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

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## 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. |



**Figure1: The Conceptual Framework**

## 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.

$H_1$: There is a significant positive relationship between KM processes and organizational performance.

$H_2$: There is a significant positive relationship between KM processes and organizational innovation.

$H_3$: There is a significant positive relationship between organizational innovation and organizational performance.

$H_4$: 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**.
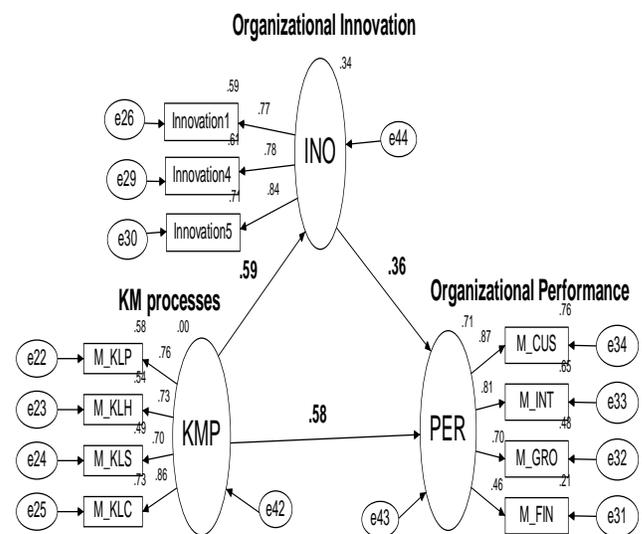
## IV METHOD

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 usingAmos 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 questionnaairs,  229 (54.5%) were completed.The  demo-graphic  information  of participants is indicated in **Table2**.

**Table2: 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 relationshipamongKM 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 partialy 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 (H$_1$, H$_2$, and H$_3$) testing results**

| Hypotheses | β | C.R. | Sig (P-value) |
|---|---|---|---|
| **H$_1$:** There is a significant positive relationship between KM processes and organizational performance. | .58 | 7.78 | .000 |
| **H$_2$:** There is a significant positive relationship between KM processes and organizational innovation. | .59 | 8.00 | .000 |
| **H$_3$:** There is a significant positive relationship between organizational innovation and organizational performance. | .36 | 4.40 | .000 |

**Note:**   Statistically Significant at p≤0.05

**Table 5: Summary of the mediation effect of "INO" on the relationship between "KMP" and "PER" (H$_4$)**

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

**Note:** Statistically Significant at p≤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 theoritical 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.

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