

Role of Organizational Agility in Knowledge Management Orientation and Organizational Performance: A Systematic Literature Review

E.K. Jayampathi¹, A.C. De Alwis² & M.J.M. Razi³

¹Faculty of Management and Finance, University of Ruhuna,
SRI LANKA

^{2,3} Faculty of Commerce and Management Studies, University of Kelaniya,
SRI LANKA

jayampathik@mgt.ruh.ac.lk¹, chamaru@kln.ac.lk², razim@kln.ac.lk³

Abstract

Today's business organizations need to improve an ability of managing organizational knowledge for attaining organizational goals and objectives while capturing the competitive advantage and enhance the performance. Although Knowledge Management Orientation (KMO) is recognized as a vital element in an organizational performance, relationship between KMO and Organizational Performance (OP) is fragmented and ambiguous due to various conceptualizations and definitions. The purpose of this paper was to develop a conceptual model that explain the fragmented results in between Knowledge Management Orientation (KMO) and OP. A systematic literature review was carried out to identify the research gaps and limitations of the literature. The study suggested a new model KMO-Organizational Agility (OA)-OP to uncover the fragmented literature between KMO and OP. Future researchers may consider the OA as a mediating variable to uncover the nexus between KMO and OP. This study highlighted the necessity of promoting OA in business organizations to improve the OP while put together the KMO.

Keywords-: Knowledge Management Orientation, Organizational Agility, Organizational Performance, Systematic Literature Review

1. INTRODUCTION

Knowledge Management (KM) has been started to evolve as an emerging discipline and become popular among scholars and practitioners since several decades ago (Farooq, 2018; Shamim et al., 2019). There is no consensus among scholars regarding the KM as a phenomenon which attached

to a distinct field. Some researchers have identified the KM is associated with Information Management (Abuaddous et al., 2018; Dave et al., 2018; Kebede, 2010) while some others argue that KM is a dimension of Strategic Management (Dayan et al., 2017; Zia, 2020). Although, a vast number of researchers and

practitioners have taken steps to introduce and follow KM and its related theories into their studies, the relatedness of KM into a specific field remains unclear. However, it has been failed to observe the actual significance of KM about any of respective fields (Farooq, 2018; Kebede, 2010). This severity of interest was resulted, KM has been viewed as a significant strategic asset of an organization which determines the competitive advantage (Shamim et al., 2019a, 2019b; Zia, 2020; Paswan & Wittmann, 2009), organizational growth and performance (Reyes et al., 2015; Wang & Wang, 2012; Wang & Lin, 2012; Yashou & Jian, 2011).

With the advent of new mechanisms, different concepts have derived to assess the KM capabilities in an organization. As such, Knowledge Management Orientation (KMO) identified as a key metric to understand the KM behavior of an organization (Zia, 2020; Hussein et al., 2018; Wang et al., 2009; Wang, C.L., 2008). KMO is a reliable and valid measure to identify the KM oriented behaviors of firms (Wang & Lin, 2013). It examines the effect of KM on creating organizational capabilities and improving organizational performance. The knowledge based view theory provides the basic understanding about the KMO of an organization (Lin, 2015; Wang et al., 2008; Farooq & Vij, 2020; Hussein et al., 2019).

The KBV theory argues the knowledge as a strategic asset that influence to competitive advantage and the growth of the business.

Business performance indicated how far a business is managing well or what degree of success is achieved by delivering quality products and service to their customers while maximizing the stakeholders' wealth (Perera & Perera, 2020). Assessing the firm performance has been becoming an important strategic management practice by organizations. Many scholars and practitioners have considered measuring firm performance as a one of the prime objectives as it directly influences on performance improvements (Javed, 2020; Williams, 2018).

Effective introduction and implementation of KMO becomes an imperative strategic issue in achieving organizational success (Farooq & Vij, 2018; Liu et al., 2014; Jasimuddin & Zhang 2008; Mills & Smith 2011). KMO reflects the firm's relative propensity to organizational memory, share the knowledge, assimilate the knowledge, and be receptive to new knowledge (Lin, 2015). KMO enables to explore, develop, and leverage the knowledge resources of an organization to acquire a significant level of business growth and success (Liu et al., 2014; Zheng et al., 2010). Many

literatures asserted that KMO drives organizations to attain organizational goals and objectives and enhance the performance (Liao & Wu 2010; Zia, 2020; Hussein et al., 2018; Wang et al., 2009; Wang, C.L., 2008; Reyes et al., 2015).

