



THE MODERATING EFFECT OF ISLAMIC WORK ETHICS ON THE RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT CAPABILITIES AND ORGANIZATIONAL PERFORMANCE AT THE PRIVATE HIGHER EDUCATION INSTITUTIONS IN OMAN

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ABSTRACT

Knowledge management capabilities are recognized as an important means for sustaining and improving organizational performance of the private higher education institutions. The evaluation of knowledge management infrastructure capabilities and knowledge management process capabilities has become important since it provides a reference for directing the private higher education institutions to enhance their organizational performance. The Islamic work ethics may have a moderating effect on the relationship between knowledge management infrastructure capabilities, knowledge management process capabilities and organizational performance. This paper provides an understanding of relationship between knowledge management infrastructure capabilities, knowledge management process capabilities, organizational performance and the Islamic work ethics. Additionally, it provides a new framework that helps the private higher education institutions to assess their knowledge management infrastructure capabilities, knowledge management process capabilities, organizational performance and the Islamic work ethics. The research findings showed that the level of knowledge management infrastructure and process capabilities at the private higher education institutions was high, and indicated that the knowledge management process capabilities had a positive significant causal effect relationship with organizational performance, however the research findings showed that the relationship between knowledge management infrastructure capabilities with organizational performance had a non-significant causal effect. Finally, the Islamic work ethics had a significant moderating effect on the relationship between knowledge management infrastructure and process capabilities and organizational performance.

Keywords: *Knowledge Management, Knowledge Management Infrastructure Capabilities, Knowledge Management Process Capabilities, Organizational Performance, Islamic Work Ethics, Private Higher Education Institutions.*

1. INTRODUCTION

In a continuously changing world, people seek for new knowledge incessantly. Knowledge management (KM) is one of the most important factors to stimulate and achieve the strategic goals for any organization. Also, even though the KM concept has been accepted for decades, yet the organizations have not been fully successful in application aspects. KM has vital importance in higher education which is responsible for the creation and transfer of knowledge to people [1]. How does the private higher education institutions

enhance their knowledge management infrastructure capabilities and knowledge management process capabilities to enhance their organizational performance is an important issue. Additionally, the Islamic work ethics (IWE) showed a positive relationship with knowledge sharing and organizational performance in previous studies [2][3][4], which may have a positive significant moderating effect on the relationship between knowledge management infrastructure capabilities, knowledge management process capabilities and organizational performance.



Scholars had attempted to measure the contribution of the knowledge management infrastructure capabilities and knowledge management process capabilities in organizational performance by different models in business context. Few researches measured the relationship between knowledge management infrastructure capabilities and knowledge management process capabilities with organizational performance at the private higher education context. Furthermore, there is a lack in research in exploring the work ethics role on the relationship between knowledge management and organizational performance more specifically the moderate effect of the Islamic work ethics.

2. LITERATURE REVIEW

The following literature reviewed the empirical researches in knowledge management capabilities contribution to the organizational performance which most was in the business settings and few researches were in the higher education setting, and work ethics, knowledge management and organizational performance relationship.

[5] Studied the theory of organizational knowledge management capabilities (KMC). This research examined the issue of effective knowledge management (KM) from the perspective of organizational capabilities. This perspective proposed that a knowledge infrastructure consisting of technology, structure and culture along with knowledge process architecture of acquisition, conversion, application and protection which are essential organizational capabilities or pre-conditions for effective KM. [4] found that the knowledge management infrastructure capabilities (KMIC) and knowledge management process capabilities (KMPC) have a positive relationship with KM effectiveness (organizational effectiveness). The organizational effectiveness measured using a broad set of non-financial outcomes for example innovation, coordination, responsiveness, ability to identify market opportunities, speed to market and process efficiency. However, [5] did not examine the financial performance, and this study was in business setting.

