The Mediating Role of Knowledge Management Processes in the Development of Organizational Innovation in the Public Sector

¹M. Naghavi, ²A.H. Dastaviz and ³M. Jamshidy

¹Graduate School of Management, University Putra Malaysia, Malaysia

²Institute of Graduate Studies, University Malaya, Kuala Lumpur, Malaysia

³Faculty of Management and Human Resource Development, Universiti Teknologi Malaysia, Malaysia

Abstract: The aim of this study was to examine the relationships among organizational factors, knowledge management processes and organizational innovation. In addition, the role of knowledge management processes as mediator in the development of organizational innovation also was investigated. In this study, four research questions and 25 hypotheses were examined. The population of this study was heads of supervisory departments of the public banks' branches in all of the Iran provinces. 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. As an analytical method, Structural Equation Modeling was selected using AMOS 16.0 version. The findings of this study identified the mediating role of knowledge management processes in the relationship between organizational factors and organizational innovation. Results of the Structural Equation Modeling analysis also revealed that "IT support" of organizational factors has the highest contribution toward the prediction of organizational innovation and so, the incentives and leadership of organizational factors were the second and third predictor variables of organizational innovation, respectively. From an academic point of view, the results of this study especially its intermediate linkage helps scholars understand the processes further, which might be helpful in discovering additional mediator at different levels of analysis.

Key words: Organizational factors, knowledge management processes, organizational innovation

INTRODUCTION

There are some barriers to effective Knowledge Management (KM) in the public sector. The most important of them are structural and cultural barriers. Rigid organizational structure and hierarchy, lack of formal information-sharing mechanism, accountability to higher government organizations, leadership capabilities, resources, reward and recognition and trust and knowledge sharing environment are major factors that inhibit KM in this sector (Chawla and Joshi, 2010; Cong et al., 2007). Meanwhile in Cong and Pandya (2003) point of view, People, KM processes and technology are the three key elements that need to be considered for public sector KM framework. According to Monavvarian and Kasaei (2007), Cong et al. (2007) and Chawla and Joshi (2010), KM in the public sector is a new subject and there is generally, relatively little information on it and even less in developing countries. Wiig (2002) focused on

KM in government and explored the important roles that KM could play, especially in the following four major areas:

- Improving decision-making in the public sector
- Assisting members of the public to be involved in decision making
- Building a society with intellectual capital capabilities to be competitive
- Developing a KM work force

Wiig (2002) emphasized the importance of KM within and in support of public administration, arguing that this would enable society to prosper, be more viable as people and organizations learn to work more efficiently. In general, such an approach would result in an improvement in the quality of life for the people.

Since innovation has recently been considered as an important factor for organizations especially banks to

Corresponding Author: M. Naghavi, Graduate School of Management, University Putra Malaysia,

innovation

maintain their competitive edge and to develop, it is important for organizations to identify the key factors for promoting an organizations' product or service and process innovation. These factors include the leadership paradigm (Anantatmula, 2008), organizational culture (King, 2008), organizational structure (Rhodes *et al.*, 2008), organizational human resource (Syed-Ikhsan and Rowland, 2004) and information technology (Sher and Lee, 2004). Therefore, organizational factors, KM processes and organizational innovation are selected as the major variables of this research.

In the related to the impact of organizational factors on KM processes, although the literature review indicates that there are various views about the key organizational factors of KM processes; many researchers have focused on five factors (i.e., organizational leadership, culture, structure, human resources and IT) as the most effective factors. Implicitly, based on the findings of scholars and practitioners, collaboration, trust and incentives are the three essential components of organizational culture (DeTienne et al., 2004), so centralization and formalization are two most studied dimensions of organizational structure (Rapert and Wren, 1998) and the training is an important enabler of organizational human recourse to KM implementation (Wong, 2005). Therefore, the key organizational factors selected for this study, based on the former literature analysis are: Leadership, incentives, centralization, collaboration, trust, formalization, training and IT support.

The main premise assumption of this study is that organizational innovation will be developed under the appropriate organizational factors that are mediated by KM processes. Therefore, major variables include organizational factors, KM processes and organizational innovation. The operational definition of each construct in this study is in Table 1.