However, it is still unclear the influence of KMO on organizational performance (Chuang 2004; Miranda et al. 2011; Atthawej et al., 2020; Hussein et al., 2019; Liu et al., 2014). There are no conclusive findings and many contradictory arguments available on the KMO-OP relationship in the literature (Farooq & Vij, 2020; Tayyebirad & Alroaia, 2020; Hussein et al., 2018; Hussein, 2018; Saqib et al., 2017; Heisig, 2016; Alrubaiee et al., 2015; Nawab et al., 2015; Aliyu & Mahmood, 2015; Ashok et al., 2016; Nawaz et al., 2014; Massingham & Massingham, 2014; Zack et al., 2009; Darroch, 2005). Even though, many scholars have recognized the significance of KMO through the direct effect of KMO-OP, some have argued that a direct relationship could not be recognized between KMO and OP (Farooq & Vij, 2020; Hussein et al., 2019; Darroch 2005; Lee 2001; Liao & Wu 2010). Further, scholars have pronounced that no performance improvement is associated with KM oriented mechanisms in business organizations (Atthawej et al., 2020; Farooq & Vij, 2020;

Hussein et al., 2019; Dzenopoljac et al., 2018; Heisig, 2016; Ashok et al., 2016; Liu et al., 2014; Liao & Wu 2010; Bogner & Bansal, 2007; Kulkarni et al., 2007; Darroch 2005; Lee 2001). Additionally, Farooq & Vij have observed no direct effect from KMO on OP in 2020. Thus, literature on behavioral perspective of knowledge management is pronounced that KMO and OP combination is remained unclear and inconclusive. Further, scholars opined that the association between KMO and OP may result from the effect of some other factors. Especially, as literature highlighted, organizational factors like dynamic capabilities of an organization may influence on the KMO and performance relationship (Zia, 2020; Chung et al. 2012; Garrido-Moreno & Padilla-Meléndez, 2011; Farooq & Vij; 2019). Underlying the empirical gap exist in the literature, scholars have commended for more empirical studies to explore the underlying mechanism in the relationship between KMO and the organizational performance (Zia, 2020; du Plessis 2007; Wang & Wang 2012).

The dynamic capability theory postulates the firm's ability to adapt in dynamic market conditions as the critical source of superior performance (Liu et al. 2012). Dynamic capability affirmed the firm's ability to

recognize, integrate, develop, envisage, and reconfigure internal and external capabilities to deal with environmental dynamics (Pavlou & El Sawy, 2011). Literature argues that KMO as a fundamental capability of an organization may influence on the dynamic capability and enhance the organizational performance (Cepeda & Vera 2007; Haas & Hansen 2005; Sher & Lee, 2004). KMO as a vital capability, provide an intellectual basis for organizations to respond for the internal and external contingencies (Ambrosini & Bowman, 2009).

Organizational Agility (OA) refers to the ability of an organization to respond and adjust itself for the sudden market changes and rapid innovative behaviors in the market (Navaro et al., 2015; Lu & Ramamurthy 2011; Sambamurthy et al. 2003).

Based on the significant relationship between OA and OP, the study expects to develop the missing interplay between KMO and OP through the interaction of OA. Owing an agile organization is a prerequisite and substantial to perform better in the turbulent economic environment. Therefore, this study suggests Organizational Agility (OA) as one of the key abilities of an organization to explore the KMO-OP relationship. OA refer to the ability of an organization to respond and adjust itself for the

sudden market changes and rapid innovative behaviors in the market (Navaro et al., 2015; Lu & Ramamurthy 2011; Sambamurthy et al. 2003). OA is a fundamental requirement for firms to face for the change in main production factors to achieve goals and objectives of the organization, shareholders, employees, and other stakeholders (Kurniawan et al., 2020; Navaro et al., 2015; Shahrabi, 2012). Thus, organizational agility necessitates firms to quickly manage their knowledge resources to respond to the dynamic environmental conditions of the business (Theyel & Hofmann, 2020; Navaro et al., 2015). OA recognized as a direct source of superior organizational performance (Kurniawan et al., 2020; Liu et al., 2012; Overby et al., 2006).

