Evolving Perspectives on Management of Knowledge in Firms and Performance: A Review of Literature

Dr. Maurice Ochieng Oyoo
Lecturer, School of Business and Human Resource Development, Rongo University, Kenya

Abstract:
A number of studies have investigated the relationship between management of knowledge in firms and performance. On the basis of previous literature, it is apparent that several angles have evolved pitting knowledge management in organizations and their performance. What is manifest, however, is that management of knowledge in firms has a role to play on an organization’s performance. On the theoretical front, credence is given to the position that knowledge resources exploited by an organizations have the potential to contribute to significant changes in performance. Besides, a number of theories are supported as underpinning management of knowledge and organizational performance. On the practical front, the review extends the debate on the relationship between management of knowledge and performance by demonstrating that several performance dimensions in organizations are associated with management of knowledge.

Keywords: Knowledge management, performance, firms

1. Introduction
A number of studies reveal that financial performance of organizations is, to a significant extent, dependent on how they manage their knowledge (Arqawi, Al-Hila, Naser & Al Shobaki, 2018; Ferraris, Santoro, & Dezi, 2017). To start with, a number of authors investigating the relationship between management of knowledge and performance of firms agree that a relationship exists between the two sets of variables (Abualoush, Masa’deh, Bataineh & Alrowwad, 2018; Ferraris, Santoro, & Dezi, 2017). Equally, a number of empirical studies suggest that knowledge-based issues are closely related to business innovative performance (Del Giudice, & Della Peruta, 2016; Donate, Sanchez, Pablo, 2014; Ferraris, Santoro, & Dezi, 2017; Inkinen, Kianto & Vanhala, 2015). However, majority of studies seem to be focused either on static knowledge assets or knowledge processes such as knowledge creation (Oyoo, 2019, Abualoush, Masa’deh, Bataineh, & Alrowwad, 2018; Arqawi, Al-Hila, Naser & Al Shobaki, 2018; Ferraris, Santoro, & Dezi, 2017).

Equally important, nonetheless, is the understanding that other studies have investigated the conscious and systematic managerial activities related to knowledge in firms (Del Giudice & Della Peruta, 2016; Donate, Sanchez, Pablo, 2014; Heisig, Suraj, Kianto, Kemboi, Perez Arrau, & Fathi Easa, 2016). Apparently, management of knowledge has been shown to be associated with improved innovative performance. By the same token, a number of authors also argue that the firms which develop and possess superior knowledge management capabilities have the ability to better manage external knowledge (Ferraris, Santoro and Dezi 2017; Abualoush, Masa’deh, Bataineh & Alrowwad, 2018; Arqawi, Al-Hila, Naser & Al Shobaki, 2018). Furthermore, it is revealed that management of external knowledge is also highly related to the management of the internal knowledge in firms. It follows therefore that combining external and internal knowledge is a recipe for improved organizational performance.

Also dominating the knowledge management debate is the relationship between leadership and its association to management of knowledge (Donate and de Pablo, 2014; Donate, Sanchez, Pablo, 2014). According to Donate and de Pablo (2014), for instance support the existence of improved management of knowledge in firms on the basis of good organizational leadership. Principally, Donate and de Pablo argue that closely related to the good leadership in knowledge management is an increase in innovative performance levels. Interestingly, other authors examine the resulting effect of specific type of leadership on the basis of whether they are knowledge-based leadership viz a viz the firm’s innovation performance (Del Giudice & Della Peruta, 2016; Donate, Sanchez & Pablo, 2014).

What is without doubt in the studies, is that the association between the variables is significantly close. But on a slightly different platform, other investigators have explored the link between knowledge management practices, problem-solving processes and organizational performance. A number of authors have delved into this topic in whole or in parts (Giampaoli, Ciambotti and Bontis, 2017; Donate, Sanchez, Pablo, 2014; Inkinen, 2016). Nonetheless, other aspects explored include knowledge maturity (Naser, Shobaki, Amuna, 2016) with the conclusion that some maturity factors affect knowledge management than others in determining overall performance of an organization.