There are different findings about the impact of organizational factors on KM processes in various environments (Ngoc, 2005; Rhodes et al., 2008; Syed-Ikhsan and Rowland, 2004). The findings show that there are no same levels of impact of organizational factors on KM processes. On the other hand, several studies have investigated the impact of KM processes on organizational innovation. The results indicate that KM systems have a distinctive contribution to the development of a sustainable competitive advantage through innovation (Du Plessis, 2007) Therefore, they can be measured and examined in an intended environment.

HYPOTHESES AND HYPOTHESIZED (MEDIATION) MODEL

This study attempts to test the relationships among organizational factors, KM processes and organizational innovation. In addition, in this research about the role KM

Leadership	Leadership is "the art of mobilizing others to want to struggle for shared aspirations" (Kouzes <i>et al.</i> , 1987)
Collaboration	Collaboration may be defined as the degree to which people
Conadoration	in a group actively support and help one another in their
	work (Hurley and Hult, 1998)
Trust.	Trust can be defined as maintaining reciprocal faith in each
Trust	other in terms of intention and behaviors (Kreitner and
	Kinicki, 1992)
Incentives	Incentives or reward systems are management tools that
Hicchieves	hopefully contribute to a firm's productivity by influencing
	individual or group behavior (Lawler and Cohen, 1992)
Centralization	Centralization refers to "the extent to which decision-
Cena anzacion	making power is concentrated at the top levels of the
	organization" (Caruana et al., 1998, pp: 19)
Formalization	Formalization refers to "the existence of formal rules and
1 Ullimitadioil	regulations and the organizations' efforts to enforce those
	rules" (Caruana et al., 1998, pp: 19)
Training	Training is a learning-based practice and its aim is to create
	permanent changes in a person to improve his/her abilities
	in working
IT support	IT is one of the key elements in effective KM. It also helps
* *	to make the workforce more efficient than those who do not
	use IT (Alavi and Leidner, 1999)
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 and Leidner, 2001)
Organizational	Innovation can be explained as a new idea or behavior, a

Table 1: Operational definition of each construct in this study

processes as mediator in the development of organizational innovation are investigated. Consequently, this study tries to answer the following research questions:

new product, service or technology (Harkema, 2003)

- (a) Is there a significant relationship between organizational factors and KM processes?
- (b) Is there a significant relationship between organizational factors and organizational innovation?
- (c) Is there a significant relationship between KM processes and organizational innovation?
- (d) Do KM processes mediate the relationship between organizational factors and organizational innovation?

The hypotheses of this study come from the theoretical statements made in the literature on KM. These hypotheses are presented through the following variables in Table 2.

Based on the supportive evidence from literature and the above-mentioned hypotheses, the conceptual framework of the study is presented in Fig. 1.

METHODOLOGY

Sample and data collection: The population of this study was heads of supervisory departments of the public banks' branches in all of the Iran provinces. Iran has 31 provinces and 12 public banks and they have

approximately 420 supervisory departments. Therefore, the unit of analysis was each head of supervisory departments of the Iranian public banks' branches. 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. For the first step, the researchers obtained consents from the top management of the participating banks through the contacts with central organizations. Then, the questionnaires were sent to all of the population members. A total of, 237 (56%) questionnaires were returned and 229 of them were acceptable for analysis.

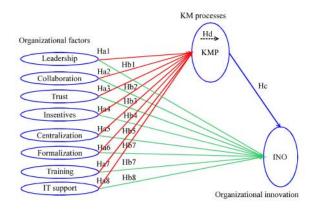


Fig. 1: Conceptual framework of the study based on the research hypotheses

Measures: A guiding principle in developing the questionnaires is to use measurement scales that have been validated by previous research. Generally speaking, it is better to use variables and measures from previous research when available, rather than developing original ones. Existing variables have already been empirically tested and it is possible to determine their empirical validity and stability of variables in different samples and their effect on the dependent variables, i.e., their relative importance. 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.