[6] Extended the notion of organizational effectiveness and added the financial measures and surveyed ten companies. The study found a weak positive relationship between the extent to which the organizations created and exploited knowledge

and overall organizational performance (OP) including financial metrics, and this research was in business setting.

[7] Lee and Lee (2007) examined the knowledge management (KM) capabilities, processes and performance and suggest strategic directions for the successful implementation of knowledge management. The result showed that there is a significant relationship among knowledge management capabilities (KMC), processes and performance, and this study was in business setting.

[8] Analyzed the relationship between knowledge management infrastructure capabilities (KMIC); culture (collaboration, trust and learning culture), structure (decentralization), management (top management support and promotion) and technology (IT support), knowledge management process capabilities (KMPC) (acquisition, conversion, application and protection), creative organizational learning and organizational performance (OP). The results showed that collaboration, learning culture, top management support and IT support affect the KMPC. KMPC and creative organizational learning in turn mediate the relationship between KMIC and OP which demonstrate the relevance of KMIC for OP. This research was in business setting.

[9] Investigated the effects of knowledge management infrastructure capabilities (KMIC); technology, structure, culture and incentive and knowledge management process capabilities (KMPC); acquisition, conversion, application, storing and protection) on organizational performance (OP). The result presented that there is a positive relationship between effective knowledge management (KM) and OP. However, no empirical evidence was found to suggest that knowledge management capabilities (KMC) are linked to the objective financial performance, which remains a topic for future review. The results also showed that knowledge management was affected by organization's size, but not by type of organization. This research was in business setting.

[10] evaluated the impact of specific knowledge management infrastructure capabilities (KMIC); technology, organizational culture and organizational structure and knowledge management process capabilities (KMPC) (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection) on organizational performance (OP). The result



indicated that some knowledge resources (e.g. organizational structure, knowledge acquisition, knowledge application and Knowledge protection) are directly related to OP while others (e.g. technology, organizational culture and knowledge conversion), though important preconditions for knowledge management (KM) are not directly related to OP. This research was in the setting of higher education institutions.

[11] Examined the knowledge management (KM) infrastructure at Kuwait University and saw how faculty members evaluate KM influence on organizational performance. The results revealed that faculty members evaluate knowledge management as 'very good' which indicated that KM components are highly related to organizational performance. This research was in higher education settings.

[12] Studied the relationship between knowledge management (KM) and organizational performance (OP): an exploratory analysis. KM practices were found to be directly related to OP which, in turn, was directly related to financial performance. There was no direct relationship found between KM practices and financial performance. A different set of KM practices was associated with each value discipline (i.e. customer intimacy, product development and operational excellence). A gap exists between the KM practices that firms believe to be important and those that were directly related to organizational performance. This research was in business setting.

[13] Examined the impact of knowledge management capability (KMC) and supplier relationship management (SRM) on corporate performance. The results indicated that KM capabilities positive influence on corporate performance, while SRM is the partial intervening variable between KMC and corporate performance. This research was in business setting.

[14] Studied the performance implications of knowledge management (KM) processes that are examining the roles of infrastructure capability and business strategy. The result found that the roles of infrastructure capability and business strategy have a positive association with the KM process and confirmed the relationship between KM and firm performance. This research was in business setting.

[15] Proposed an integrated knowledge management capability (KMC) framework for

assessing organizational performance. The knowledge management infrastructure capability (KMIC) consisted of; knowledge-based structure, knowledge-based technology, knowledge-based human resources and knowledge-based culture. The knowledge management process capabilities (KMPC) consisted of knowledge acquisitions, knowledge conversions, knowledge applications, knowledge protections and knowledge storing. The knowledge management functions consisted of knowledge creation, knowledge sharing and knowledge utilizations. The results indicated that there is positive correlation between KMC and OP. The results also showed that the proposed framework can be used to assess OP and also can be used as decision tool to decide which KMC should be improved. This research was in business setting.

