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Knowledge Management Capabilities and Organizational Performance of Public Listed Companies: A conceptual Framework

Baha Aldeen Mohammad Ahmad Fraihat[1], Behrang Samadi[2]

ABSTRACT

Organizational performance is vital for organizations, countries, and individuals. The performance of Jordanian public listed companies (PLCs) is experiencing a decreasing trend. Existing studies have focused on factors, such as structure, capital, and size; while other factors, such as knowledge management, trust, and experience of top management, have not been adequately investigated. The purpose of this study is to develop a conceptual framework that helps decision makers improve the organizational performance of PLCs. Building on the resource-based view, and knowledge-based view, this study proposes that the knowledge management capabilities (KMC) infrastructure and KMC process could affect the organizational performance. In addition, the effect of the KMC infrastructure on organizational performance is mediated by the KMC process. Trust and top management experience could moderate the effect of the KMC infrastructure and KMC process on organizational performance. Propositions are developed and discussed as well as future work.

Keywords: Knowledge Management Capabilities, Knowledge-Based View, Trust, Organizational Performance, Resource-Based View, Top Management Experience.

1. Introduction

Public listed companies are the largest companies in any country, and, hence, their performance is of interest to the government, investors, and individuals. Developing countries in Middle East and North Africa (MENA) suffered a major reduction in performance due to the instability in the region. The growth of the gross domestic product (GDP), for some countries in the region, reduced from 3.3% in January 2015 to 1.8 in July 2016 (Trading Economies, 2017). The performance of the public listed companies in certain countries (e.g. Jordan) also reduced by 2.4% in 2015 compared to 2014 (Amman Stock Exchange, 2016).

Studies that have investigated the performance of PLCs have focused on the structure, capital and board characteristics using secondary data. The role of knowledge management capabilities (KMC),

[1] Faculty of Business and Management, Asia Pacific University of Technology and Innovation (APU), Malaysia. Email: baha1f@yahoo.com
[2] Faculty of Business and Management, Asia Pacific University of Technology and Innovation (APU), Malaysia. Email: behrang@apu.edu.my

trust, and top management's experience have not received adequate attention. Gold, Malhotra and Segars (2001) highlighted the role of KMC in improving organizational effectiveness. They suggested that KMC consists of the KMC process and the KMC infrastructure. The first includes the process of knowledge acquisition, knowledge conversion, knowledge application, and knowledge protection; while the latter consists of the technology infrastructure, organizational culture, and organizational structure. Several researchers have deployed the model of Gold et al. (2001).

Using the KMC model, researchers have found that KMC are associated with many organizational outcomes, such as innovativeness (Donate & Sánchez de Pablo, 2015; Lin, 2007), organizational effectiveness (Aujirapongpan et al., 2010; Gold et al., 2001), competitiveness (Liu, Chen, & Tsai, 2004), and new product development (Lai and Lin, 2012). However, only a few of the previous studies focused on the effect of KMC on organizational performance (Tseng, 2014; Tseng and Lee, 2014; Alaarj et al., 2016).

Trust is important to promote knowledge sharing among organizational members and to enhance knowledge transfer as well as to increase the commitment and innovation of organizational members (Hashim & Tan, 2014; Hill, Bartol, Tesluk, & Langa, 2009; Shazi, Gillespie, & Steen, 2015; Utami, Bangun, & Lantu, 2014). Only a few studies investigated the mediating role, or the direct effect of trust (e.g., Alaarj et al., 2016) and even fewer have investigated its moderating effect. The absence of trust affects the willingness of employees to share their tacit and explicit knowledge (Gharakhani & Mousakhani, 2012; Holste & Fields, 2010). Previous studies have found that a high level of trust could facilitate the organization's ability to enhance relationships, collect information related to the market, and technology development, as well as establish beneficial knowledge sharing internally and externally (Romijn & Albaladejo, 2002).

The experience of the top management is one of the most important factors that enable the management to make accurate decisions that lead to better organizational performance. A high level of top management experience is an indication that the organization will do better than others with a low level of experience (Classen, Van Gils, Bammens, & Carree, 2012). This is because the top management experience has a major impact on the strategic decisions of the organization (Datta & Iskandar-Datta, 2014). Top management with long to experience have a positive effect on the dynamic capabilities of companies as well as the development of new products and services, internal competitiveness, and knowledge sharing (von den Driesch et al., 2015; Saatcioglu, Ozmen & Eris, 2012; Vasudevan & Chawan, 2014; Alaarj, Zainal & Bustamam, 2015).

The aim of this paper is to develop a conceptual framework that helps decision makers to improve the organizational performance of PLCs. This paper consists of five sections. The first section presented the introduction, issues, and objectives; this is followed by the literature review. The third section discusses the conceptual framework. The fourth section discusses the future work, while the last section concludes the study.

2. Literature review

This section discusses the organizational performance, the theoretical framework, KMC, trust, and the experience of top management.

2.1 Organizational performance

Organizational performance is the level of target achieved by an organization or an evaluation of the effectiveness of the individuals, groups, or organization (Tseng & Lee, 2014). The literature review of several studies indicated that organizational performance is the most prevalent dependent variable in the management literature (Richard, Devinney, & Yip, 2009). This is because improved organizational performance at the company level has an essential effect on the macroeconomic variables of countries, such as the foreign direct investment (FDI), employment, and the gross domestic product (GDP).

Researchers have used several methods to measure organizational performance. Traditionally, researchers focused on financial indicators, such as the maximization of profit, reduction of cost, sales, and turnover rate; while the non-financial indicators, such as customer satisfaction, retaining outstanding employees, product development, and new competence, were infrequently used (Kaplan & Norton, 2007; Rhodes et al., 2008).

The balanced scorecard (BSC) criticizes the measurement of performance because it only uses financial indicators. Kaplan and Norton (1992) developed the BSC to strengthen the inadequacy of the previous measurement and to match the development of company performance. They pointed out that only using financial indicators has many limitations and does not reflect the real performance of companies. Thus, they included not only financial performance but also non-financial performance. Therefore, in this study, the financial and non-financial indicators are used to measure organizational performance. This is in agreement with Alaarj et al. (2016), Tseng (2014), and Tseng, and Lee (2014) who investigated performance using financial and non-financial indicators.

2.2 Theoretical framework

Researchers have employed several theories to explain the organizational performance of companies. Among these theories, the resource-based view (RBV) and the knowledge-based view (KBV) are the most suitable for studies that involve KMC. The RBV argues that companies can improve their performance and create a competitive advantage using their resources and capabilities (Barney, 2001). The theory suggests that the survival of a business is dependent on its ability to create and build new resources and capabilities, and to make these capabilities unmatchable by competitors to achieve competitive advantage (Peteraf, 1993; Prahalad & Hamel, 1990). Studies found that using the theory can explain the organizational performance of companies, especially between the functional capabilities and organizational performance (Yu, Ramanathan, & Nath, 2014). Aujirapongpan et al. (2010) conducted a comprehensive literature review to investigate the origin of KM capabilities. The author pointed out that the capabilities of organizational culture, organizational structure, and technology infrastructure represent the resource-based perspective of KMC.

On the other hand, the KBV was derived from the RBV. It proposes that when companies use their knowledge, they will achieve superior performance and competitive advantage (Grant, 1996). The theory claims that knowledge is the most important asset in the company. In addition, it is difficult to match this advantage by competitors in the short time, and, hence, companies can achieve competitive advantage.

Aujirapongpan et al. (2010) argued that the KBV could explain the KMC process. They pointed out that processes, such as knowledge creation, sharing, and application are grouped under the knowledge-based perspective. Tseng (2014) used the theory to explain the effect of protection and conversion of knowledge on the organizational performance of Taiwanese companies.

2.3 Knowledge management capabilities

Many studies have investigated the effect of KMC on the organizational outcome. However, the studies either focused on using the KMC process or the KMC infrastructure. For example, Cepeda and Vera (2007) investigated the effect of the KMC infrastructure on operational capabilities. Chuang (2004) focused on the KMC infrastructure and its effects on KM capabilities, and Pandey and Dutta, (2013) examined the effect of the KMC infrastructure using a case study approach.

However, researchers focused more on the KMC process and related many organizational outcomes to these capabilities. For example, Ju et al. (2006) examined the mediating role of the KMC process using three dimensions (acquisition, conversion, application) between organizational learning and innovation.