Testing for mediation: In this study, the mediating role of KM processes (KMP) on the relationship between Organizational Factors (OFs) and organizational innovation (INO) was investigated. According to Hair *et al.* (2010) a researcher can determine if mediation exists and whether it is full or partial, in several ways. One of the ways is the decision tree adopted from Mathieu and Taylor (2006) that is shown in Fig. 2. Mediation requires significant correlations among all three constructs

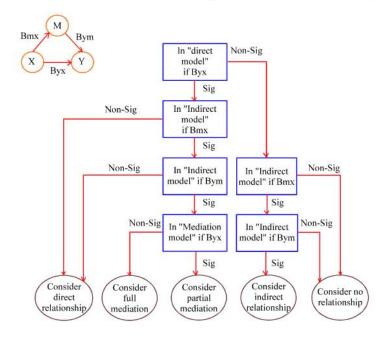


Fig. 2: Decision tree for evidence supporting different intervening effects (Adopted from Mathieu and Taylor, 2006)

Table 2. The	research hypotheses made in the merature on Kivi
Hypotheses	Explaination
Ha_1	There is a significant positive relationship between Leadership
	and KM processes
Ha_2	There is a significant positive relationship between
	collaboration and KM processes
Ha_3	There is a significant positive relationship between trust and
	KM processes
Ha ₄	There is a significant positive relationship between incentives
	and KM processes
Ha_5	There is a significant relationship between centralization and
	KM processes
Ha_6	There is a significant relationship between formalization and
	KM processes
Ha ₇	There is a significant positive relationship between training and
	KM processes
Ha_8	There is a significant positive relationship between IT support
	and KM processes
Hb_1	There is a significant positive relationship between leadership
	and organizational innovation
Hb_2	There is a significant positive relationship between
	collaboration and organizational innovation
Hb_3	There is a significant positive relationship between trust and
	organizational innovation
Hb₄	There is a significant positive relationship between incentives
***	and organizational innovation
Hb ₅	There is a significant relationship between centralization and
T.TL.	organizational innovation
Hb_6	There is a significant relationship between formalization and
T.TI.	organizational innovation There is a significant positive relationship between training and
Hb ₇	organizational innovation
Hb_8	There is a significant positive relationship between IT support
1108	and organizational innovation
Нс	There is a significant positive relationship between KM
110	processes and organizational innovation
Hd_1	KM Processes mediate the relationship between Leadership and
1101	organizational innovation
Hd ₂	KM Processes mediate the relationship between Collaboration
1102	and organizational innovation
Hd_3	KM Processes mediate the relationship between Trust and
1145	organizational innovation
Hd₄	KM Processes mediate the relationship between Incentives and
1104	organizational innovation
Hd ₅	KM Processes mediate the relationship between Centralization
.9	and organizational innovation
Hd_6	KM Processes mediate the relationship between Formalization
	and organizational innovation
Hd_7	KM Processes mediate the relationship between Training and
	organizational innovation
Hd_8	KM Processes mediate the relationship between IT support and
_	organizational innovation

(e.g., X, M and Y in Fig. 2). A mediating construct facilitates the relationship between the other two constructs involved. If the mediating construct completely explains the relationship between the two original constructs (e.g., X and Y), then this is termed as full mediation. But if it is found that there is still some of the relationship between X and Y that is not explained away by the mediator, then this is denoted as partial mediation.

RESULTS

Confirmatory Factors Analysis (CFA) and Structural model: Confirmatory Factors Analysis (CFA) is used as a

statistical method to determine the relationships between the observed variables and the constructs, which were also called latent variables (Byrne, 2010). In this study separate CFA were conducted for all of the latent variables including OFs, KMP and INO. The overall fit of a measurement model is determined by confirmatory factors analysis Ho (Ho, 2006). The measurement model focuses on the linear functions between latent variables and their indicators in the model.

The researcher then examines the relationship between exogenous and endogenous variables by structural modeling (Byrne, 2010). The structural model (Fig. 3) reveals a path analysis process with latent constructs to investigate the mediation, direct and indirect structural relationship between variables. In this study, the structural model assesses the relationship between: Eight predictor variables (Organizational Factors) such as Leadership (LED), Collaboration (COL), Trust (TRU), Incentives (INC), Centralization (CEN), Formalization (FOR), Training (TRA) and IT support (ITS) and KM processes (KMP) as mediator variable and organizational innovation (INO) as dependent variable.

In addition, the model fit of path analysis was evaluated by examining the Root Mean square Residual (RMR), Goodness of Fit Index (GFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA) (Byrne, 2010; Hair et al., 2010; Ho, 2006).

The hypothesized research model was tested using Maximum Likelihood (M.L.) estimation. The standard regression weights of the mediation, direct and indirect model are presented in Table 3.

Hypotheses testing: In order to access the research objectives and answer the research questions, this study tests 25 research hypotheses. Each research question was related to one or a set of hypotheses and the researcher has used the structural model (Fig. 3), the Standard Regression Weights in the Models (Table 3) and the regression weights related to mediation model in testing the study's hypotheses. The research questions with related hypotheses were examined through p-value at levels (<0.1, <0.05 and <0.001).

Research Question (a): Is there a significant relationship between organizational factors and KM processes?

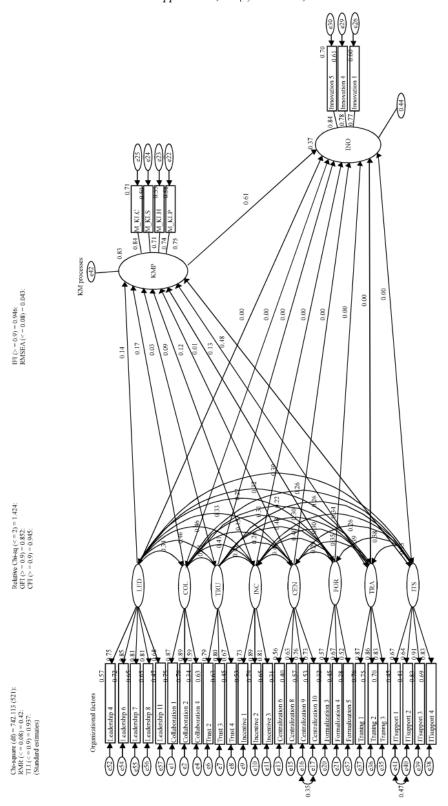


Fig. 3: Estimated path coefficients of the hypothesized (Mediation) model

Table 3: Standard	rearection	venichte	in the	model
Lable 3: Standard	regression	weights	m the	model

			Direct model (OFs- INO)	Indirect model (OFs-KMP-INO)	Mediation model
DV		IV	β	β	β
KMP	<	LED	0.00	0.15	0.13
KMP	<	COL	0.00	0.17	0.19
KMP	<	TRU	0.00	0.03	0.03
KMP	<	INC	0.00	0.09	0.07
KMP	<	CEN	0.00	0.11	0.13
KMP	<	FOR	0.00	-0.01	0.03
KMP	<	TRA	0.00	0.14	0.14
KMP	<	ITS	0.00	0.46	0.43
INO	<	KMP	0.00	0.61	0.36
INO	<	LED	0.19	0.00	0.15
INO	<	COL	-0.04	0.00	-0.11
INO	<	TRU	0.01	0.00	0.00
INO	<	INC	0.21	0.00	0.19
INO	<	CEN	-0.08	0.00	-0.13
INO	<	FOR	-0.19	0.00	-0.20
INO	<	TRA	0.09	0.00	0.04
INO	<	ITS	0.50	0.00	0.34

DV: Dependent variable, IV: Independent variable, β: Estimate of standardized regression weight, LED: Leadership, COL: Collaboration, TRU: Trust, INC: Incentives, CEN: Centralization, FOR: Formalization, TRA: Training, ITS: IT support, KMP: KM processes, INO: Organizational innovation, OFs: Organizational factors

Table 4: The Results of Hypotheses Testing Related to Question (a)