Literature articulated that organizational memory, knowledge sharing practices, new knowledge absorption and assimilation are determined the effective and efficient OA (Chung et al., 2012; du Plessis, 2005). Although an extensive literature promoting KMO and its direct link to OP exists, few studies identify variables that mediate this relationship and, more specifically, no previous research which investigates the potential mediating effect of OA on this relationship. The lack of extensive study examining the effect of OA on the relationship between KMO, and OP motivates this study.

The objective of this study was to supplements the applicability of OA to promote KMO-OP relationship. Thus, the study develops a link between KMO and OA, and considers the effect on organizational performance. The theoretical conceptualization of the study is grounded on the knowledge-based view theory which mainly discusses and determines the competitive advantage and organizational performance.

Outcomes of this study facilitate to understand efficient and effective utilization of knowledge resources during the dynamic and uncertain environments resulting in improved OP. Furthermore, this study highlights the necessity of formulating new policies to improve the organizational ability to work under uncertain and dynamic environment as essential strategic intervention to seek better and improved performance outcomes. Thereby, entrepreneurs and policymakers can re-assess, and re-design their strategic plans in accordance with the outcome of this study. The study emphasis that performance improvement could not be possible merely developing knowledge related strategies, it should be incorporated with organizational ability to work in an agile environment. If the policymakers and entrepreneurs can ensure that KMO ability of an organizational is correctly addressed the agile environmental conditions, the

study conclude that performance improvement is apparent.

2. METHODS

The systematic literature review approach proposed by Hanafizadeh et al. (2014) was applied to identify the relevant literature for the study. A systematic review creates a platform for the process of identify, evaluate, and interpret all existing research findings which is relevant to the subjected field of study, the research questions, or the rising interest of phenomenon (Kitchenham & Charters, 2007). It was used the studies explored from the databases including Scopus, Science Direct, Emerald, IEE, Willey Online Library, and Taylor & Francis. The study was based on the studies related to KMO, organizational performance, knowledge-based view, dynamic capability, and organizational agility. Furthermore, the publication year, fully English transcript, and full-text availability were considered as inclusion- criteria and the studies which do not exist in full text, and the doctoral & master level academic works were excluded.

Research papers published during the 2010-2022 were considered to recognize the contemporary issues and challenges in KMO related studies as this period is recognized as the period where KMO studies have gradually increased. As

Hussein et al. (2016), KMO has tremendously become popular as a field of study among scholars during following decade.

The main keywords used in the automatic search stage was KMO, OP, and OA were also used as keywords in the automatic search stage. Through the automatic stage, it was able to identify 108 studies initially. By removing the duplicated studies, 94 research papers were evaluated with the inclusion and exclusion criteria. Abstract, methodology and conclusion of each study was examined. Accordingly, another 37 studies were eliminated from the selected study database as they do not provide insights for the review. Examining the references of selected studies were able to identify several missing studies. Another 12 studies were identified as result of the manual search. Number of 07 studies were removed as they do not compatible with the quality assessment criteria of the study. Thus, a total of 62 studies were considered as primary studies for the purpose of this study. Based on the literature review, researchers were able to develop a conceptual model to address the gaps identified in the literature. The figure 1 illustrates the conceptual framework developed for the purpose of this study.

