

The Mediating Role of Organizational Innovation on the Relationship between Knowledge Management Processes and Organizational Performance in the Public Sector

Mojtaba Naghavi¹, ZainalAbidin Mohamad², and Murali Sambasivan³

¹University Putra Malaysia, Naghavi2008@Gmail.com

² UniversityScience Islam Malaysia, laniaz@usim.edu.my

³ University Putra Malaysia, murali@econ.upm.edu.my

ABSTRACT

The main objective of this study is to survey relationships among some of critical success factors of knowledge management (KM) include; KM processes (KMP), organizational innovation (INO), and organizational performance (PER). So in this research about the role INO as mediator will be investigated. The research proposes that KM in the public sector is still in its infancy and has a long way to go in the KM journey. However, the study has identified a certain number of factors that are essential to the success of the KM initiative and program in the public sector. The result of this investigation could have significant implications for KM programs in public sector organizations in Iran.

Keywords: KM processes, organizational innovation, organizational performance.

I INTRODUCTION

Nowadays in various countries including Iran, managers are eager to create KM systems in organizations with the aim of taking advantage of its useful results. Effective KM reduces costs in production of knowledge, and ensures to publish the best practices working in organization, and enables organizations to solve their problems. Due to lack of enough experience in the field of KM in many organizations, managers must understand the problems when creating KM systems in their organization.

II BACKGROUND OF STUDY

Even though KM has been widely discussed by many academics and practitioners, there is relatively little information on KM found in the public sector. Cong et al.,(2007) have emphasized that KM in the public sector is still in its infancy and has a long way to go in the KM journey. Cong and Pandya(2003)mentioned governments are now realizing the importance of KM in its policy-making and service delivery to the public and some of the government departments are beginning to put KM high on their agenda. However, it is not easy to implement, as it seems.

The basic assumption of this study is that organizational performance will be increased under the appropriate KM processes that are mediated by organizational innovation.The operational definition of each construct in this study are in **Table1**.

Table 1: Operational definition of each construct in this study

KM processes	KM can be viewed in many ways. One of them is the 'process perspective'. Based on this perspective, KM focuses on understanding how knowledge is created, validated, presented, distributed, and applied within an organization (Alavi & Leidner, 2001).
Organizational Innovation	Innovation can be explained as a new idea or behavior, a new product, service or technology (Harkema, 2003).An innovative organization is characterized by flexibility, empowered employees, and the absence of strict work rules (Daft,

	2009).
Organizational Performance	The Balanced Scorecard (BSC) approach is one of several well-known ways to evaluate organizational performance by examining the gap between a target performance and a current performance value (Chen & Chen, 2005). The BSC, first developed by Kaplan and Norton in 1992, encompasses financial and non-financial measures.

III HYPOTHESES AND CONCEPTUAL FRAMEWORK

The hypotheses of this study come from the theoretical statements made in the literature on KM. These hypotheses are presented through the following variables.

H₁: There is a significant positive relationship between KM processes and organizational performance.

H₂: There is a significant positive relationship between KM processes and organizational innovation.

H₃: There is a significant positive relationship between organizational innovation and organizational performance.

H₄: organizational innovation mediate the relationship between KM processes and organizational performance.

Based on the supportive evidence from literature and the above-mentioned hypotheses, the conceptual framework of the study is presented in **Figure1**.

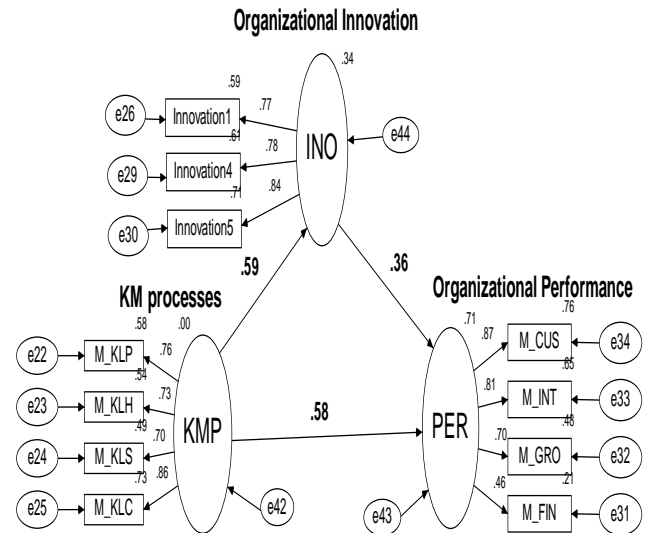


Figure1: The Conceptual Framework

IV METHOD

The population of this study is the heads of supervisory departments of the Iranian public banks' branches. Iran has 31 provinces and 12 public banks and they have approximately 420 supervisory departments. A questionnaire containing 42 questions with a likert-type scale from 1 (strongly disagree) to 5 (strongly agree) was used as the main instrument in gathering data, and a total of 229 respondents were involved in the survey. In order to test the content validity of this instrument, five domain experts were invited to discuss and revised it. In addition, a pilot study was performed to test the research methodology and confirmation of instrument reliability and validity; a reliability analysis was used to explain internal consistency; and a confirmatory factor analysis (CFA) was carried out to determine the degree of model fit. In addition, as an analytical method, Structural Equation Modeling (SEM) was selected using Amos 16.0 version. To test the mediator, this research used of Mathieu and Taylor (2006) following Baron & Kenny (1986) approach.

