Artykuły
Articles

PRZESTRZEŃ Społeczna

Social SPACE

Volume 22 Issue 01
2022

Role of Human Capital and Knowledge Management Practices in Organizational Growth: The case of Saudi Arabia

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Abstract

In the competitive world, organizations have realized that without effective implementation of knowledge management practices and human capital utilization, gaining competitive edge is a daydream. Unfortunately, limited studies have focused on exploring the role of knowledge management practices and human capital on improving organizational performance which has created ambiguity among policy makers and professionals. Therefore, purpose of this study is explaining the role of KM practices and human capital in enhancing organizational performance. Data was collected from 181 supervisors and managers working in various organizations operating at global level and analyzed using structural equation modelling with Amos 16. Findings of this study indicated that human capital dimensions namely leadership and motivation, satisfaction and creativity mediate the relationship between KM practices and firm performance in terms of global agility and global innovations. Whereas qualification as dimension of human capital has no significant effects on firm performance. Findings of this study will be helpful for policy makers and management professionals to design and implement their policies accordingly. Since none of the study has examined relationship among these variables, this study will provide better understanding about the role of KM practices and human capital in improving organizational performance.

Keywords – Global agility, global innovation, leadership and motivation, satisfaction, and creativity. Human capital

Introduction

Knowledge and human capital have been getting much attention from researchers and policy maker since they have realized that knowledge and human capital play critical role in organizational performance. In this regards, Fatemeh et al. (2017) explained that organizational success is based on competitive advantage which can be gained through effective and efficient use of resources which is not possible without reliable human capital strategies and knowledge management practices. In this regard, Ipe (2003) explained that organizations can't perform better without effective implementation of knowledge management system. Omotayo (2015) have highlighted that knowledge is critical element for organization to produce competitive products and services but its not possible without effective management of knowledge.

Zack et al. (2009) argued that knowledge sharing practices helps organization to gain competitive edge in the market. In addition, Fayyaz et al. (2020) suggested that knowledge sharing culture promote motivate employees to be innovative which enhance organizational innovation capacity. Therefore, when organizational enhance innovation capacity, it helps to gain competitive edge which helps organization to improve performance specially when organization is dealing in global environment. In addition, Bontis (1998) explained that human capital which consist of employees knowledge, ability and skills is important element of organizational intellectual asset and without effective implementation of knowledge management practices these skills and abilities cannot be used for organizational development (Sohrabi et al., 2015).

Past research has limited understanding about role of knowledge management practices and human capital in organizational performance. In addition, most of the past studies are still focusing on conceptualization of knowledge management practices and elements of human capital. In this regard, Johanson and Mattsson (2015) suggest that measuring human capital is important task in order to understand the role of human capital in organizational performance. Although Johanson and Mattsson (2015) have developed effective scale to measure human capital but limited studies have empirically tested the role of human capital in organizational performance. In addition, most of the studies have examined the role of knowledge management practices on firm performance but using Johanson and Mattsson (2015)

scale, none of the study has examine the role of human capital based on knowledge management practices and firm performance.

Sahibzada et al. (2020) have examined knowledge workers productivity as mediator between knowledge management practices and organizational performance whereas in another study of Sahibzada et al. (2020) they have examined the effects of knowledge management process on organizational performance. In addition, Alnachef and Alhajjar (2017) has examined the direct impact of human capital on organizational performance but limited studies Rezaei et al. (2021) have examined the mediating role of human capital Therefore, purpose of this study is to empirically examine the mediating role of human capital in relationship between knowledge management practices and organizational performance but measurement scales used in these studies are not effective in comparison with the scale developed by Gardner et al. (1993) in which they have proposed 3 dimensions of human capital scale namely leadership and motivation, qualification, satisfaction and creativity. Therefore, current study has used these three dimensions of human capital and test as mediator in relationship between knowledge management practices and organizational performance. In addition, past studies have used organizational performance as single construct whereas current study use two dimensions of organizational performance namely global agility and global innovation. Lastly, none of the study has examined these variables as a model. Therefore, specifically, purpose of this study is to test the mediation role of human capital between knowledge management practices and firm performance in terms of innovation and agility.

Literature Review

Organizations cannot achieve performance targets until employees are not willing to acquire and share their ideas and opinions with peers which is not possible without organizational culture which support knowledge creation and sharing behavior. In this regard, Torabi and El-Den (2017) highlighted that tacit and explicit knowledge develop organizational knowledge and for better organizational performance both types of knowledge are critical. In this situation, organization only need to provide effective environment for employees to share tacit and explicit

knowledge. Rezaei et al. (2021) explained that knowledge sharing is helpful to promote innovation in the organization because knowledge sharing is helpful to present new ideas and learn from others experience.

