediator.
6. Organizational agility has a significant impact on organizational performance.
7. Knowledge management has a significant impact on organizational performance.

Materials and Methods

The present research is a practical descriptive study due to the application of knowledge development in a particular field. Moreover, the data collection was carried out through the descriptive survey process. The statistical population comprised of 700 personnel of Faghihi Hospital in Shiraz. The sample size was 248 using Morgan Table using the simple random sampling method.

In this study, structured knowledge was considered as an independent variable and organizational agility and knowledge management were dependent variables. Also, organizational agility and knowledge management are considered mediating variables.

In this study, library and field methods were used for data collection. The library method was carried out using books, articles, researcher's findings, and relevant Internet Information to assemble the literature review and variables specifications, which are essential for the questionnaire data collection. Therefore, the researcher utilized the field method in pursuance of the distribution.

Results

The research questionnaire included 25 questions for testing the study research hypotheses. The information is displayed in Table 1.

To assess the reliability coefficient of the measurement tool, we considered various methods, resulting in Chronbach's Alpha. In this research, 40 questionnaires were distributed among the statistical population as a pretest. As shown in Table 2, the coefficient rate of Chronbach's Alpha was more than 0.7 in all cases, leading to a suitable reliability rate of the questions given in the questionnaire.

To descriptively measure the recorded scores of

Table 1: Questionnaire’s Features

Variables	Components	Questions No	Questions Order	Refrence
Structured Knowledge	Knowledge Acquirement Process	4	1-4	(12)
	Knowledge Conversion Process	4	5-8	
	Knowledge Application Process	4	9-12	
Customer’s Knowledge Management		4	13-16	(2)
Organizational Agility		4	17-20	(12-14)
Organizational Performance		5	21-25	(12, 15-17)

Table 2: The result of Chronbach’s Alpha

Variables	Components	Measured Chronbach’s Alpha
Structured Knowledge	Knowledge Acquirement Process	0.71
	Knowledge Conversion Process	0.73
	Knowledge Application Process	0.79
Customers’ Knowledge Management		0.84
Organizational Agility		0.81
Organizational Performance		0.88

Table 3: Descriptive Indices of all Variables

Variables	No	Standard Deviation	Average	Max.	Min.
Structured Knowledge	248	2.675	4.494	8	2
Customers’ knowledge Management	248	0.428	4.172	5	3
Organizational Management	248	0.690	4.103	5	2.33
Performance	248	0.432	4.433	5	3.67

every variable of the research, we evaluated all the central variables and dispersion variables; results are shown in Table 3.

As shown in Table 3, the average of every variable was above three, which were evaluated to exceed the medium level, showing the comparative satisfaction of variables in the population sample. This research was conducted in two phases; the measurement model test included the structures validity and reliability test, research tool, structural model test, and the test of the relationships and theories utilizing Partial Least Square method and the Smart PLS method. Figure 1 shows the research model in the standard estimation mode.

Figure 2 Shows the research model in a significant numerics model using the bootstrapping method, including 300 subsets to estimate the T-Statistics values related to measurement of all equations (Factor Loadings) and structural modelling (Route coefficients).

Given the factor analysis model, the indexes without the power to cause the level of significance were removed; also, to create structural convergent validity, the indexes with less 0.5 significance level were removed, as well. The entire variables of observant variables could be a hidden variable item to measure itself. Since the weight of the significance level of all