[16] Investigated the role of knowledge management (KM) in enhancing organizational performance (OP). The research examined the relationship between knowledge management infrastructure capabilities (KMIC); technology, structure, culture and human resources and knowledge management process capabilities (KMPC); acquisition, conversion, application, storing and protection and the KM performance. The research sample was 302 IT employees. The result presented that all elements of KMC have a positive significant relationship with all measures of the OP at 1% level of significant; it means that there is a great correlation between KMIC, KMPC and OP. This research was in business setting.

[17] Examined the impact of knowledge management resources on organizational performance. The results showed that some knowledge resources (structure & acquisition) were directly related to organizational performance, while others (technology & culture) were not directly related to organizational performance.

[18] Investigated the relationship between ethics, knowledge creation and organizational performance. The results revealed that there is a positive and strong correlation between ethics and organizational performance. The relationship between ethics and knowledge creation processes is also positive and significant but no significant relationship is observed between knowledge creation processes and organizational performance.

In summary, although the relationship between knowledge management infrastructure capabilities



(KMIC) and organizational performance(OP) and the relationship between knowledge management process capabilities (KMPC) and organizational performance(OP) has been investigated by a number of studies [11][13][18][10][15][16][19][8][17][9][14][12][7][6][5]. Few researches examined the association between KMIC, KMPC and OP in the higher education setting [10] [11]. Additionally, little research investigated the role of work ethics on the relationship between knowledge management and OP [18]. Also, although knowledge management has spread its wings across many domains, it still lacks its implementation in higher education institutions [20]. According to [21] even though organizations have implemented knowledge management (KM) and offer inconsistent support that KM enhances firm performance and relevant empirical research has yet to produce satisfactory evidences on the nature of the relationship between KM and firm performance. The existing researches are not enough to make a conclusion about the relationship between KMIC, KMPC and OP in non-business setting (e.g., higher education).

2.1 Knowledge Management Capability

Knowledge management capability (KMC) is the ability to organize, shift, configure and arrange knowledge-based resources to achieve the goals and gain business values from the organization based on knowledge-based view [22][23]. [24] defined knowledge management capability (KMC) as an organizational capability to manage the organization's knowledge with efficacy (efficiently and effectively) and assert.

Knowledge management capability (KMC) is the ability to deploy knowledge resources effectively and implement knowledge processes efficiently to derive organizational benefits [25]. According to [19], KMC is the ability of an enterprise to leverage existing knowledge to create and protect new knowledge. Furthermore, an enterprise should combine personal skills and knowledge, physical and technical resources, structure and culture to stimulate the ongoing knowledge dynamism [26].

Knowledge management capability (KMC) are defined as the use of knowledge assets, such as human, organization, and information capital, to produce knowledge synergy through a series of coordinated knowledge processes, such as knowledge acquisition, transfer, integration, and application [27].

According to [5] knowledge management capability consists of knowledge management infrastructure capability (KMIC) and knowledge management process capability (KMPC). Knowledge management infrastructure capability (KMIC) is deeply related to balancing people and technology; establishing and cultivating a knowledge environment; combining technology and organizational design; managing tacit knowledge and establishing flexible and modular organizational structure [5]. Knowledge management process capability (KMPC) refer to the abilities of a firm using knowledge assets in a series of coordinated knowledge processes for the purpose of creating valuable knowledge [5]. Knowledge assets and capabilities may interact with each other to develop organizational capability and further improve organizational performance [28].

2.2 Organizational Performance

[29] Stated that organizational performance (OP) encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added). Performance can be characterized as a measure of the accomplishment of organizations objectives [30].

Organizational performance (OP) is measured through financial and non-financial measures like sale, profit, and market share and non-financial factors measures are efficiency, quality of service, productivity of organization, satisfaction of employees [31]. An organization must constantly strive to improve performance. Traditionally, organizational performance (OP) was measured using financial data however, financial measurements defines the results of actions already taken and are usually reported at the end of projects, so there is no instant feedback when a problem occurs. In this sense, a single financial performance measurement could not support the continuous improvement and innovation of the organization [32].