Liu and Deng (2015) incorporated acquisition, conversion, application, and protection as dimensions of the KMC process and studied their effect on business process outsourcing. Liu et al. (2004) investigated the effect of the KMC process, including obtaining, refining, storing, and sharing on the competitiveness of Taiwanese companies. The findings showed that the four dimensions have a strong correlation with competitiveness.

Many other researchers have used a similar approach to determine the effect of the KMC process on organizational performance (Wu & Chen, 2014; Tseng & Lee, 2014; Tseng, 2014; Gharakhani and Mousakhani, 2012; Chen & Fong, 2012), and the effect of the KMC process on innovation performance (Zheng et al., 2011).

A few studies have attempted to examine both the KMC infrastructure and the KMC process. For example, Gold et al. (2001), Mills and Smith (2011), and Fan et al. (2009) investigated the effect of the

KMC process and the KMC infrastructure without including any mediator or moderator. Alaarj et al. (2016) tested the direct effect of both capabilities on the organizational performance of Malaysian PLCs. Table 1 summarizes the findings of previous studies.

Table 1: Summary of the findings on KMC

Author(s) /year/	Description	Summary of Findings
Ju, Li and Lee, (2006), Liu and Deng (2015), Liu, Chen and Tsai, (2004), Wu and Chen, (2014), Zheng, Zhang and Du (2011), Tseng and Lee, (2014), Tseng (2014), Gharakhani and Mousakhani, (2012), Chen and Fong (2012)	KMC process	The KMC process positively affects the outcome variables, such as business performance outsourcing, innovation performance, organizational performance, sales growth, quality improvement, and customer satisfaction. The KMC process and its elements play a mediating role between variables. Various variables were used as elements of the KMC process.
Chuang (2004), Cepeda and Vera (2007), Pandey and Dutta, (2013)	KMC infrastructure	Researchers consistently used culture, structure, and technology infrastructure as elements of the KMC infrastructure and found a positive effect on the organizational outcome.
Fan et al. (2009), Chang and Chuang (2011), Aujirapongpan et al. (2010), Mills and Smith (2011), Alaarj et al. (2016), Gold et al. (2001)	KMC: both process and Infrastructure.	Mixed findings regarding the importance of the KMC process and KMC infrastructure, and which element is the most important for organizational outcome and performance.

2.4 Trust

Trust is a new variable in the context of business management and is still in its infancy stage (Wang, Law, Hung, & Guillet, 2014). Ko (2010) pointed out that the existence of trust promotes knowledge sharing and facilitates the knowledge process activities between the consultants and the clients. Holste and Fields (2010) indicated that trust is essential for knowledge sharing and the use of knowledge among the co-workers. Jo et al. (2015) found that trust in the organization has a strong effect on the creativity of the organizational members. Fainshmidt and Frazier (2016) investigated the effect of trust on the organizational capacities of sensing, seizing, and re-configuration. The findings indicated that trust has a strong effect on the capacities, and, in turn, these capacities affect the competitive advantage.

The majority of the studies focused either on the direct effect of trust (e.g., Jo et al., 2015; Holste & Fields, 2010; Ko et al., 2010; Fainshmidt & Frazier, 2016) or on the mediating effect (e.g., Kath et al., 2010; Niu, 2010; Nohe & Michaelis, 2016). Only a few studies investigated the moderating effect of trust on organizational performance (Calvo-Porral & Lévy-Mangin, 2016; Erturk et al., 2015; Fairhurst, 2016)

2.5 Experience

Experience refers to the experience of the senior top management executives, as chief executive officers (CEOs) or other executives, such as chief knowledge officers (CKOs) and all other top management team have a position that enables them to shape the organizational outcomes, and they are the most important individuals in leading and deciding on the direction of the organization in terms of strategic issues, such as knowledge management and its capabilities (Classen et al., 2012). In addition, the upper echelon theory indicates that the experience and personality of top management members have a major impact on the strategic decisions of the organization (Datta & Iskandar-Datta, 2014). This is because the perception of top management forms the basis for the organizations to take action and make a decision (Von den Driesch, Eva Susanne da Costa, Christina Flatten, & Brettel, 2015). Von den Driesch et al. (2015) found that CEOs with long experience have a positive effect on the dynamic capabilities of companies. It is proven that a long experience of work creates more tacit knowledge about the business process and the decision-making process (Teerajetgul & Chareonngam, 2008). Studies also

found that the long experience gained from applying knowledge and the lessons learned is an essential source for new product development (Saatcioglu, Ozmen, & Eris, 2012). In addition, internal competitiveness and knowledge sharing practices in the organizations are linked to the level of experience among the organizational members (Vasudevan & Chawan, 2014).

Drucker (1999) pointed out that the people in the organization and their experience is a major source of organizational experience and knowledge of the organization. This indicates that the experience is a resource that the companies can use to improve their organizational performance and achieve competitive advantage.

3. Conceptual framework

This study aims to determine the effect of the KM infrastructure capabilities and KM process capabilities on organizational performance. Based on the relevant literature, this study proposes that the KM process and KM infrastructure will have a direct effect on the organizational performance of Jordanian public listed companies. The study also proposes that the KMC process on organizational performance mediates the KMC infrastructure. Further, the study also expects that the effect of the KMC process and KM infrastructure on organizational performance could be moderated by the trust and experience of the top management. The author believes that a high level of trust will lead to a better KM process and utilization of the KM infrastructure. In addition, highly knowledgeable and experienced top management will have a positive moderating impact on the KMC process and KMC infrastructure, and their effects on organizational performance. Figure 1 shows the proposed conceptual framework.

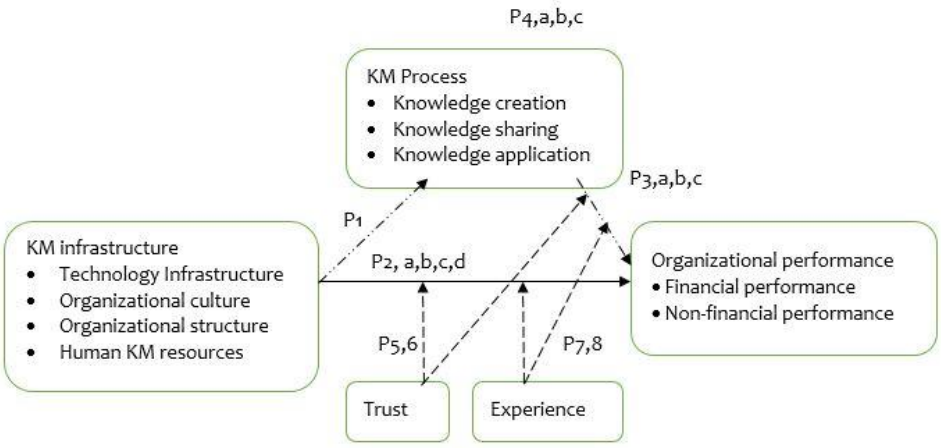

Figure 1: Conceptual framework

4. Development of propositions

Based on the literature review and the conceptual framework, this study proposes direct effect propositions as well as mediating and moderating propositions. In the following sections, a discussion of the development of the propositions in this study is provided.

4.1 KM infrastructure capabilities and organizational performance

KM infrastructure is defined as a special dynamic capability that a firm purposely develops to manage its knowledge base over time (Chen & Fong, 2012). The KMC infrastructure proposed by Gold et al. (2001) included technology infrastructure, organizational culture, and organizational structure. Several researchers have adopted the three dimensions of Gold et al. (Fan et al., 2009; Mills and Smith, 2011; Alaarj et al., 2016). However, the people or employees of an organization are an essential part of the KM assets and capabilities (Drucker, 1999). This has encouraged researchers to add more dimensions to comprehensively contain the KM infrastructure. For example, Miranda et al. (2011) added human resources as a dimension of the KMC infrastructure. Together with the structure, culture and technology infrastructure, Chuang (2004) included the human KM resources as a dimension of the KMC infrastructure. Similarly, Chang and Chuang (2011) included the human KM resources as a dimension of the KM infrastructure.

Cohen and Olsen (2015) considered human capital capabilities to be an important element of the KMC infrastructure. In this study, following the approach of the majority of previous research, the KMC infrastructure is operationalized to include the three basic elements of the KMC infrastructure; namely,

the technology infrastructure, organizational culture, and organizational structure. In addition, the study incorporates human KM resources as a fourth dimension of the KMC infrastructure.