V RESULT

In order to enhance the research ability to generalize for the whole population, the survey questionnaires were distributed to all the members of population, and of the 420 questionnaires, 229 (54.5%) were completed. The demographic information of participants is indicated in **Table 2**.

Table 2: Characteristics of the Respondents

	Characteristics	Sample	Valid Percent
Gender	Male	217	97.3
	Female	6	2.7
Age	<40	65	29.4
	40~50	140	63.3
	>50	16	7.2
Job experience	<10	21	9.5
	10~20	89	40.3
	>20	111	50.2

In this study, the hypothesized research model was tested using Maximum Likelihood (M.L.) estimation. The regression weights of the mediation, direct and indirect model are presented in **Table 3**. In addition, the model fit of path analysis was evaluated by examining the root mean square residual (RMR), Goodness of Fit (GFI), Incremental Fit Index (IFI), and Comparative Fit Index (CFI) (Byrne, 2010; Hair, Anderson, Tatham, & Black, 2010; Ho, 2006). Hypotheses (H1, H2, and H3) testing results indicates there are significant positive relationship among KM processes (KMP), organizational innovation (INO), and organizational performance (PER) (see **Table 4**). In order to evaluate the mediating effect of INO on the relationship between KMP and PER (H4), based on Standard Regression Weights in the Models (**Table 4**) and Mathieu and Taylor (2006) approach, there is evidence of the presence of **partial mediation** (see **Table 5**). This means, INO partially mediates the relationship between KMP and PER.

Table 3: Standard Regression Weights in the Models

DV		IV	Mediation Model	Direct Model	Indirect Model
INO	<---	KMP	.59	.00	.68
PER	<---	INO	.36	.00	.79
PER	<---	KMP	.58	.79	.00

Table 4: Summary of hypotheses (H₁, H₂, and H₃) testing results

Hypotheses	β	C.R.	Sig (P-value)
H₁ : There is a significant positive relationship between KM processes and organizational performance.	.58	7.78	.000
H₂ : There is a significant positive relationship between KM processes and organizational innovation.	.59	8.00	.000
H₃ : There is a significant positive relationship between organizational innovation and organizational performance.	.36	4.40	.000

Note: Statistically Significant at $p \leq 0.05$

Table 5: Summary of the mediation effect of "INO" on the relationship between "KMP" and "PER" (H₄)

Test "INO" as Mediator					
Model	IV on DV	β	C.R.	P-value	Sig.
Direct	PER ← KMP	.79	.89	.000	Yes
	INO ← KMP	.68	9.17	.000	Yes
Indirect	PER ← INO	.79	10.44	.000	Yes
	PER ← KMP	.58	7.78	.000	Yes
Result			Partial Mediation		

Note: Statistically Significant at $p \leq 0.05$

VI DISCUSSION AND CONCLUSION

The results of this study indicate that KM processes affect organizational performance via their effects on the organizational innovation. The present evidence implies that KM processes lead to increased organizational innovation and the indirect path through organizational innovation results in a higher

level of organizational performance. This study also reveals that KM processes (including knowledge creation, storing, sharing and application) help organizational members to increase organizational innovation.

In theoretical implications, this study contributes to the body of knowledge by examining whether organizational innovation mediates the relationship between the organizational innovation's antecedents, which is KM processes in the present study and the organizational performance as the consequence of organizational innovation. In practical implications, the results of this study indicates that organizational innovation has key role in knowledge management procedure in an organization. Therefore, managers need to be aware of this linkage, and be ready to provide support to strengthen it.

behavior. *Journal of Organizational Behavior*, 27(8), 1031-1056.

REFERENCES

- Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly: Management Information Systems*, 25(1), 107-136.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173-1182.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (Second Edition ed.): Lawrence Erlbaum.
- Chen, A. P., & Chen, M. Y. (2005). *A review of survey research in knowledge management performance measurement: 1995-2004*.
- Cong, X., Li-Hua, R., & Stonehouse, G. (2007). Knowledge management in the Chinese public sector: empirical investigation. *Journal of Technology Management in China*, 2(3), 250-263.
- Cong, X., & Pandya, K. V. (2003). Issues of Knowledge Management in the Public Sector. *Electronic Journal of Knowledge Management*.
- Daft, R. L. (2009). *Organization Theory and Design*.
- Hair, Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate data analysis: with readings* (Seventh Edition ed.): Prentice-Hall, Inc.
- Harkema, S. (2003). A complex adaptive perspective on learning within innovation projects. *Learning Organization, The*, 10(6), 340-346.
- Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*: CRC Press.
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational