Mediating Effect of Knowledge Sharing Between Knowledge Capabilities and Organizational Effectiveness of Higher Education Institutes of Pakistan

Yasin Munir, Saif-Ur-Rehman and Tahira Nazir

Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru, Malaysia

Abstract: The value of knowledge management practices is significantly recognized all over the world. In Pakistan most of the organizations have also realized the growing importance of knowledge management. To examine how much higher education institutes are capable for successful knowledge management practices, structural equation modeling technique is applied. Present study is an endeavor to examine the contribution of knowledge infrastructure capabilities knowledge process capabilities and knowledge sharing, in organizational effectiveness. Data is collected from faculty members of higher education institutes at the response rate of 64.5%. Questionnaire is adapted because of reliability and validity of constructs. Strong mediation is found between knowledge process capabilities and organizational effectiveness. Research limitations and future guidelines are provided in this study.

Key words: Knowledge Management · Knowledge Capabilities · Knowledge Sharing · Organizational Effectiveness and Higher Education Institutes

INTRODUCTION

In present organizational environment vast amount of information exchanges [1, 2, 3, 4] from upper to lower and lower to upper management [5, 6]. Numerous surveys and discussions have been conducted to scrutinize the information for effective decision making [7]. Information overload was a big issue for the 21st century managers to reduce the information effectively [8, 7, 9]. Higher education institutes are good business area for proper utilization and implementation of knowledge. Traditionally universities or higher education institutes involve in two modes, knowledge creation and knowledge dissemination. Research has considered as a main key point for knowledge creating in universities or in higher education institutes while teaching has considered as a main key point for knowledge dissemination. In today’s competitive environment universities are facing challenges as a knowledge disseminators and knowledge creators. In higher education institutes boss and subordinates share their knowledge in form of research, team work and groups when a large project is undertaken for research otherwise they try to compete with each other. So knowledge environment or knowledge culture is very essential for managing knowledge in higher education institutes. The value of knowledge management practices is significantly recognized all over the world.

[10, 11, 12, 13]. In Pakistan most of the organizations have also realized the growing importance of knowledge management. So there is a need to conduct research to know how much higher education institutes are capable for successful knowledge management practices. The objective of this endeavor is to examine the contribution of knowledge infrastructure capabilities knowledge process capabilities and knowledge sharing, in organizational effectiveness.

Literature Review: Complex business environment has made very hard to predict and understand flow of knowledge in organizational activities. To support management and workforce for better understanding, this thing realize us that judgmental decisions based on beliefs do not transform organization into knowledge based organizations [14, 15, 16, 17]. For more instance different organizational characteristics of individual has positive impact on three stages of knowledge evolution, system quality and management support [18, 3, 19, 7, 20, 21].

Corresponding Author: Yasin Munir, Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
Managing knowledge means creating a dynamic learning environment to encourage, share and use knowledge [22]. Interested organizations in pursuing innovations and knowledge may wish such a dynamic environment [12, 23, 24] and framework in which managers can help to introduce, discuss and analyze enabling factors that are considered significant according to different form of knowledge and interaction level needed to handle particular problems [3, 23, 13, 9]. Organizational culture significantly influence three knowledge management processes [10, 14, 11, 1] and this environment further classified into five different dimensions cultural and structural context, [11, 13, 9] external and internal social networks, systematic knowledge and strategic engagement.

Cultural diversity have different impact on understanding of knowledge [4, 24, 9]. In knowledge management practices sharing and capturing knowledge is a big challenge in major projects. Furthermore knowledge management theories knowledge claim evaluation is insufficient and lacking empirically. Understanding of practical work, contextual factors and impact of knowledge claim evaluation on knowledge management theories can be consented [25, 26, 8]. Organizational characteristics strongly influence on national cultural although they affect knowledge management [15, 25]. For more instance, during the phase of implementation of knowledge management people have common issues with organizational culture and technology [21, 9]. Initiatives of knowledge management practices are better considered if they make rational or judgmental decisions. Moreover to support learning stages from individuals to organizational level a theoretical framework of learning is described [20]. Knowledge management promise can only be appreciated when people will ready to adopt new ideas [22].