Hypotheses	β	C.R.	p-value	Sig.
Ha ₁ : There is a positive significant relationship	0.14	1.96	0.05**	Yes
between Leadership and KM processes				
Ha2: There is a positive significant relationship	0.17	2.04	0.04**	Yes
between collaboration and KM processes				
Ha ₃ : There is a positive significant relationship	0.03	0.35	0.73	No
between trust and KM processes				
Ha ₄ : There is a positive significant relationship	0.09	1.31	0.19	No
between incentives and KM processes				
Ha5: There is a significant relationship	0.12	1.64	0.10*	Yes
between centralization and KM processes				
Has: There is a significant relationship	-0.01	-0.06	0.95	No
between formalization and KM processes				
Ha7: There is a positive significant relationship	0.13	2.00	0.05**	Yes
between training and KM processes				
Hag: There is a positive significant relationship	0.46	6.35	0.00***	Yes
between IT support and KM processes				

 β : Estimate of standardized regression weight, C.R.: Critical ratio for regression weight, Sig.: Significant (*at p \le 0.10, **at p \le 0.05, ***at p \le 0.01)

The hypotheses related to this question are Ha₁, Ha₂, Ha₃, Ha₄, Ha₅, Ha₅, Ha₇ and Ha₈. The extracted concepts of hypotheses related to Question (a) are shown in the following (Table 4):

As shown in Table 4, this study identifies the relationship between individual dimensions of organizational factors and KM processes. Specifically, it has been found that variables leadership, collaboration, centralization, training and IT support were significantly positively related to KM processes. So, variables trust, incentives and formalization, however, were not significantly related to KM processes.

Research question (b): Is there a significant relationship between organizational factors and organizational innovation?

Table 5: The Results of Hypotheses Testing Related to Question (b)

Hypotheses	β	C.R.	p-value	Sig.
Hb ₁ : There is a significant positive relationship	0.19	2.20	0.03**	Yes
between leadership and organizational				
innovation				
Hb ₂ : There is a significant positive relationship	-0.05	-0.49	0.62	No
between collaboration and organizational				
innovation				
Hb ₃ : There is a significant positive relationship	0.02	0.12	0.90	No
between trust and organizational				
innovation				
Hb ₄ : There is a significant positive relationship	0.22	2.53	0.01**	Yes
between incentives and organizational				
innovation				
Hb ₅ : There is a significant relationship	-0.09	-1.02	0.31	No
between centralization and organizational				
innovation	0.10	1.76	0.00*	***
Hb ₆ : There is a significant relationship	-0.19	-1./5	0.08*	Yes
between formalization and organizational innovation				
	0.00	1 12	0.27	No
Hb ₇ : There is a significant positive relationship between training and organizational	0.09	1.12	0.27	NO
innovation				
Hb ₈ : There is a significant positive relationship	0.50	5.01	0.00***	Yes
between IT support and organizational	0.50	5.91	0.00	1 es
innovation				
HHIOVALIOH				

 β : Estimate of standardized regression weight, C.R.: Critical ratio for regression weight, Sig.: Significant (*at p \leq 0.10, **at p \leq 0.05, ***at p \leq 0.01)

The hypotheses related to this question are Hb_1 , Hb_2 , Hb_3 , Hb_4 , Hb_5 , Hb_6 , Hb_7 and Hb_8 . The extracted concepts of hypotheses related to Question (b) are shown in the following Table 5.

As shown in Table 5, this study identified the relationship between some of the individual dimensions of organizational factors and organizational innovation. Specifically, it has been found that variables leadership, incentives, formalization and IT support are significantly related to organizational innovation and variables collaboration, trust, centralization and training, however, are not significantly related to organizational innovation.

Research question (c): Is there a significant relationship between KM processes and organizational innovation? The hypothesis related to this question is:

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

KM processes have a positive significant relationship with organizational innovation (β = 0.61, C.R. = 8.37, p-value = 0.00) and so the research hypothesis (Hc) is supported.

Research question (d): Do KM processes mediate the relationship between organizational factors and organizational innovation?