A number of knowledge management dimensions emerge in literature reviews (Giampaoli, Ciambotti & Bontis, 2017; Inkinen, 2016). What is without doubt, however, is that management of knowledge resources in firms to improve productivity has elicited an intense and focused debate in the last decade (Omotayo, 2015; Ferraris,
Santoro & Dezi, 2017; Giampaoli, Ciambotti & Bonis, 2017; Inkinen, 2016). Besides, the transition in the past two decades, of most world economies to knowledge based, has inevitably reawakened the need to rethink the critical role of optimal management of firms’ knowledge bases (Omotayo, 2015). A number of authors support the position that effective management of knowledge is a critical ingredient for firms seeking to reap optimally from sustainable strategic competitive advantage that they enjoy or possess (Kinyua, 2015). Inevitably, therefore, a number of studies have linked management of knowledge to improved organizational outputs (Omotayo, 2015; Giampaoli, Ciambotti & Bonis, 2017; Kinyua, 2015). Contrastingly, however, the performance dimensions arising out of knowledge management in the very organizations have largely differed from study to study (Shujahat, Hussain, Javed, Malik, Thurasamy & Ali, 2017; Kinyua, 2015).

Knowledge sharing as an indicator, for instance, has taken different approaches and measurement as visualized by different authors. Manifestly, studies are identifying several knowledge sharing culture indicators in organizations. For instance, processes in organizations to facilitate sharing of knowledge (Halloway, 2016; Janus, 2016; Mac Alister, 2016; Garfield, 2017). Another aspect is openness, trust and freedom by both management and employees - in an attempt to share organization specific knowledge (Mac Alister 2016; Ni, Cui, Sang, Wang, & Huang, 2016). By the same token, there is reward and recognition for knowledge sharing (Alhousary & Underwood, 2016; Halloway, 2016; Garfield, 2017). In a similar manner, there is recognizing employees’ work (Zhang & Ng, 2012; Arriagada & Alarcón, 2014; Garfield, 2017). Likewise, another indicator - and one that is appearing to overtake all other indicators - is technological usage and adoption in organizations (Halloway, 2016; Garfield, 2017). Clearly, technology has, of late, become the major route through which sharing is permitted in most organizations (Garfield, 2017).

Increasingly, overcoming objections is also finding support as one of the sharing cultures being cultivated to encourage sharing of organizational knowledge in firms (Gurteen, 1999; Skyme, 2002; Halloway, 2016). But perhaps more crucial - and one that is transcending sharing to other aspects of an organization’s life - is effective collaboration and communication (Janus 2015; Halloway, 2016; Garfield, 2017). Yet, contrary to the existence of these indicators in organizations, their relationship to performance has majorly been explored in relation to performance from a general perspective (Ohiorenoya & Iyamah, 2015; Hussain et al., 2015; Marouf, 2016). Manifestly, most of the performance investigated has been financial dimensions. Importantly there is need to investigate the relationship between the extent of knowledge sharing culture adopted by organizations and their non-financial performance. In summary, the relationship between knowledge sharing culture and non-financial performance has commanded very little focus by investigators. More and more studies (Gurteen, 1999; Skyme, 2002).

Prior studies also identify several management of intellectual capital aspects in organizations. For instance, there is utilization of intellectual capital for competitive advantage (Gogan, Borca, Rennung & Sirbu, 2015; Conley, 2018). A case in point is the focus on using intellectual capital to gain and maintain competitive advantage (Conley, 2018). More and more studies have investigated the achievement of competitive advantage (Skyme, 1998; Dzenopoljac, Yaacoub, Elkraj & Bonis, 2017; Khavandkar, Ehsan, Theodorakopoulos, Hart & Preston, 2016), but ignored its link to the intellectual capital dimension. Unfortunately, achieving a competitive advantage through non-financial performance has also been largely ignored and the current study attempts to bridge the gap.

Increasingly, a number of studies have also investigated the manner in which organizations manage intellectual capital to create value that improves their organization performance (Abdulahi, 2012; Gogan, Borca, Rennung & Sirbu, 2015). Nonetheless, the creation of value is just that - creation of value, since it is not specific on the value creation mechanisms in firms. The current study therefore envisages non-financial performance as a means to value creation in firms and attempts to address it as such. Indeed, in the management process, management of intellectual capital has been defined as one of the most important factors in creating value (Gogan, Borca, Rennung & Sirbu, 2015; Conley, 2018). The current study finds resonance with the assertion that value creation remains an important facet of management of intellectual capital, but should be defined clearly, for instance through non-financial performance in organizations.

Another important aspect of management of intellectual capital explored by most previous studies, has been its role in process improvement in organization (Gogan, Borca, Rennung & Sirbu 2015; Paletta & Alimehmeti, 2014). Yet, it remains critical going forward, that an attempt is made at finding out the manner in which process improvement should be seen as part of management of intellectual capital and, by extension, its relationship to non-financial performance. The scenario is emphasized by Gogan, Borca, Rennung and Sirbu (2015) who affirms that the processes and procedures established in the management of intellectual capital should be regarded as an important starting point for layout and process improvement. Nonetheless, the processes improved in the organization are not well articulated by Gogan, Borca, Rennung and Sirbu (2015) to make it clearer for the organizations keen on their use to spur non-financial performance. The current study is underpinned by the assertion that strategic knowledge practices would be spurred by strategic capabilities to improve performance. Naturally, therefore, process improvement is assumed to be silent in the interaction of the variables meant to engender improvement in organization’s non-financial performance.

Innovative work also features predominantly in management of intellectual literature, and is largely as a result of intellectual capital management (Gogan, Borca, Rennung & Sirbu 2015; Zerenler & Hasiloglu, 2008). But, the concept is referred to by Gogan, Borca, Rennung and Sirbu (2015) as innovative worker. Besides that, the overriding intention of managing intellectual capital is achievement of innovative products. Aspects of innovativeness aimed at managing intellectual capital therefore need to be investigated in relation to non-financial performance. It follows, therefore, that innovative workers and products that come about as a result of the relationship need to be envisaged as intertwined. Nonetheless, the demand for knowledge workers in any economy is continually on the rise (Conley, 2018). It follows, unsurprisingly, from the demand for knowledge worker being on the rise, that the relationship between non-financial
performance and the associated work in firms needs to be established. The debate, therefore, calls for a need to create synergy and strive for the establishment of an innovative atmosphere in the work place (Gogan, Borca, Rennung and Sirbu, 2015).

Knowledge created by an organization has been shown to correlate positively with enhanced performance (Iyer, Sharp & Brush, 2017; Xu, Yang, Jiaotong & Zhang, 2017). Moreover, Frost (2014), observes that new knowledge created in firms has the capacity to bring to the forefront ideas, data and information which the organization can strategically utilize to improve and sustain their competitiveness and survival. But, despite the reality concerning the immediate gains of knowledge creation for firms, studies have majorly focused on knowledge creation and either financial performance, competitive advantage and other performance dimensions; thereby failing to uncover the relationship with non-financial performance. Yet it is non-financial performance that ensures customer satisfaction (Goff et al., 2002), customer retention (NG data, 2017) and employee satisfaction (Heathfield, 2016).

2. Methodology

Methodology wise, a number of investigators in this realm have used empirical evidence to gauge the relationship between management of knowledge in firms and performance (Inkinen, Kianto & Vanhala, 2015; Ferraris, Santoro & Dezi, 2017; Heisig, Suraj, Kianto, Kemboi, Arrau & Easa, 2016; Giampaoli, Ciambotti & Bontis, 2017; Naser, Shobaki, Amuna, 2016). Besides, there is the use of empirical evidence, in particular the survey method. Other studies have relied on previous literature review. However, the studies relying on past review are significantly less compared to the studies based on empirical evidence (Inkinen, 2016).