Misunderstanding overlap only when the probability of individual’s mindset increases although they have sophisticated ways to implement and manage knowledge where as knowledge itself is hard to manage and control [3, 8]. Knowledge-sharing dilemma is considered as a substitution between experience and technology-based systems that inhibit strong system of technology and learning based environment [25]. This is not all the time when employees encouraged for own purpose this thing enhance capability of employees for experimental learning [10, 14, 11]. Furthermore to acknowledge the effective knowledge management several organizational levels needed to deployed, support, elicitation, exchange of knowledge, explicit and accommodations of both formal and informal processes of knowledge [14, 25, 8].

Similarly, less amount of awareness about knowledge management practices presented by the non-profit organizations while embedded knowledge were found maximum in non-profit organizations while in few organizations negative impacts were observed about practicing of knowledge management [26, 21, 24]. Another instance, some organizations are practicing hybrid strategy of knowledge management between hard and soft mechanisms and somewhere divergent mechanisms [17, 13]. Several factors have strong and successful impact in implementation of knowledge management in the organization. Knowledge management is shared understanding and positioning as a strategic value in the area of managing organization [14, 18, 2].

MATERIALS AND METHODS

Faculty members were targeted to measure the knowledge capabilities, knowledge sharing and organizational effectiveness. A total of 245 testable questionnaires were received at the response rate 64.2%. A purposive sampling technique was applied to collect the responses of the respondents. Questionnaire was adapted and items were selected on the basis of high factor loading.

The gender composition of the sample was 55% male and 45 % (N = 200). Majority of the respondents 49% were between 25-30 years old. 49.5% have 1-5 years of teaching experience while 33% of the total faculty member were assistant professor and 13% were associate professor, rest of the respondents were lecturer in higher education institutes A set of questionnaire anchored on five-point scales is designed as to measure the knowledge infrastructure capabilities, knowledge process capabilities, knowledge sharing and organizational effectiveness, The interplay between the aforementioned constructs was incorporated with following hypotheses:

H1: Knowledge infrastructure capabilities positively contribute to knowledge sharing

H2: Knowledge infrastructure capabilities positively contribute to organizational effectiveness
H3: Knowledge sharing will mediate the relationship between knowledge infrastructure capabilities and organizational learning because knowledge infrastructure capabilities will transform knowledge sharing into organizational effectiveness.

H4: Knowledge process capabilities positively contribute to knowledge sharing.

H5: Knowledge process capabilities positively contribute to organizational effectiveness. H6: Knowledge sharing will mediate the relationship between knowledge process capabilities and organizational effectiveness because knowledge process capabilities will increase knowledge sharing and organizational effectiveness.

Statistical Analysis: To determine the mediating effect of knowledge sharing and learning organization between knowledge infrastructure capabilities, knowledge process capabilities and organizational effectiveness and to analyze the mediation effect and to determine the path analysis, structural equation modeling technique (SEM) was applied. SEM was selected despite of multiple regression analysis because of two reasons [27]. 1) SEM can estimate all the variables at a time in form of structural model. 2) It is quite difficult to test the nature of relationship of variables because in one study a variable is considered as an independent variable and in another study it is used as dependent variable as a consequence of other variables so through goodness of model fit it can be managed easily. To investigate which variable significantly contributes to successful knowledge management practices a structural models are developed so that the change in goodness of fit indexed can be measured. Model 1 represents structural model of successful knowledge management practices and mediating effect of knowledge sharing between knowledge infrastructure capabilities, knowledge process capabilities and organizational effectiveness. In model 1 Chi-square value is 2.438, RMR=.091, AGFI=.951, NFI=.996, CFI=.998, RMSEA=.077 and TLI=.986 all coefficient pathways are positively interrelated except of knowledge infrastructure capabilities and knowledge sharing. Path analysis did not allow the direct relationship of knowledge infrastructure capabilities and knowledge sharing. Result of model 1 shows that model is overall good fit and accepted.