2.3 Islamic Work Ethics

Islamic work ethics (IWE) is a multi-dimensional phenomenon including various dimensions related to economy, society and



morality [33]. [34] Defined Islamic work ethics (IWE) as an orientation that shapes and influences the involvement and participation of believers in the workplace. It implies that work is a virtue in light of man's needs and a necessity to establish equilibrium in one's individual and social life. IWE can be defined as the good principles and values based on the Islamic sources.

According to [35] Islamic work ethics (IWE) is a guideline in conducting work based on Islamic teaching. It is an orientation that shapes and influences the believers' involvement and practice in the workplace. [36] Defined IWE as the set of moral principles that distinguish what is right from what is wrong in the Islamic context. [37] Defined IWE as an orientation toward work and approaches work as a virtue in human lives. Islamic work ethics (IWE) is a principle of right and wrong which designate to demonstrate what human ought to do taught Quran and shown in the great life of Prophet Muhammad [38]. IWE is a concept of ethics that is based on Islamic teaching and principle which rely on faith [39]. IWE is defined as a set of values or system of beliefs derived from the Quran and *Sunnah* concerning work and hard work [40].

From the literature review, there is a scarcity in empirical researches investigating the moderate effect of the Islamic work ethics (IWE) on the relationship with organizational aspects as following:

First, the moderating effect of the Islamic work ethics (IWE) on the relationship between job stress and work outcomes among employees at private and public sector in Pakistan [41]. Second, the moderating effect of the IWE on the relationship between human resources (HR) practices (Employees Recruitment and Selection, Employees Training and Development, Employees Performance Appraisals and Employees Compensation System) and perceived project success in project-based Pakistani organization [42]. Third, the moderating effect of the IWE on the relationship between organizational justice and work outcomes (turnover intentions, job satisfaction, and job involvement) [43]. Fourth, the moderating effect of the IWE on the relationship between organizational commitment and turnover intentions in public sector of Pakistan [44]. Fifth, the moderating effect of IWE on the relationship between employee's commitment and employees work satisfaction among employees in banking

sector [45]. Sixth, the moderating effect of the IWE on the relationship between knowledge sharing capability and innovation capability among administrative and diplomatic service officers from the Malaysian public sector organizations [4]. Seventh, the moderating effect of the IWE on the relationship between organizational commitment and the job satisfaction among Muslim employees in several organizations in the United Arab Emirates (UAE) [46]. Finally, [47] proposed a framework on the moderating effect of the IWE on the relationship between emotional intelligence and leadership practice among the middle administrators at the Malaysian public universities.

Additionally, few previous researches showed that there is a significant positive relationship between knowledge management (KM) and work place ethics [48] [49] [50] [51] [37]. [49] Studied and explained that competing values framework does not include scales for trust and an ethical workplace and concerning the important role of ethics culture in knowledge management (KM) process, competing values framework was revised by adding an aspect which indicates ethics culture and trust. [18] Investigated the relationship between ethics, knowledge creation and organizational performance. The findings showed that there is a positive and strong correlation between ethics and organizational performance. The relationship between ethics and knowledge creation processes is also positive and significant but no significant relationship is observed between knowledge creation processes and organizational performance.

Furthermore, few researches investigated the relationship between the Islamic work ethics (IWE) and organizational performance (OP) direct relationship and found that there is a significant positive effect between IWE and OP [2][3]. Additionally, little research investigated the direct relationship between workplace ethics and found the direct relationship between work place ethics and knowledge management process (knowledge creation) [48] [49] [50] [51] [37]. Little research measured the moderate effect of the IWE on the relationship between knowledge sharing capability and innovation capability and the findings proved the moderate effect of IWE on the relationship [4].