Many researchers have investigated the KMC infrastructure. Cepeda and Vera (2007) indicated that the KMC infrastructure has a significant effect on the knowledge configuration. Chuang (2004) indicated that cultural KM resources, structural, and human, have a significant impact on the competitive advantage of Taiwanese companies. Chang and Chuang (2011) found that the KMC infrastructure positively affected the KMC process and the organizational performance of firms in Taiwan. In this study, it is expected that the KMC infrastructure will have a positive effect on the organizational performance of PLCs. Thus, the following propositions are:

Proposition 1: The KMC infrastructure has a significant effect on the KMC process.

Proposition 2: The KMC infrastructure has a significant effect on organizational performance.

4.1.1 Technology infrastructure

This element consists of the electronic systems that are used by companies to facilitate the knowledge processes, such as knowledge creation, knowledge sharing, knowledge storing and knowledge application (Miranda et al., 2011). Chang and Chuang (2011) found direct links between the infrastructure capabilities and the organizational performance of companies. Similarly, Miranda et al. (2011) linked the stock and flow of the knowledge to the technology infrastructure of the organization. Mills and Smith (2011) found positive relationships between the technology infrastructure and organizational performance. Similar findings were derived by Hao and Song (2016) who found a positive link between IT resources and organizational performance. Therefore, in this study, it is proposed that:

Proposition 3: The Technology infrastructure has a significant effect on organizational performance.

4.1.2 Organizational culture

In the KM context, culture is considered to be a complex collection of behavior, values, norms, beliefs, and symbols that influence the effectiveness of KM in organizations (Ho, 2009). Pandey and Dutta (2013) found that organizational culture is one of the most important variables to promote knowledge sharing. Chang and Chuang (2011) incorporated culture into their framework and tested its effect on the business strategy and performance. They found a direct and significant relationship between the variables. Mills and Smith (2011) did not find any significant relationship between organizational culture and organizational performance. Gold et al. (2001) found that culture is one of the essential elements of the KMC infrastructure to support the KM effectiveness. Thus, it is proposed that:

Proposition 4: The organizational culture has a significant effect on organizational performance.

4.1.3 Organizational structure

Organizational structure consists of the hierarchies, rules, regulations, and the reporting relationship in the organizations and it is a means of control and coordination of the organizational activities (Gold et al., 2001). Gold et al. (2001) found that the effect of culture on organizational performance is significant. Chang and Chuang (2011), and Miranda et al. (2011) also included organizational structure and found that it has a significant effect on organizational performance. Pandey and Dutta (2013) pointed out that structure has an essential role in facilitating KM activities. Similarly, Mills and Smith (2011) indicated that the role of the structure is important and that it has a significant effect on organizational performance. Thus, it is proposed that:

Proposition 5: The organizational structure has a significant effect on organizational performance.

4.1.4 Human KM resources

Human resources are essential for creating new knowledge resources. Previous studies examined the effect of human resources on different organizational outcomes. For example, Chuang (2004) found that human KM resources have a significant effect on the competitive advantage of companies. Chang and Chuang (2011) found that human KM resources have a significant effect on the KMC process and organizational performance. Özbağ, Esen and Esen (2013) also found that human KM

resources are directly related to the KM process and to the innovation of companies. Cohen and Olsen (2015) found that human KM resources are essential and when they interact with other activities they will result in high customer service outcome. Thus, the following proposition is made:

Proposition 6: The human KM resources have a significant effect on organizational performance.

4.2 KMC process and organizational performance

Gold et al. (2001) categorized the KMC process into acquisition, conversion, application, and protection. Many other researchers fully adopted the categorization of Gold et al. (2001), for example, Fan et al. (2009) and Mills and Smith (2011). However, other researchers incorporated different dimensions of the KMC process. For example, Liu et al. (2004) included obtaining, refining, storing, and sharing. Wu and Chen (2014) incorporated creation, transfer, integration, and application. Zheng et al. (2011) viewed the KMC process as including acquisition, generation, and combination. Tseng and Lee (2014) only incorporated transfer and protection, while Tseng (2014) only included conversion and protection. Gharakhani and Mousakhani, (2012) incorporated the KMC process comprising the process of acquisition, sharing, and application. Chen and Fong (2012) included acquisition, dissemination, and utilization.