Table 1 shows the results of maximum likelihood estimates of relationship of all variables. Table 1 shows when knowledge process capabilities go up by 1 knowledge sharing goes up 83.8% while when knowledge sharing goes up by 1 and organizational effectiveness goes up by 39.5%. When knowledge process capabilities will go by 1, organizational effectiveness will go 43.2% up. When knowledge infrastructure capabilities will go by 1, organizational effectiveness will go 14% up where as intercorrelations among knowledge infrastructure capabilities and knowledge process capabilities is 21.7%.

Fig. 1: Model 1: A Structural Model of Successful Knowledge Management Practices Showing Mediating Effect of Knowledge Sharing on Learning Organization

Table 1: Maximum Likelihood Estimates of Model 1

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS &lt;----- KPC</td>
<td>.838</td>
<td>.066</td>
<td>12.793</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>OE &lt;----- KS</td>
<td>.395</td>
<td>.024</td>
<td>16.147</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>OE &lt;----- KPC</td>
<td>.432</td>
<td>.034</td>
<td>12.794</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>OE &lt;----- KIC</td>
<td>.140</td>
<td>.021</td>
<td>6.593</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>KPC &lt;----- KIC</td>
<td>.217</td>
<td>.040</td>
<td>5.369</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

***P<.001; KIC = Knowledge Infrastructure Capabilities; KPC = Knowledge Process Capabilities; KS = Knowledge Sharing; EA = Employee’s Attitude towards knowledge sharing; OE = Organizational Effectiveness
DISCUSSION

Model 1 indicate that knowledge infrastructure capabilities significantly and positively correlated with organizational effectiveness which support proposed hypothesis of this study that knowledge infrastructure capabilities due to knowledge management practices significantly correlated with organizational effectiveness. Managing complexities in distinctive organizational culture and environment for managing change in organization that reflects in management practices [16, 7, 9]. Managers found such knowledge and skills which they subsequently experienced different approaches which they considered that these changing will enable organization towards competitive advantages. Result shows that our model is good fit and the findings of SEM support our hypotheses except the mediating effect of knowledge sharing between knowledge infrastructure and organizational effectiveness. Present study supports that knowledge sharing significantly mediate between knowledge process capabilities and organizational effectiveness. Explicitness, higher modularity and knowledge characteristics can increase knowledge integration among departments and can enhance learning process of the organization while firm’s innovation depends on knowledge management capabilities. Integration of knowledge in organization has significant impact on organizational learning. Knowledge management system, organizational learning and knowledge integration have strong impact on knowledge management capabilities [10, 14, 17, 26].

Implication: Universities and higher education institutes must formulate some strategies to cope with the current pace and to recognize current changes required for their learning and implementation of knowledge as an intellectual capital. Majority of the students remain no longer satisfied with the current universities knowledge disseminating process because they understand current global working environment and challenges they have to face after the completion of their education. Students have realized that there is wide knowledge gap between universities and corporate sectors and they have to develop new skills, aptitude and competencies to achieve and sustain their positions in corporate sectors [11, 12]. Present study provides assessment tool for higher education institutes to understand whether they are successfully practicing knowledge management in their organizations are not, if yes then at what level they have achieved their goals, if no then which parameters are significant in knowledge management practices to achieve organizational effectiveness.

Limitations and Future Indications: As for as, implications are concerned, it is necessary to point out some of its limitations. Current study conducted once over a period so for more reliable results later on studies should focus on longitudinal data. We used adopted questionnaire and all variables incorporated at five-point likert scale which allows the respondents to tick the options at random so there were chances of common method variance, to resolve this issue we examined reliability and normality of the survey. Future studies must focus on learning organization as a mediating variable and should test Up to what extent knowledge sharing and organizational learning mediate the relationship of knowledge infrastructure capabilities, knowledge process capabilities and organizational effectiveness?

REFERENCES