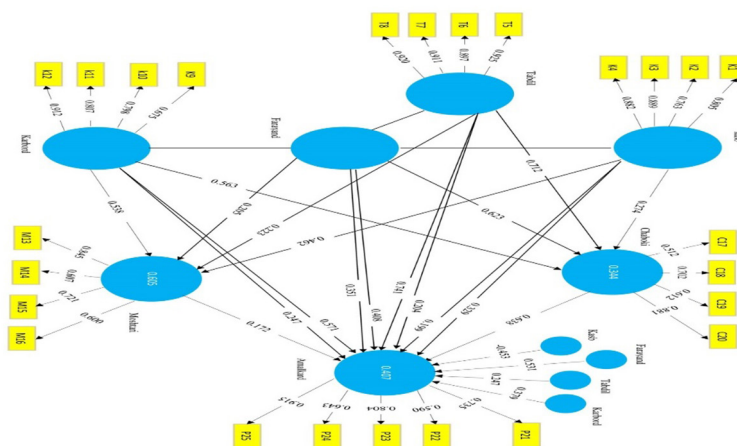


Figure 1: The Early Assessment Model in Coefficient Estimation Mode.

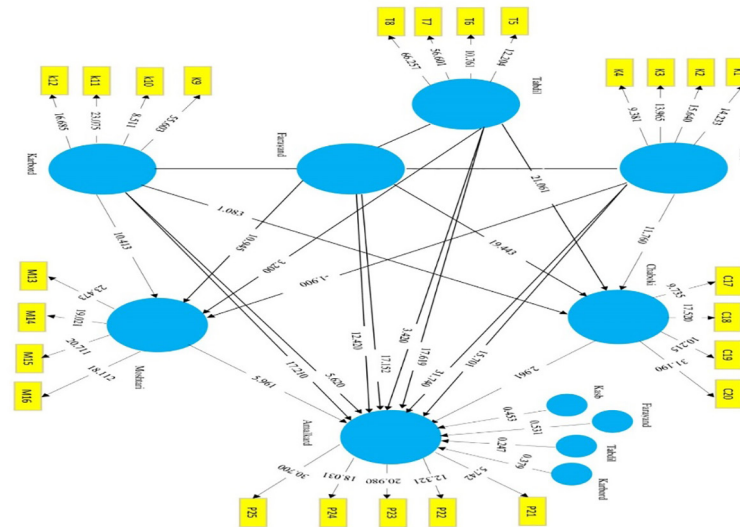


Figure 2: The Early Assessment Model in Significance Coefficiency Mode.

Table 4: Route Coefficients and T-Statistics

Hypothesis	Route	Route's Coefficient	T-Statistics	Result
1	Structured Knowledge → Performance	0.531	15.031	Confirmed
1-1	Knowledge Acquirement → Performance	0.453	1.742	Rejected
2-1	Knowledge Conversion → Performance	0.247	12.471	Confirmed
3-1	Knowledge Application → Performance	0.379	3.961	Confirmed
2	Structured Knowledge → Customers' Knowledge Managemnt	0.205	10.945	Confirmed
1-2	Knowledge Acquirement → Customers' Knowledge Management	0.462	-1.90	Rejected
2-2	Knowledge Conversion → Customers' Knowledge Managemnet	0.223	3.200	Confirmed
3-2	Knowledge Application → Customers' Knowledge Management	0.538	10.413	Confirmed
3	Structured Knowledge → Organizational Agility	0.623	19.443	Confirmed
1-3	Knowledge Acquirement → Organizational Agility	0.274	11.760	Confirmed
2-3	Knowledge Conversion → Organizational Agility	0.712	21.061	Confirmed
3-3	Knowledge Application → Organizational Agility	0.563	1.083	Rejected
4	Structured Knowledge → Organizational Agility → Performance	0.408	17.152	Confirmed
1-4	Knowledge Acquirement → Organizational Agility → Performance	0.329	15.701	Confirmed
2-4	Knowledge Conversion → Organizational Agility → Performance	0.204	17.619	Confirmed
3-4	Knowledge Application → Organizational Agility → Performance	0.571	5.620	Confirmed
5	Structured Knowledge → Customers' Knowledge Management → Performance	0.351	12.40	Confirmed
1-5	Knowledge Acquirement → Customers' Knowledge Management → Performance	0.199	31.740	Confirmed
2-5	Knowledge Conversion → Customers' Knowledge Management → Performance	0.741	3.420	Confirmed
3-5	Knowledge Application → Customers' Knowledge Management → Performance	0.247	17.210	Confirmed
6	Organizational Agility → Performance	0.638	2.961	Confirmed
7	Customers' Knowledge Management → Performance	0.172	5.961	Confirmed

indexes was between -1.96 and +1.96, all indexes were significant. Furthermore, because the factor loading of all indexes was above 0.5, all questions should act in the particular index assessment, leading to the removal of questions. Considering the information in Table 4, we realized that all hypotheses, except for hypotheses 1-1, 1-2, 3-3, were accepted.