Table 6: Summary of the mediation effects of "KMP" on the relationship between "OFs' factors" and "INO" (Hai, Has)

Test "KMP	" as me	ediator													
Direct mod	el				Indirect mod	lel				Mediation	model				
IV on DV	β	C.R.	p-value	Sig.	IV on DV	β	C.R.	p-value	Sig.	IV on DV	β	C.R.	p-value	Sig.	Result
INO_LED	0.19	2.247	0.02**	Yes	KMP_LED	0.14	2.036	0.04**	Yes	INO_LED	0.13	1.778	0.08*	Yes	Partial mediation
					INO_KMP	0.61	8.393	0.00 ***	Yes						
INO_COL	-0.04	-0.465	0.64	No	KMP_COL	0.17	2.017	0.04**	Yes	-	-	-	-	-	Indirect relationship
					INO_KMP	0.61	8.393	0.00***	Yes						
INO_TRU	0.01	0.109	0.91	No	KMP_TRU	0.03	0.346	0.73	No	-	-	-	-	-	No relationship
INO_INC	0.21	2.513	0.01**	Yes	KMP_INC	0.09	1.316	0.19	No	-	-	-	-	-	Direct relationship
INO_CEN	-0.08	-1.009	0.31	No	KMP_CEN	0.11	1.627	0.10*	Yes	-	-	-	-	-	Indirect relationship
					INO_KMP	0.61	8.393	0.00***	Yes						
INO_FOR	-0.19	-1.785	0.07*	Yes	KMP_FOR	-0.01	-0.090	0.93	No	-	-	-	-	-	Direct relationship
INO_TRA	0.09	1.126	0.26	No	KMP_TRA	0.14	2.102	0.04**	Yes	-	-	-	-	-	Indirect relationship
					INO_KMP	0.61	8.393	0.00	Yes						
INO_ITS	0.50	5.954	0.00***	Yes	KMP_ITS	0.46	6.560	0.00***	Yes						
					INO KMP	0.61	8.393	0.00***	Yes	INO ITS	0.34	6.075	0.00***	Yes	Partial mediation

Sig.: Significant (*at $p \le 0.10$, **at $p \le 0.05$, ***at $p \le 0.01$)

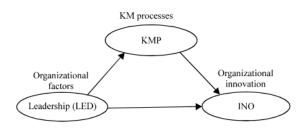


Fig. 4: Mediating effect of KMP on the relationship between LED and INO

The hypotheses related to this question are H_{d1} , H_{d2} , H_{d3} , H_{d4} , H_{d5} , H_{d6} , H_{d6} , and H_{d8} as in the following:

H_{al}: KM Processes mediate the relationship between Leadership and organizational innovation

Based on Standard Regression Weights in the Models (Table 3) and "Decision tree for evidence supporting different intervening effects" (Fig. 2) the mediating effect of "KMP" on the relationship between "LED" and "INO" (Fig. 4) was tested as follows:

- (a) In direct model, LED has significant relationship with INO (β = 0.19, C.R. = 2.247, p-value = 0.02)
- (b) In indirect model, LED has significant relationship with KMP (β = 0.14, C.R. = 2.036, p-value = 0.04) and KMP has significant relationship with INO (β = 0.61, C.R. = 8.393, p-value = 0.00)
- (c) In mediation model, LED has significant relationship with INO (β = 0.13, C.R. = 1.778, p-value = 0.08)

Therefore, based on above results, there is an evidence for the presence of partial mediation. This means, KMP partially mediates the relationship between LED and INO.

The other hypotheses such as H_{d2} , H_{d3} , H_{d4} , H_{d5} , H_{d6} , H_{d7} and H_{d8} are tested same above. The extracted concepts of the mediation effects of KMP on the relationship between Ofs' factors and INO have been shown in Table 6.

As shown in Table 6, the findings of the structural model analysis supported the mediating role of KM processes in the relationship between organizational factors and organizational innovation. The results of the SEM analysis revealed that KM processes partially mediate the relationship between variables leadership and IT support of organizational factors with organizational innovation. The results of the tested model also show that: (a) Variables collaboration, centralization and training of the organizational factors had indirect significant relationships with organizational innovation through KM processes, (b) Variables incentives and formalization of the organizational factors had direct significant relationships with organizational innovation; and finally, (c) Variable trust of the organizational factors did not have any significant effect on organizational innovation.