In summary, although the relationship between the Islamic work ethics (IWE) and organizational performance (OP) has been investigated by few researches in business context [2][3], the existing researches are not enough to make a conclusion



about the relationship between IWE and OP in non-business setting (e.g., higher education). [4] measured the moderate effect of the IWE on the relationship between knowledge sharing capability and innovation capability and the findings proved the moderate effect of IWE on the relationship. Finally, there is a scarcity in research in measuring the IWE moderate effect on the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) with the organizational performance (OP) especially in the context of the private higher education institutions in Oman. The current research intended to achieve the moderating effect of the IWE on the relationship between KMIC, KMPC and OP at the private higher education in Oman.

3. RESEARCH OBJECTIVES AND HYPOTHESES

The objectives of this research are as follows:

1. To identify the level of knowledge management infrastructure capabilities (KMIC) and knowledge management process capabilities (KMPC) at the private higher education institutions (PHEIs) in Oman.
2. To determine the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and the organizational performance (OP) at the private higher education institutions (PHEIs) in Oman.
3. To measure the moderating effect of the Islamic work ethics (IWE) on the relationship between knowledge management infrastructure capabilities (KMIC) knowledge management process capabilities (KMPC) and the organizational performance (OP) at the private higher education institutions (PHEIs) in Oman.

Meanwhile, the hypotheses of this research are as following:

Hypothesis 1: There is a significant relationship between knowledge management infrastructure capabilities (KMIC) and organizational performance (OP) at the private higher education in Oman.

Hypothesis 2: There is a positive and significant relationship between knowledge management process capabilities (KMPC) and organizational performance (OP) at the private higher education in Oman.

Hypothesis 3: There is a significant moderate effect of the Islamic work ethic (IWE) on the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and organizational performance (OP) at the private higher education in Oman.

4. METHODOLOGY

This research used a quantitative correlation method using survey questionnaire to fulfill the research objectives. The research sample was 163 management staff at the private higher education institutions in Oman. The questionnaire was divided into five parts to specifically address the objectives determined in this research. Part one consisted of the demographic information of the respondent. Part two and three contained statements of measuring knowledge management infrastructure capabilities (KMIC) and knowledge management process capabilities (KMPC) adopted 81 items from [5] measure. Part four; comprised statements of measuring the Islamic work ethics (IWE) adopted a short version 17 items of [52] measure. Part five consisted statements of measuring the organizational performance (OP) adopted 40 items from [5] [53] [54] [15]. The research measure had coefficient alpha of .810 - 0.965 in previous studies and in actual research scored 0.892-0.925. The research questionnaire was based on a five-point Likert-type scale with anchors from "5- Strongly agree" to "1- Strongly disagree".

5. RESULTS

The research data was analyzed using IBM SPSS Statistics version 20 and IBM SPSS AMOS version 20. The research data was screened for errors and missing data by inspecting the frequencies for each of the research variables [55] and the results are presented in the following section.

5.1 Demographic Characteristics

The variables selected to describe the respondents' (management staff) background were gender, age, nationality, qualification and years of experience. The results are shown in Table 1.1.



Table 1.1: Frequency and Percentage Distribution of Respondents by Demographic Characteristics

Demographic Characteristics	Frequency (n)	Percentage (%)
<i>Gender:</i>		
Male	91	55.8
Female	72	44.2
<i>Age:</i>		
20 to 31 years	21	12.9
32 to 41 years	46	28.2
42 to 51 years	66	40.5
52 to 65 years	30	18.4
<i>Nationality:</i>		
Omani	41	25.2
Non Omani	122	74.8
<i>Qualification:</i>		
Diploma	9	5.5
Bachelor	39	23.9
Master	58	35.6
PhD	56	34.4
Certification (Information Technology)	1	.6
<i>Years of Experience:</i>		
1-5 years	52	31.9
6-10 years	37	22.7
11-15 years	35	21.5
16-20 years	19	11.7
21-25 years	10	6.1
26-above years	10	6.1