Employee motivation could be important factor behind knowledge sharing and acquisition which is the responsibility of the leader to motivate the employee to acquire and share the knowledge. If leader is unable to create culture of knowledge acquisition and sharing, employees will be less inclined towards knowledge acquisition and sharing which might negatively influence organizational performance. In this regard, Torabi and El-Den (2017) suggest that when organization motivate employees to work as a team and share the knowledge, it enhance organizational performance. It is important to understand that innovation and agility are important component of organizational performance and without knowledge sharing, acquisition and retention, innovation and agility cannot be enhanced.

Birasnav and Rangnekar (2010) explain that organizations should effectively implement knowledge management practices because its helps organizations to develop human capital and improve organizational performance. In this regard, Sohrabi et al. (2015) pointed out that past research has empirically tested the relationship between knowledge management practices and human capital but these studies are not enough to cover the literature gap since these studies are limited. They further suggest that main objective of knowledge management is to help organization for better performance and gain competitive advantage which is not possible without employee or human capital. In this regard, Rezaei et al. (2021) suggest that knowledge management practices such as knowledge sharing, knowledge creation knowledge acquisition helps organization to gain competitive advantage. In addition, Birasnav and Rangnekar (2010) suggest that organization should explain their employees about importance and benefits of knowledge management practices in enhancing organizational performance but limited research has been done to understand the relationship between knowledge management practices and human capital.

Bontis (1998) explain that knowledge sharing among employees determine the quality and level of human capital in the organization because nature of knowledge transfer to employees helps organizations to develop human capital. In this regard,

Birasnav and Rangnekar (2010) suggest that knowledge usage through creative and innovative skills promote human capital in the organization which means that creativity and innovation is important element of human capital which can be used to develop human capital and knowledge management practices based on creativity and innovation can helps organization to gain competitive advantage in the market. In this regard, Sohrabi et al. (2015) found that knowledge sharing, knowledge creation, knowledge storage and knowledge application positively influence human capital. For example, knowledge is created in the minds and when employees create knowledge, it improves skills and expertise of employees which is helpful to improve job performance.

Huang and Li (2009) explained that knowledge management provide creative environment which helps organization to improve their performance. I. C. Hsu (2008) have highlighted that without effective knowledge management system it's difficult for organization to develop human capital through innovation. In addition, Alshammari (2020) found that human capital and knowledge management positively influence organizational performance through learning culture. Furthermore, Y.-H. Hsu and Fang (2009) reported that knowledge management practices positively influence organizational performance mediated by innovation and intellectual capital. Therefore, based on the above discussion, this study proposed following hypothesis:

Hypothesis

H1: Leadership and motivation mediates the relationship between KM practices and global agility.

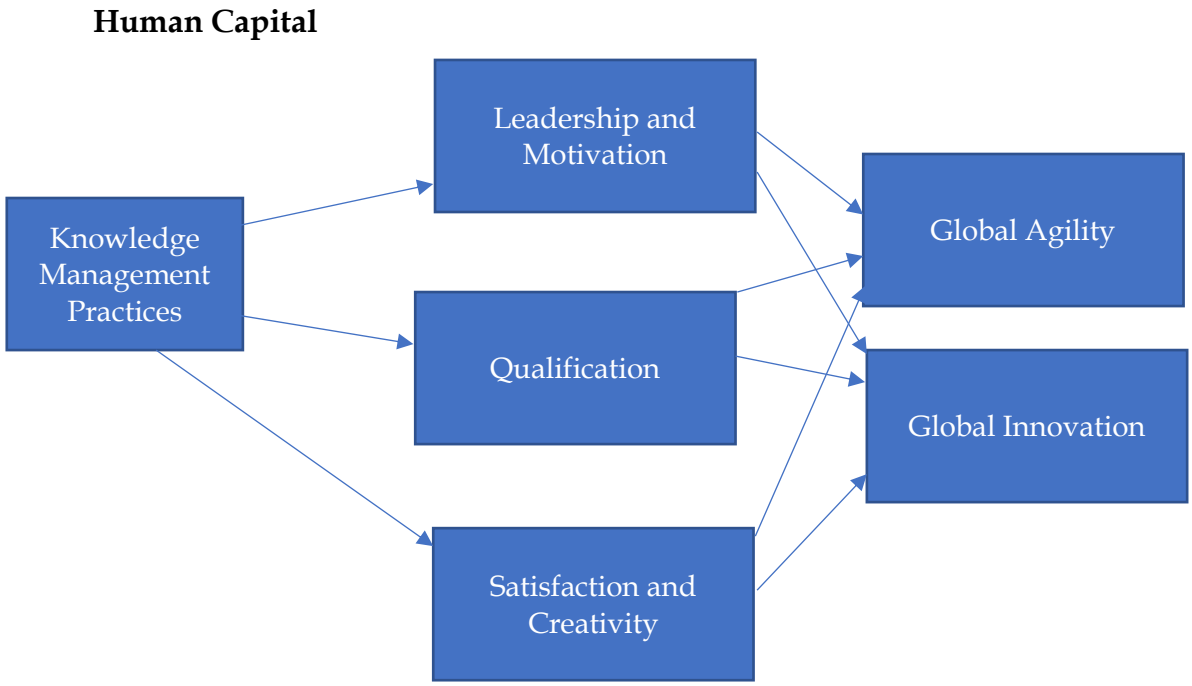
H2: Leadership and motivation mediates the relationship between KM practices and global innovation.