CONCLUSION

The aim of this study was to examine the relationships among organizational factors, knowledge management processes and organizational innovation. In addition, the role KM processes as mediator in the development of organizational innovation were investigated. Result of the SEM analysis revealed that, (a) Variables leadership, collaboration, centralization, training

Table 7: Direct, indirect and total effects of latent variables on INO

	Direct effect via (OF-INO)	Indirect effect via (OF-KMP-INO)	Total effect				
Latent variables	β	β	β				
LED	0.15	$0.13 \times 0.35 = 0.04$	0.15 + 0.04 = 0.19				
COL	-0.11	$0.19 \times 0.35 = 0.06$	-0.11 + 0.06 = -0.05				
TRU	0.00	$0.03 \times 0.35 = 0.01$	0.00+0.01 = 0.01				
INC	0.19	$0.07 \times 0.35 = 0.02$	0.19+0.02 = 0.21				
CEN	-0.13	$0.13 \times 0.35 = 0.04$	-0.13 + 04 = -0.09				
FOR	-0.21	$0.03 \times 0.35 = 0.01$	-0.21+0.01 = -0.20				
TRA	0.04	$0.14 \times 0.35 = 0.05$	0.04 + 0.05 = 0.09				
ITS	0.35	$0.43 \times 0.35 = 0.14$	0.35 + 0.14 = 0.49				
KMP	0.00	0.35	0.35				

β: Estimate of standardized regression weight, LED: Leadership, COL: Collaboration, TRU: Trust, INC: Incentives, CEN: Centralization, FOR: Formalization, TRA: Training, ITS: IT support, KMP: KM processes, INO: Organizational innovation, OFs: Organizational factors

and IT support of the OFs have significant relationships with KMP. (b) Variables leadership, incentives, formalization and IT support of the OFs have significant relationships with INO. (c) There is a significant positive relationship between KMP and INO. (d) KMP partially mediates the relationship between variables leadership and IT support of the OFs with INO.

Implicitly, the results showed that for this hypothesized model, 61% of the variance in the KMP is explained by the joint influences of the Ofs predictors and so, 49% of the variance in the INO is explained for by the joint influences of the predictors of OFs and KMP. The finding of the overall structural model showed that the IT support based on Direct, Indirect and Total Effects of Latent Variables on INO (Table 7) had the highest contribution toward the prediction of organizational innovation (β = 0.49). The incentives and leadership were the second and third predictor variables of organizational innovation, respectively (β = 0.21, β = 0.19). Therefore, this study verified that, OFs positively affect the innovation of public bank branches in Iran.

Implications: From an academic point of view, the results of this study especially its intermediate linkage helps scholars understand the processes further, which might be helpful in discovering additional mediator at different levels of analysis. The findings of this study also suggest that the variables of OFs such as (leadership, collaboration, centralization, training and IT support) increase KMP that have direct influence on INO. The results of this research have important implications primarily for scholars and managers.

From a practical point of view, the results of this study have some implications for public banks as follows:

 The findings of this study indicated that IT support has a strongly significant relationship with KM

- processes and organizational innovation (β = 0.43, β = 0.35, respectively). In addition, IT support based on Direct, Indirect and Total Effects of Latent Variables on INO (Table 7) has the highest contribution toward the prediction of organizational innovation (β = 0.37). These show that IT support plays key role in knowledge management issue in public banks in Iran
- This study highlighted the importance of the relationship between Incentives variable with KM processes and organizational innovation (β = 0.19, β = 0.07, respectively). Pertaining to incentives, (Syed-Ikhsan and Rowland, 2004) believed that it is unrealistic to assume that all employees are willing to easily offer knowledge without considering what may be gained or lost as a result of this action. Therefore, employees need a strong motivator in order to share knowledge. Hence, managers of public banks should be used a favorable incentives system as management tools that hopefully contribute to a bank's productivity by influencing individual or group behavior
- The result from the mediation model findings indicated that leadership variable was significantly positively related to KM processes and organizational innovation (β = 0.13, β = 0.15, respectively). Meanwhile, based on (Anantatmula, 2008) view promoting innovation using the KM process requires collaborative culture and participation in decision-making. Leadership promotes innovation by creating a vision and providing strategic direction

REFERENCES

Alavi, M. and D.E. Leidner, 1999. Knowledge management systems: Issues, challenges and benefits. Commun. Assoc. Inform. Syst., Vol. 1,

Alavi, M. and D.E. Leidner, 2001. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Q., 25: 107-136.