5.2 Level of Knowledge Management Infrastructure Capabilities and Knowledge Management Process Capabilities

The first objective of this research was to determine the level of knowledge management infrastructure capabilities (KMIC) and knowledge management process capabilities (KMPC) implemented at the private higher education institutions. The overall mean value for KMIC was 2.6380 and standard deviation was 0.51905. Additionally, the overall mean for KMPC was 2.4785 and standard deviation was 0.55929. Based on 5 Likert scale labeled as low (1.00 through 2.33), moderate (2.34 through 3.66) and high (3.67 -5.00), majority of the respondents (i.e. management staff) scored a high level of KMIC and KMPC. This indicated that the private higher

education institutions (PHEIs) paid a good attention to KMIC and KMPC.

5.3 Hypothesis Testing

The second and third of the research objectives were presented in Hypotheses 1 and 2 which focused on the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and organizational performance (OP) at the private higher education institutions (PHEIs) in Oman. The results of structural equation model (SEM) model fit were revealed in Table 1.2 and the hypotheses assessment was shown in Table 1.3. The results showed that there was a non-significant relationship between KMIC and OP. However, there was a significant positive relationship between KMPC and OP at the PHEIs in Oman.

Table 1.2: The Structural Equation Model (SEM) Model Fit

Name of Category	Fit Indexes Level of Acceptance	Index Level Modified Overall SEM KMIC---->OP KMPC---->OP
Absolute Fit	Chisq X ² RMSEA<0.08	249.023 0.078
Incremental Fit	CFI > 0.90 TLI > 0.90 NFI > 0.90	0.950 0.939 0.906
Parsimonious Fit	Chisq/df < 5.0	1.992

Table 1.3: The Hypotheses Tests are of the Modified Overall KMIC, KMPC and OP Structure Equation Model

Hypotheses Path	Estimate	S.E	C.R	P	Estimate β
Modified Overall SEM	0.152	0.094	1.606	0.108	0.331
KMIC-->OP	0.176	0.077	2.297	0.022	0.471
KMPC-->OP					

The fourth of the research objective was presented in Hypothesis 3 which was focused on the moderating effect of the Islamic work ethics (IWE) on the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and organizational performance (OP) at the private higher education institutions (PHEIs).



The results of structural equation model (SEM) using multiple grouping analysis of the high and low group of the moderating variable (IWE) difference of the Chi Square and the degree of freedom between the constrained and unconstrained of the two groups [55] were revealed in

Table 1.4. The result showed that there was a significant positive moderating effect of the IWE on the relationship between KMIC, KMPC and OP at PHEIs in Oman.

Table 1.4: The Moderation Test using High and Low IWE Group SEM of the Relationship between KMIC, KMPC and OP

The Moderation Test for High IWE Group					
Fit Index	Constrained Model KMICXOP	Constrained Model KMPCXOP	Unconstrained Model KMICXOP KMPCXOP	Chi-Square Difference	
Chi-Square	187.763	187.538	181.276	6.487	6.262
DF	121	121	120	1	1
The Moderation Test for Low IWE Group					
Chi-Square	200.716	203.854	195.029	5.687	8,825
DF	120	120	119	1	1

6. CONCLUSION AND RECOMMENDATION

This research intended to identify the level of knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) at the private higher education institutions (PHEIs) in Oman. Second, this research also aimed to determine the relationship between KMIC and KMPC and organizational performance (OP) at the PHEIs in Oman. Additionally, this research sought to measure the moderating effect of the Islamic work ethics (IWE) on the relationship between KMIC, KMPC and OP at PHEIs in Oman. The findings are summarized as follows:

1. The levels of the knowledge management infrastructure capabilities (KMIC) (organizational structure, organizational culture and technology infrastructure) and the knowledge management process capabilities (KMPC) (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection) at the private higher education institutions (PHEIs) in Oman was high.
2. There was a non-significant relationship between knowledge management infrastructure capabilities (KMIC) and organizational performance (OP). On the other hand there was a positive significant relationship between knowledge management process capabilities (KMPC) and OP at the private higher education institutions (PHEIs) in Oman.