3. PROPOSED CONCEPTUAL MODEL AND STUDY PREPOSITIONS

Refer: Figure 1: Proposed Conceptual Framework

3.1. Mediating role of Organizational Agility

Chung et al. (2019) pointed out that the knowledge creation process promotes not only the creativity of the organization but also the competitive advantage improving the organizational agility. OA refers the ability of an organization to perceive opportunities for innovations and grasp the competitive market opportunities through accumulation of mandatory assets, knowledge, and relationships in a contingent and volatile environment (Sambamurthy et al., 2003). As Chung et al. elaborate; knowledge creation process enhances the OA. For the contemporary organizations work in a volatile and hypercompetitive environment, organizational agility, or the capability of sensitivity for environmental fluctuations and respond to those volatilities appropriately with rapid and intensified approaches becomes an increasing critical factor for the survival (Chung et al., 2019; Sambamurthy et al., 2003). Further, Sambamurthy and his group explains that knowledge creation process is understood the consequences of increasing organizational agility. Through the greater knowledge reach and richness creates a platform for OA (Chung et al., 2019; Sambamurthy et al., 2003). Organizational

agility plays as a complementary ability of the firm that facilitates to integrate resources, functions and knowledge in a rapid changing environment rather just applying the knowledge (Navarro et al., 2015). The level of knowledge gained, and its richness determine the ability for OA as practical or substantive knowledge assets permit organizations to come across quick decisions (Chung et al., 2019) with higher level of certainty nevertheless highly changing and volatile environment. Involving organizational members to exchange their ideas with others inspire to take innovative decisions and perspectives which enhance the organizational performance (Sambamurthy et al., 2003). Owing an agile organization is a prerequisite and substantial to perform better in the turbulent economic environment. The knowledge resources gained and stored by the organization can re-use or re-apply to enhance the decision-making process and provide innovative solutions for the sudden changes in the marketplace (Chung et al., 2019). Knowledge creation and management processes let firms to mobilize their intellectual resources at its maximum in the presence of agile competition (Chung et al., 2019). A mechanism which develops to grasp more tacit and implicit knowledge resources from internal and external sources may quickly translate opportunities

into valuable and marketable products and services (Nonaka et al., 1994). An advanced knowledge integration and coordination approach supports to quickly respond for the significant changes and critical occurrences in the marketplace (Sambamurthy et al., 2003). This directs organizations to quickly move from one temporary advantage to another with fast moving environmental conditions (Nonaka et al., 1994). A knowledge management system that focuses both internal and external knowledge resources enrich the firm's ability to detect more accurate and relevant information regarding the market opportunities and customers demand changes etc. KM oriented behavior of organizations promotes the coordination and integration among functional subunits (Chung et al., 2019) with greater knowledge generation. This enhances the organizational agility with rapid responding to the changes while accurately detecting the related changes and opportunities innovatively and sustainably. Furthermore, a continuous generation of new knowledge from authenticated knowledge generation or creation mechanism ensures to build a solid knowledge repository for creating short-mid-long-term advantages (Chung et al., 2019). OA, in turn, stimulates the firm performance through addressing unexpected market changes and issues with appropriate and

innovative solutions (Sambamurthy et al., 2007). The ability to recognize and respond to issues and problems quickly provide an organization a higher degree of certainty. Agile organizations can better transform organizational knowledge resources to solve unexpected market changes and opportunities with solid and innovative solutions which leads to enhance organizational performance (Sambamurthy et al., 2007). Business intelligence shows a direct and positive relationship with OA (Doddy Ridwando et al., 2019). Li et al. (2020) examined significance of e-commerce as a vibrant window of opportunity increases the organizational agility in agricultural firms. This study illustrates a mechanism that explain the impact of KMO on firm performance. Specifically, study proposes the KMO which include different arrays of knowledge sources and applications promote the organizational agility, which results in superior firm performance. When organizations align with more KMO practices stimulates OA more and promote OP in a greater extent. Thus, it assumes that OA plays a critical role in the relationship between KMO and OP.

P₁: Organizational agility (OA) mediates the relationship between KMO and OP.

3.2. Organizational Memory, Organizational Agility, and Organizational Performance

Organizational Memory (OM) refers to a mechanism to capture, store and distribute knowledge resources gained from previous experience which can be used for decision making (Wang et al., 2008). As Farooq (2018) uttered, OM is a type of knowledge codification strategy that explicit knowledge of an organization is being stored and memorized. Under the OM, organizations acquire knowledge and store in different type of databases and documents and consider for decision making purposes (Farooq, 2018). Further, the OM can be identified as a process of acquisition, store, distribution, and retrieval of knowledge and information by organizations. Scholars have argued the importance of the knowledge resources available for re-use for the effective business performance (Farooq, 2018; Chirumalla & Parida, 2016). Memory of the organization creates avenues for organizational innovations. Existing knowledge resources help employees to think innovatively and produce new products and services. Moreover, managers can introduce new managerial techniques, ideas and methods using organizational memory (Yazhou & Jian, 2013). The knowledge codified in knowledge repositories can leverage the decision-making

process and stimulate for the competitive advantage (Watson and Hewett, 2006). Organizations who manage knowledge repositories accelerate the effective decision-making behavior addressing competitive dynamics innovatively and enhance the performance of organizations (Farooq, 2016; Farooq, 2018). Thus, organizations belong to a robust OM can enhance the agility of the organization and lead to business performance.

P₂. Organizational memory is positively related to OA which leads to organizational performance.

3.3. Knowledge Sharing, Organizational Agility, and Organizational Performance

Knowledge sharing refers to the tendency of an organization to enable, encourage and reward for knowledge exchanges in view of capturing implicit and explicit knowledge acquired by employees (Farooq, 2018; Vij & Farooq, 2016). Lin (2015) explained, knowledge sharing is the belief of exchanging knowledge, views, insights, experience, and skills captured by employees with others. Knowledge sharing is playing a critical role as an important determinant of KMO (Farooq, 2017; Wang et al., 2008). Sharing knowledge among knowledge workers of the firm facilitates to

address unexpected changes in the marketplace with innovative solutions (Farooq, 2018; Lin, 2015). Upon the survey results conducted based on cross-sectional industries in Taiwan was found that KS has a significant effect on strengthening innovative capability of knowledge intensive organizations (Liao et al., 2016). When the organizational knowledge sharing is strengthened, innovative capability of the organization will be strengthened and improve the performance (Tsai, 2002). The integration of both implicit and explicit knowledge of an organization allows firms to adapt in response to changes in the market (Wang et al., 2008; 2009). Knowledge sharing is an important predictor of organizational performance (Farooq, 2018; Vij & Farooq, 2016). Organization can develop innovative solutions for the rapid changes in the marketplace through quick access to the knowledge resources of innovation (Yazhou & Jian, 2013). Additionally, they uttered that KS is the way of accessing quickly to the knowledge needed in rapid changing and dynamic environments. Thus, the study proposes that the knowledge spirals which integrate both implicit and explicit knowledge of an organization stimuli the ability to respond sudden market changes and solve market issues with innovative solutions and lead to

enhance organizational performance.

P₃: Knowledge sharing is positively related to OA which leads to organizational performance.

3.4. Knowledge Absorption, Organizational Agility, and Organizational Performance

Knowledge absorption is the ability of an organization to identify new knowledge, integrate or assimilate, and implementing in the business activities (Wang et al., 2008). The ability to recognize new knowledge, bringing them into the organization and applying the knowledge with existing business practices are the functions of knowledge absorption. The knowledge does not generate only from internal sources but also absorption from the external sources and engagements (Hussein et al., 2018). Knowledge absorption is twofold; knowledge exploration and knowledge exploitation. New knowledge exploration focuses to identification and acquisition of new knowledge while new knowledge exploitation refers to utilization of existing knowledge (Cohen & Levinthal, 1990). Knowledge absorption is a key determinant of the dynamic capability such as market orientation of an organization and lead to enhance firm performance (Hussein et al; 2018; Yao et al., 2013; Yazhou & Jian, 2013). The

study conducted by Hussein et al. in 2019 pointed out that there is a significant relationship between knowledge absorption and innovation, where Innovation is considered as a dynamic capability of the organization. The higher knowledge absorbed determine the higher level of innovative solutions will be (Hussein et al., 2019). KA ability of an organization forecast the strength of the organizational innovative capability in turbulence markets (Cohen and Levinthal, 1990). A study conducted based on 29 Chinese manufacturing firms discovered that firm's capability in dynamic situations is driven by the synergy of investment and absorption capacity of knowledge of the organization (Liu and white (1997). Further, Zahra and George (2002) pointed out that only the firms who have the real absorptive capability in knowledge can get the competitive advantage at the marketplace through innovations and product developments. Knowledge absorption is regarded as an absorptive capacity (Cohen & Levinthal, 1990) of an organization, and it related to enhance the dynamic capabilities of the firm (Hussein et al., 2019). Absorbed Knowledge through exploration and exploitation (Cohen & Levinthal, 1990) can be utilized to enhance dynamic capabilities like innovation, market orientation etc. (Hussein et al., 2019). Thus, the study proposes there should be a

combination between knowledge absorption as an absorptive capacity of the organization with the organizational agility which is a dynamic capability of the organization. The knowledge absorption may increase the agile processes of the organization and may lead to enhance the organizational performance.