In this study, the KMC process is considered to be a comprehensive process that includes the life cycle of knowledge. Thus, based on the definition of the KMC process, in this study, it is operationalized as knowledge creation, knowledge sharing, and knowledge application. The new knowledge must first be created and then shared among the organizational members, and this knowledge must be used in decision-making and in adjusting the business process so that the organization can benefit.

The KM process as a construct was examined in several studies. The KM process has a significant effect on organizational performance (Chang and Chuang, 2011). Liu and Deng (2015) found a positive relationship between the KM process and business process outsourcing. Gold et al. (2001), Mills and Smith (2011), and Alaarj et al. (2016) found that the KM process has a significant effect on organizational performance. Thus, this study proposes the following:

Proposition 7: The KM process has a significant effect on organizational performance.

4.2.1 Knowledge creation

The creation of resources across functional departments and boundaries by organizations is referred to as the knowledge creation process (Mills & Smith, 2011). It involves many processes and activities, such as the interaction between organizational members, the innovation, feedback, and benchmarking (Kao & Wu, 2016). Knowledge creation has a significant effect on the innovation capabilities of Spanish companies (Donate & Sánchez de Pablo, 2015; Forés & Camisón, 2016). Thus, the following is proposed:

Proposition 8: Knowledge creation has a significant effect on organizational performance.

4.2.2 Knowledge sharing

Cummings (2004) described knowledge sharing as the obtaining of the know-how and the task information to help collaborate with others to solve problems, develop, and implement new ideas, policies, procedures, and a paradigm shift. The knowledge sharing activities between employees have a significant effect on the employees' performance (Kuzu & Özilhan, 2014). Knowledge sharing has been linked to the business strategy of companies. Chang and Chung (2011) investigated the influence of knowledge sharing on the strategy of companies and found a direct and significant influence. A study conducted by Chen and Fong (2012) to identify the effect of knowledge sharing on the company performance showed that the first could significantly affect the latter. Thus, the following can be proposed:

Proposition 9: Knowledge sharing has a significant effect on organizational performance.

4.2.3 Knowledge application

Knowledge must be applied by organizations to create value for their products and services (Gold et al., 2001). Gold et al. (2001) found that knowledge application has a strong effect on the organizational performance. Similarly, the study of Alaarj et al. (2016) found that knowledge utilization is an important

factor for the organization's performance. Several previous studies, such as Forés and Camisón (2016), found that knowledge application is essential for innovation. Liu and Deng (2015) found that the most important factor is knowledge application. Therefore, the following proposition:

Proposition 10: Knowledge application has a significant effect on organizational performance.

4.3 KMC process capabilities as mediator

The capability of the KMC infrastructure cannot be fully leveraged without the presence of the KMC process capability (Gold et al., 2001). The KMC process is important to facilitate the KM activities in the organization. Ko (2014) investigated the mediating role of the transfer process capabilities and found that this process mediates the effect of trust on the project outcome. Delbufalo (2015) found that the knowledge sharing routine capabilities and the governance mechanism of KM has a mediating role on the relationship between subjective trust and perceived risk relationships with exchange performance. Wu and Chen (2014) found that the KM process mediates the effect of knowledge assets on business process. Chen and Fong (2012) found that the KM process could play a mediating role between business performance and the knowledge governance mechanism. Özbağ, Esen and Esen (2013) found that the KM process has a mediating role on the relationship between the HR capabilities and innovation.

Ju et al. (2006) conducted a study to examine the mediating role of the KM process, such as acquisition, conversion, and application between organizational learning and KM integration, and innovation. The findings indicated that the KM process could have a mediating role between the variables. In this study, it is expected that the KM process (creation, sharing, and application) will mediate the effect of KM infrastructure on the organizational performance. Thus, the following propositions:

Proposition 11: The KM process mediates the effect of the KM infrastructure on organizational performance.

Proposition 12: Knowledge creation mediates the effect of the KM infrastructure on organizational performance.

Proposition 13: Knowledge sharing mediates the effect of the KM infrastructure on organizational performance.

Proposition 14: Knowledge application mediates the effect of the KM infrastructure on organizational performance.