Anantatmula, V.S., 2008. Leadership role in making effective use of KM. VINE, 38: 445-460.

Byrne, M., 2010. Structural Equation Modeling with AMOS: Basic Concepts, Applications and Programming. 2nd Edn., Routledge Taylor and Francis Group, New York, USA.

Caruana, A., M.H. Morris and A.J. Vella, 1998. The effect of centralization and formalization on entrepreneurship in export firms. J. Small Bus. Manage., 36: 16-19.

- Chawla, D. and H. Joshi, 2010. Knowledge management initiatives in Indian public and private sector organizations. J. Knowl. Manage., 14: 811-827.
- Cong, X. and K.V. Pandya, 2003. Issues of knowledge management in the public sector. Electron. J. Knowl. Manage., 1: 25-33.
- Cong, X., R. Li-Hua and G. Stonehouse, 2007. Knowledge management in the Chinese public sector: Empirical investigation. J. Technol. Manage. China, 2: 250-263.
- DeTienne, K.B., G. Dyer, C. Hoopes and S. Harris, 2004.
 Toward a model of effective knowledge management and directions for future research: Culture, leadership and CKOs. J. Leadership Organiz. Stud., 10: 26-43.
- Du Plessis, M., 2007. The role of knowledge management in innovation. J. knowl. Manage., 11: 20-29.
- Hair, J.F., W.C. Black, B.J. Babin and R.E. Anderson, 2010. Multivariate Data Analysis: With Readings. 7th Edn., Prentice-Hall Inc., USA., ISBN-13: 978-0138132637, Pages: 816.
- Harkema, S., 2003. A complex adaptive perspective on learning within innovation projects. Learn. Organiz., 10: 340-346.
- Ho, R., 2006. Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS. Chapman and Hall/CRC Press, Boca Raton.
- Hurley, R.F. and G.T.M. Hult, 1998. Innovation, market orientation and organizational learning: An integration and empirical examination. J. Market., 62: 42-54.
- King, W.R., 2008. Questioning the conventional wisdom: Culture-knowledge management relationships. J. Knowl. Manage., 12: 35-47.
- Kouzes, J.M., B.Z. Posner and T.J. Peters, 1987. The Leadership Challenge: How to get Extraordinary Things done in Organizations. Jossy-Bass, San Francisco, USA.
- Kreitner, R. and A. Kinicki, 1992. Organizational Behavior. Richard D. Irwin, Homewood, IL., USA.

- Lawler, E.E. and S.G. Cohen, 1992. Designing pay systems for teams. ACA J., 1: 6-19.
- Mathieu, J.E. and S.R. Taylor, 2006. Clarifying conditions and decision points for mediational type inferences in organizational behavior. J. Organiz. Behav., 27: 1031-1056.
- Monavvarian, A. and M. Kasaei, 2007. A KM model for public administration: The case of Labour Ministry. VINE, 37: 348-367.
- Ngoc, P.T.B., 2005. An empirical study of knowledge transfer within Vietnam's IT companies. Internal Working Paper, Department of Informatics, University of Fribourg, Fribourg, Switzerland.
- Rapert, M.I. and B.M. Wren, 1998. Reconsidering organizational structure: A dual perspective of frameworks and processes. J. Managerial Issues, 10: 287-302.
- Rhodes, J., R. Hung, P. Lok, B.Y.H. Lien and C.M. Wu, 2008. Factors influencing organizational knowledge transfer: Implication for corporate performance. J. Knowl. Manage., 12: 84-100.
- Sher, P.J. and V.C. Lee, 2004. Information technology as a facilitator for enhancing dynamic capabilities through knowledge management. Inform. Manage., 41: 933-945.
- Syed-Ikhsan, S.O.S. and F. Rowland, 2004. Knowledge management in a public organization: A study on the relationship between organizational elements and the performance of knowledge transfer. J. Knowl. Manage., 8: 95-111.
- Wiig, K.M., 2002. Knowledge management in public administration. J. Knowl. Manage., 6: 224-239.
- Wong, K.Y., 2005. Critical success factors for implementing knowledge management in small and medium enterprises. Ind. Manage. Data Syst., 105: 261-279.