H3: Qualification mediates the relationship between KM practices and global agility.

H4: Qualification mediates the relationship between KM practices and global innovation.

H5: Satisfaction and creativity mediates the relationship between KM practices and global agility.

H6: Satisfaction and creativity mediates the relationship between KM practices and global innovation.



Methodology

Since the study aimed to empirically examined the relationships among knowledge management practices, human capital and organizational performance, questionnaire was used to collect the data. Questionnaire was divided into four sections, in the first section respondents were asked to provide demographic information including gender, age, qualification and number of years' experience. In the second section, respondents were asked to rate knowledge management practices using 5-point likert scale as 1= strongly disagree, 2= agree, 3=neutral, 4= agree and 5= strongly agree. In the third section, respondents were asked to rate human capital dimensions using 5-point likert scale. Human capital dimensions include leadership and motivation, qualification and satisfaction and creativity. In the last section, respondents were asked to rate organizational performance in terms of global agility and global innovation. Unit of analysis was individuals who are working as supervisor or managers in the organizations operating at global level. Structural Equation Modelling (SEM) with Amos 16 was used to analyze the data.

Data Collection

Stratified random sampling method was used to collect the data from supervisor and

managers working in various organizations such as hospitality and tourism, oil and gas, banking and finance, telecommunication, and education. Total 300 questionnaires were distributed with cover letter explaining the importance of study. After two weeks, a kind reminder was sent to complete the questionnaire. Total 189 completed questionnaires were returned in which 8 were discarded due to incomplete and illogical response. Therefore, 181 completed questionnaires were used in the analysis.

Measurements

Human capital was measured using 13 items developed by Alnachef and Alhajjar (2017). Scales was consisting of 3 categories namely leadership and innovation, qualification and satisfaction and creativity. Leadership and motivation scales was measured using 5 items which includes "1-Our employees constantly do their best" 2- "Our employees have leadership skills" 3- "Our organization's employees evaluate their actions" 4- "Employees generally perform tasks with a lot of energy" 5- "Employees learn from each other" Qualification scale was measured using 5 items which includes 1- "Our employees competence is at a suitable level" 2- "When an employee leaves the company we have a training program for a successor" 3- "The organization supports employees in upgrading their skills and qualifications where necessary" 4- "Our company employees are considered intelligent (gifted)" 5- "Our employees are widely considered the best in the whole banking sector" Satisfaction and creativity was measured using 3 items which includes 1- "Our organization consistently generates new ideas" 2- "Our employees are satisfied with the organization" 3- "The organization is assured that it is getting the most from its employees".

Knowledge management practices scale was measured using 10 items adopted from Kaldeen and Nawaz (2020). Scale items includes 1- "We come up with new ideas about our products, services, working methods and process frequently" 2- "We develop new ideas and innovations in collaboration with external partners such as suppliers and clients" 3 "We quickly detect changes in market needs (e.g. preference of clients)" 4- "We collect information about our competitors actively and timely" 5- "We do lot of works to refine, organize and store the knowledge / information collected" 6- "The information sources, manuals and databases are up-to-date" 7-

"The firm applies available knowledge to improve its performance, efficiency, and services provided to customers" 8- "we are able to use knowledge to solve new problems" 9- "We have processes to protect knowledge from inappropriate use inside and outside the organization" 10 "We have extensive policies and procedures for protecting trade secrets".