Discussion

The study's first hypotheses examined the process

impact of structured knowledge on organizational performance, and in its sub-hypothesis, the impact of structured knowledge of every component, including knowledge acquirement, knowledge conversion, and knowledge conversion, was examined. With respect to the research findings, structured knowledge had a positive and significant impact on organizational performance; among the structured knowledge components, the process of Knowledge Conversion/ Application had a significant and positive impact

on organizational performance. Based on the study findings, the knowledge acquisition process did not significantly impact the organizational performance. The second hypothesis of this study was to examine the impact of structured knowledge process on the customers' knowledge management; also, in its sub-hypothesis, the impact of each of the structured knowledge components (including knowledge acquirement, knowledge conversion, and knowledge application on customers' knowledge management) was examined. Based on the research findings, structured knowledge had a significant and positive customers' knowledge management, and among the structured knowledge components, the process of knowledge conversion/application had a significant and positive impact on the customers' knowledge management in the organization.

Conclusion

Based on the research findings, the process of knowledge acquisition did not significantly impact the customers' knowledge management. The third hypothesis of the study examined the impact of structured knowledge on organizational agility and, in its sub-hypothesis, the impact of every component of structured knowledge including (including knowledge acquirement, knowledge conversion, and knowledge application, on customers' agility) was examined. With respect to the study findings, structured knowledge had a positive and significant impact on organizational agility, and among the structured knowledge components, the knowledge acquisition and knowledge conversion process had a significant and positive impact on the organizational agility. The study findings as to hypotheses 2-3, 1-3, and 3 were in line with the findings of (7, 10, 12) in which they investigated and confirmed the influence of knowledge organizational agility. The fourth hypotheses of this research examined the influence of organizational agility mediating role associated with the process of structured knowledge and organizational performance and also in its sub-hypotheses, the influence of the mediating role of organizational agility in relation to every component of structured knowledge process (including knowledge acquirement, knowledge conversion and knowledge application on performance) was examined. Based on the results, structured knowledge and its components (including knowledge acquisition, knowledge conversion, and knowledge application) has a significant and positive impact on the mediating role of organizational agility on performance. The fifth hypothesis investigated the impact of the mediating

role of customers' knowledge management in the relationship between structured knowledge and an organization's performance. In its sub-hypotheses, the impact of the mediating role of the customers' knowledge management in relation with the structured knowledge process components (including knowledge acquirement, knowledge conversion and knowledge application on performance) was investigated. According to the results of structured knowledge research and its components (including knowledge acquirement, knowledge conversion, and knowledge application), the mediating role of the knowledge management process on organizational performance had a significant and positive influence. The sixth hypothesis of this research investigated the impact of the role of organizational agility on organizational performance. Based on findings, organizational agility had a significant and positive impact on organizational performance that is in line with (10, 12); they also confirmed the impact of organizational agility on performance. The seventh hypothesis of this research examined the influence of customers' knowledge management on organizational performance, resulting in the positive and significant impact of customer knowledge management on organizational performance that is in line with the results of a previous research (10) confirming the customers' knowledge management on performance.

The main limitation of this research was reliance only on the responses given by the questionnaire respondents, and no actual observations or interviews were carried out. Therefore, future researchers are recommended to complete the balance sheet in the accounting department of this research, according to the existing and actual documents such as profit and loss statements .

Conflict of Interest: None declared.

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