4.4 Trust as moderator

Trust is defined as a social phenomenon that makes collaboration among individuals possible (Niu, 2010). Trust plays an important role in terms of how individuals transfer and share knowledge with others; organizational controls, which are used to manage knowledge, can have a significant influence on how individuals behave (Turner & Makhija, 2006). Fairhurst (2016) indicated that trust could have a moderating role between the purchase intention and the extent of purchase. Calvo-Porral and Lévy-Mangin (2016) also found that trust has a significant moderating effect on consumer loyalty to private food label brands. More complicated analysis, called the moderated mediation, was conducted by Ertürk and Vurgun (2015) who found that trust can moderate the mediated relationship between psychological empowerment and turnover intention in such a way that trust in an organization moderates the mediating influence of perceived organizational support, whereas trust in the supervisor moderates the mediating effect of the leader-member exchange. It is expected that a high level of trust will lead to a positive interaction between the KM process and KM infrastructure, and the organizational performance. Thus, it is proposed:

Proposition 15: Trust moderates the effect of the KM infrastructure on organizational performance.

Proposition 16: Trust moderates the effect of the KM process on organizational performance.

4.5 Experience as moderator

The experience of the top management shapes the organizational activities and direction (Classen et al., 2012). The top management are the ones who make the decisions, and these decisions are strategic in nature and consume substantial resources and are not easily reversible (Grant, 2010). Thus, a good experience could be an asset for the organization as pointed out in the RBV (Barney, 1991). Greater

experience supports the creation of knowledge as well as the arrangement of the organizational environment to suit the KM activities (Teerajetgul & Chareonngam, 2008). Saatcioglu et al. (2012) found that the extensive experience of the top management facilitates the new product development. In addition, it increases the internal competitiveness as well as the knowledge sharing activities in the organization (Vasudevan & Chawan, 2014). Venkatesh et al. (2003) incorporated experience as a moderator between performance expectancy, effort expectancy, social influence, facilitating condition, and the behavioral intention to adopt a new system. In this study, the experience of top management is proposed to moderate the effect of the KMC process and KMC infrastructure on organizational performance. Thus, it is proposed:

Proposition 17: Experience moderates the effect of the KM infrastructure on organizational performance.

Proposition 18: Experience moderates the effect of the KM process on organizational performance.

5. Future work

This is a conceptual study that aims to develop a framework that can be used by decision-makers in Jordan. As a way forward, the author will empirically test the framework of this study. Senior top management executives from Jordanian PLCs will be the respondents of this study. Future researchers are recommended to test this framework in their respective countries. The respondents of the study could be middle managers and operational managers. In doing so, researchers are advised to alter the experience to suit the level of management that they collect the data from.

Researchers are also recommended to expand the model by incorporating other factors, such as the use of social media connectivity and its role in increasing the KMC process, such as knowledge creation, sharing, and application. Additionally, as few studies have been conducted in developing countries, future researchers are advised to conduct more empirical studies in these countries. As the manufacturing sector has dominated the studies of KMC and organizational performance, future studies could be conducted in other sectors, such as the service sector or high technology sector.

Due to the high business uncertainty, future studies could incorporate business uncertainty as a moderator and test its effect on the relationship between the KMC process and infrastructure, and organizational performance. Business strategies and external trust can also be incorporated to determine their effect and their potential role in increasing the organizational performance of the PLCs.

6. Conclusion

This study was conducted to develop a framework that can be used to increase the performance of PLCs. The literature was reviewed, and related theories were investigated. Building on the existing studies, this study proposes that the KMC infrastructure and KMC process could affect the organizational performance of PLCs. The study proposes that the effect of KMC infrastructure could be mediated by KMC process. In addition, the trust and experience of top management could potentially moderate the effect of KMC infrastructure and the KMC process on the organizational performance of PLCs.

Most of previous studies focused on manufacturing companies in developed countries while the PLCs received less attention. This study contributed to the literature by focusing on this type of companies and proposing different set of organizational performance (financial and non-financial). The study also incorporated trust, which is a new and emerging variable in the management literature, as a moderator. The paper developed the conceptual framework based literature related to KMC and suits PLCs. Testing this framework should be on large scale organization. A discussion on the development of the propositions was provided, and future work that includes the testing of the proposed conceptual framework was discussed.

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