Data analysis approaches also significantly deviate from each other in approach. In particular, Inkinen (2016) prefers the employment of a systematic review procedure in his study. Other departures include those who adopt partial least squares to test the hypothesized relationships (Inkinen, Kianto & Vanhala, 2015; Donate & de Pablo, 2014). Furthermore, Ferraris, Santoro and Dezi (2017) use the OLS regression analysis technique. Structural Equation Modeling (SEM) also find use in the related studies (Donate & de Pablo, 2014; Giampaoli, Ciambotti & Bontis, 2017; Handsfield, Cousins, Lawson & Petersen, 2014; Tseng, 2016). Interestingly, the use of partial least squares dominates the preferred analysis techniques for researchers. Besides, most data sought for investigation is, for the most part, empirical. In fact, survey is the most common approach in collecting data for testing the relationships.

3. Findings

A number of studies demonstrate that management of knowledge in firms is significant driver for their innovativeness (Inkinen, 2016; Inkinen, Kianto & Vanhala 2015; Donate & de Pablo, 2014). More specifically, Inkinen (2016) asserts that specific leadership characteristics and organizational arrangements are likely to support firm performance through more efficient and effective management of knowledge resources. Inkinen, Kianto and Vanhala (2015), however, are of the position that firms are capable of supporting innovation performance through strategic management of knowledge and competence. In addition, they point out that knowledge-based compensation practices, and information technology practices also support innovative performance. Interestingly, their study supports the position that some knowledge management practices are not directly associated with innovation performance.

Interestingly, Donate and de Pablo (2014) results demonstrate that in as much as most studies point to a positive link between management of knowledge and performance, the existence of this kind of leadership encourages the development and use of KM exploration (i.e., creation) and exploitation (i.e., storage, transfer, and application) practices. Another finding which managers should be conscious on is management of knowledge and enhanced corporate performance (Tseng (2016; Giampaoli, Ciambotti & Bontis, 2017; Donate & de Pablo, 2014).

According to Inkinen (2016), specific leadership characteristics and organizational arrangements are likely to support firm performance through more efficient and effective management of knowledge resources. Giampaoli, Ciambotti and Bontis (2017), however, approaches leadership in an organization from the viewpoint of their efficacy at problem solving and notes that creative problem solving has a direct impact on both organizational and financial performances, whereas problem-solving speed has a direct effect only on financial performance. On his part, Tseng (2016), averse that KMC is the major factor for enhancing corporate performance, and suggested CKG to be a significant intervening factor between KMC and corporate performance.

It is noteworthy that findings on the relationship between management of knowledge in firms and performance dimensions have also evoked interesting, ambiguous and on occasion, damning and confounding results. For instance, in the case of Heisig, Suraj, Kianto, Kemboi, Arrau and Easa (2016), the results support value contribution of KM requires more research despite experts agreeing on the complexities involved in solving this challenge and that research is required in areas such as the influence of KM to support business strategy, intellectual capital, decision-making, knowledge sharing, organizational learning, innovation performance, productivity and competitive advantage.

4. Implications/Conclusions

Knowledge management is recognized as one of the factors responsible for improved innovative performance (Inkinen, 2016; Inkinen, Kianto & Vanhala, 2015; Donate & de Pablo, 2014). Besides, studies on knowledge management and performance are valuable, since from managerial perspective, it sheds light on the role of knowledge in contributing to improved companies’ innovation performance (Inkinen, Kianto & Vanhala, 2015; Ferraris, Santoro & Dezi, 2017). Other studies point out that from a managerial perspective, there is need to understand the relevance of managing knowledge effectively and efficiently, leading to allocation of substantial resources (Ferraris, Santoro & Dezi, 2017). Besides, studies on
knowledge management and performance are important since they contribute to invaluable findings to future research needs in terms of management of knowledge and business outcomes (Donate & de Pablo, 2014). In addition, Giampaoli, Ciambotti and Bontis (2017) aver that there is empirical evidence management of knowledge and performance studies to support the position that knowledge management practices aid in problem-solving activities and improved firm performance.

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