3. There was a significant moderating effect on the relationship between relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and organizational performance (OP) at the private higher education institutions (PHEIs) in Oman.

The findings through the statistical analysis could contribute practicality on the implementation of knowledge management infrastructure capability (KMIC) and knowledge management process capability (KMPC) at the private higher education institutions (PHEIs) in Oman in order to identify the reasons why the KMIC (organizational structure, organizational culture and technology infrastructure) did not have a significant relationship with organizational performance (OP) although the level of KMIC was high at the PHEIs. In addition, the PHEIs should focus more in the KMPC (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection) in their daily work activities since it contributes significantly in OP. Furthermore, the Islamic work ethics (IWE) resulted in having a significant moderating effect on the relationship between KMIC, KMPC and OP which addressed that the management staff should utilize the IWE to improve the relationship between KMIC, KMPC and OP.

For the purpose of enhancing the organizational performance (OP) at the private higher education institutions (PHEIs) in Oman, it is highly recommended that PHEIs implement the Islamic work ethics (IWE) along with knowledge



management infrastructure capabilities (KMIC) (organizational structure, organizational culture and technology infrastructure) and the knowledge management process capabilities (KMPC) (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection).

The private higher education institutions (PHEIs) should look into several factors to enhance the successful utilization of knowledge management infrastructure capabilities (KMIC) (organizational structure, organizational culture and technology infrastructure) and the knowledge management process capability (KMPC) (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection) as following:

1. The KMIC should improve the organizational structure of the PHEIs in a way that encourage knowledge utilization, creation, sharing and implementation among the management staff collectively.
2. The KMIC should promote the knowledge management culture among the management staff in the way of understanding the benefits of knowledge management and promote the knowledge culture that values the individuals' expertise, training, job learning, teamwork in the PHEIs vision and mission.
4. The KMIC should employ technological infrastructure in a way that allows employees to collaborate, learn and retrieve knowledge with each other and monitor the competitors and generate opportunities with PHEIs allies and partners.
5. The knowledge management process capabilities (KMPC) should improve the knowledge acquisition process by acquiring and exchange knowledge from PHEIs customers, suppliers, partners and feedback from projects, inter and intra organizational collaborations and new knowledge from the higher education sector and competitors.
6. The knowledge management process capabilities (KMPC) should develop knowledge conversion process through converting knowledge into new services, practical plans and actions and transferring the organizational knowledge into individual knowledge and absorbing knowledge from individual, business partners and distribute knowledge throughout the PHEIs. Additionally, the PHEIs should integrate different sources of knowledge, organize it and replace the outdated knowledge.

7. The knowledge management process capabilities (KMPC) should develop knowledge application process by applying and accessing the knowledge learnt from mistakes and learned experience to develop new services, improve efficiency, solve problems, face competitors and adjust the PHEIs strategic directions.
8. The knowledge management process capabilities (KMPC) should focus knowledge protection process by having a process to protect knowledge from inappropriate use inside and outside the PHEIs. Also, the PHEIs should have the incentive that encourages the protection of knowledge, the policies and procedures to protect the PHEIs business secrets and knowledge embedded in the PHEIs employees and clearly communicate of the importance of knowledge protection.
9. The Islamic work ethics (IWE) plays an essential moderating effect on the relationship between knowledge management infrastructure capabilities (KMIC), knowledge management process capabilities (KMPC) and organizational performance (OP) so the PHEIs should apply the IWE code of conduct so that the management staff and employees implement ethical standards in the KMIC (organizational structure, organizational culture and technology infrastructure) and the KMPC (knowledge acquisition, knowledge conversion, knowledge application and knowledge protection) to enhance organizational performance.

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