Global performance was measured using two dimension namely global agility and global innovation adopted from Ahammad et al. (2021). Global agility was consisting of 7 items which includes 1- "My organization responds quickly to local business opportunities" 2. "My organization absorbs global information (from customers, suppliers, competitors, or industry leaders) quickly" 3. "Global learning capability is a source of my organization's global competitive advantage" 4. "My organization responds quickly and effectively to worldwide emergency situations" 5. "My organization responds quickly and effectively to worldwide technology and market changes" 6. "My organization is able to store global employee knowledge/expertise or operational processes" 7. "My organization utilizes industry leaders or international competitors to learn benchmarks". Global innovation was measured using 3 items which incudes 1. "My organization invests more on R&D than its international competitors" 2. "My organization enjoys lower costs on new product development or new technology development than its international competitors" 3. "My organization enjoys more new technology development or new product development than its international competitors".

Analysis and Results

Table 1. Reliability of the Scale

Constructs	Internal Consistency
Knowledge management Practices	0.74
Leadership and Motivation	0.69
Qualification	0.73
Satisfaction and Creativity	0.78
Global Agility	0.60
Global Innovation	0.68

Table 1 shows that the reliability of all scales is above then 0.6 Cooper et al. (2016) which indicates that all scales have higher internal consistency level.

Table 2. Demographic profile

Demographics	No. of Supervisor/Managers	Percentage
Gender		
Male	142	78.4
Female	39	21.5
Age		
18-28 years	28	15.4
29-39 years	65	35.9
40 and above	88	48.6
Education		
Diploma	21	11.6
Graduates	104	57.4
Masters	48	26.5
Others	8	4.4
No. of years' Experience		
less than 5	14	7.7
6-10	81	44.7
11 and above	86	47.5

Notes for the Model

Table 3. Computation of degree of freedom (Default Model)

Number of distinct sample moments	1325
Number of distinct parameters to be estimated	241
Degree of freedom (1325-241)	1084

Table 4. Measurement Model fit

Overall Model Measure	Overall Model Score	Acceptable Model Fit	Acceptable Baseline
CFI	0.931	Passed	≥0.90
AGFI	0.864	Passed	≥0.80
RMSEA	0.024	Passed	< 0.10
CMIN/DF	1.55	Passed	< 3
TLI	0.904	Passed	≥ 0.89
IFI	0.911	Passed	≥ 0.90

Table 5. Structural Model fit

Overall Model Measure	Proposed Model	Acceptable Model Fit	Acceptable Baseline
CFI	0.943	Passed	≥0.90
AGFI	0.814	Passed	≥0.80
RMSEA	0.027	Passed	< 0.10
CMIN/DF	1.97	Passed	< 3
TLI	0.927	Passed	≥ 0.89
IFI	0.949	Passed	≥ 0.90

Table 6. Summary of Effects

Variables	Direct Effects	Indirect Effects	Total Effects
KM Practices --> leadership and motivation	0.201	--------	0.201
KM Practices --> Qualification	0.147	--------	0.147
KM Practices --> Satisfaction and creativity	0.255	--------	0.255
KM Practices --> Global agility	0.187	--------	0.187
KM Practices --> Global Innovation	0.197	--------	0.197
Leadership and motivation -- > Global agility	0.244	--------	0.244
Leadership and motivation -- > Global innovation	0.314	--------	0.314
Qualification -- > Global agility	0.288	--------	0.288
Qualification -- > Global innovation	0.387	--------	0.387
Satisfaction and creativity -- > Global agility	0.211	--------	0.211
Satisfaction and creativity -- > Global innovation	0.246	--------	0.246
KM Practices --> Global agility	-------	3.57	3.57
KM Practices --> Global Innovation	-------	2.99	2.99

Table 7. Result of Analyses and Hypotheses

Hypotheses		P-value	t-value	Accept or reject
H1	Leadership and motivation mediate the relationship between KM practices and global agility.	0.077	3.77	Accept
H2	Leadership and motivation mediate the relationship between KM practices and global innovation.	0.065	3.47	Accept
H3	Qualification mediates the relationship between KM practices and global agility.	0.470	1.20	Reject
H4	Qualification mediates the relationship between KM practices and global innovation.	0.550	1.57	Reject
H5	Satisfaction and creativity mediate the relationship between KM practices and global agility.	0.057	2.58	Accept
H6	Satisfaction and creativity mediate the relationship between KM practices and global innovation.	0.044	3.10	Accept

Results of the SEM reported that leadership and motivation, satisfaction and creativity mediate the relationship between KM practices and global agility and global innovation whereas qualification does not mediate the relationship between KM practices and global agility and global innovation. These results lead to accept H1, H2, H5 and H6 ((t = 3.77, 3.47, 2.58, 3.10; t > 1.96; Hair et al., 2007) respectively whereas reject H3 and H4 (t = 1.20, 1.57; t > 1.96; Hair et al., 2007).

Discussion

Rezaei et al. (2021) explained that knowledge management practices cannot be effective until knowledge is effectively use by employees. In this regards, Tubigi and Alshawi (2015) argued that organizations cannot improve their performance through knowledge management practices until these practices are incorporated in organizational culture such as leadership and support, innovativeness, training and incentives etc. Therefore, purpose of this study is to empirically examine these arguments to develop better understanding about the role of KM practices and human capital in enhancing organizational performance.

Findings of this study indicated that KM practices positively influence human capital dimension of leadership and motivation which further influence organizational performance in terms of global agility and global innovations. In other words, leadership and motivation mediates the relationship between KM practices and organizational performance. Findings of this study support the viewpoints of Rezaei et al. (2021) in which they argued that organization cannot enjoy the benefits of KM practices unless their employees are engage in these practices and leaders develop learning culture. Point of consideration is that when leaders develop a culture of knowledge sharing, employees get motivated which encourage them to share their ideas. These practices and culture help organization to be more innovative and gain competitive advantage in the market.

Findings of this study also reported that KM practices positively influence satisfaction and creativity which further influence organizational performance in terms of global agility and global innovation. In other words, satisfaction and creativity mediates the relationship between KM practices and organizational performance. Findings of this study support the conceptualization of Birasnav and Rangnekar (2010); Sohrabi et al. (2015) in which they highlighted that KM practices cannot be successfully implement without engagement of human since employees creativity will be helpful to effectively implement KM practices. It can be concluded that KM practices with employee's creativity helps organization to be more innovative.

Findings of this study explained that KM practices can be more effective when organizations focus on developing human capital by providing learning culture, promoting knowledge sharing behavior, encouraging innovative ideas, motivating employees to acquire, share and retain the knowledge. In this regard, Al-Qatawneh et al. (2019) suggested that employees motivation and satisfaction to be more innovative can be enhanced through effective training and learning culture. Therefore, leaders can play important role in motivating employees to apply the learned skills and share their ideas to help organization to improve performance. These initiatives help organizations to effectively implement KM practices which leads to enhance organizational performance in terms of global innovation and global agility.

Implications

Based on the study findings, this study explains many theoretical and practical implications. Theoretically, findings of this study provide support about conceptualization of human capital scale based on three dimensions namely leadership and motivation, qualification, satisfaction, and creativity. Confirmatory factor analysis supports these three dimensions which justify the conceptualization of the scale. In addition, Findings of this study explain that three-dimension scale of human capital mediate the relationship between KM practices and organizational performance in terms of global agility and global innovation. These findings strengthen the body of literature and develop understanding about knowledge management, human capital, and firm global performance. From practical point of view, findings of this study explain that knowledge management practices alone will not be effective to enhance organizational performance, but organizations need to develop their human capital for better results. Mangers and policy makers should promote learning culture and provide training and skills development programs to their employees to improve their innovative behavior. Therefore, when employees are motivated to share the learned knowledge, leaders provide opportunities to practice learned skills and employees are satisfied with development process, it helps organization to be more innovative. In addition, managers and supervisor should explain to their employees how their knowledge, skills and abilities can help organization to perform better. These practices will also improve organizational global agility.

Limitations and Future research Directions

There are few limitations in this research which invite researchers to further expand boundaries of current research. Firstly, response rate in this research was low which may hinder the generalization of the findings of this study. Future researchers should test these relationships based on larger set of data to better generalize the findings. In addition, current research focus on those organizations who are only involve in global operation and findings may not be completely applicable on those

organizations operating at national level only. Therefore, future research should focus on those organizations operating at national level as well. Furthermore, mostly target organizations in this study were large firms and findings of this study may not be completely applicable for SME's. Future research should explore how KM practices and human capital based on three dimensions perform in the context of SME's only and how these factors influence SME's performance operating at national and global level. Lastly, current research did not measure organizational performance in term of global financial performance. Future research should focus third dimension of firm performance and measure organizational performance based on three dimensions namely global agility, global innovation, and global financial performance.

Acknowledgement

This work was supported by the Deanship of Scientific Research, King Faisal University, Saudi Arabia [Project No. NA000222].

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