P4: Knowledge absorption is positively related to OA which leads to organizational performance.

3.5. Knowledge Receptivity, Organizational Agility, and Organizational Performance

Knowledge receptivity refers to the ability of an organization to encourage individual's ideas and assess them on a fair and effective basis regularly and incorporate those ideas into the business practice (Tabar & Nemati, 2013). Knowledge receptivity as defined by Wang et al (2008) is the comfort of an organization to generate knowledge internal sources. Organizational ability to focus on new knowledge from internal sources and incorporating such knowledge into the business activities is regarded as the knowledge receptivity. This is simply called as internalizing of new knowledge within the organization. As Hussein et al. (2019) defined, knowledge receptivity is the willingness of the firm to respect of individual's knowledge ownership through

anticipating employee contribution in decision making and being rewarded. Some studies revealed that knowledge receptivity is the critical dimension of KMO (Hussein et al., 2017; 2018). Further, knowledge receptivity as an important dimension of KMO, found to have a strong effect on organizational performance (Hussein et al., 2016; Yazhou & Jian, 2013). Organizational innovation as a dynamic capability increases as the effect of knowledge receptivity (Han et al., 2008; Hussein et al., 2019). More receptivity to new knowledge ensures more ability in creative and innovative solutions for business changes. Market orientation mediates the relationship between KMO and firm performance (Hussein et al., 2018). Market orientation is regarded as a dynamic capability of an organization where agility is also plays a critical role in the organization as a dynamic capability. MO explains the indirect effect of KMO on business performance. Dynamic capability developments like organizational agility are strongly required to be empowered by the knowledge based oriented behaviors (Kurniawan et al., 2020) like knowledge receptivity which drive to market change and the competitive advantage (Wilden et al., 2018). When the organization follows an open-door policy for individuals to welcome their ideas may progressively

affect to augment the dynamic capabilities of the firm (Hussein et al., 2019; Tabar & Nemati, 2013). Thus, the study proposes that knowledge receptivity can influence to increase organizational agility which leads to organizational performance.

P₅: Knowledge receptivity is positively related to OA which leads to organizational performance.

3.6. Knowledge Re-use, Organizational Agility, and Organizational Performance

Effective KM development processes of an organization should promote the knowledge reuse in decision making to improve innovative capabilities (Yang, 2010; Yusr et al., 2017) in an agile environment. Organizational fluency on knowledge reuse (absorptive capacity) develops the dynamic capability of the organization (Gonzalez & Martine, 2017; Teece et al., 1997; Volberda et al., 2010). Absorptive capacity of an organization facilitates to gain more dynamic capabilities of the firm (Hussein et al., 2019). Knowledge reuse as a dynamic capability of the organization may proactively effect on the aspiration of pursuing new opportunities (Gonzalez & Martine, 2017) and develop novel and innovative mechanisms to commercialize them. Knowledge must be used to develop new

knowledge through integration, innovation and reuse for decision making (Ganzaroli et al., 2017; Gonzalez & Martine, 2017; Gonzalez et al., 2014). The ability of knowledge reuse or re-experience can support to create new knowledge or replace the existing knowledge as a dynamic capability of the organization (Nielsen, 2006; Volberda et al., 2010; Pinho et al., 2012). With the view of dynamic capabilities, Teece et al. (1997) mentioned that firm's ability to integrate, develop, and reuse knowledge powers may quickly respond to the organizational changes (García-Fernández, 2015; Gonzalez & Martine, 2017; Teece et al., 1997). The importance of knowledge reuse does not only mean exploiting skills and experience what the organization is already mastered but supporting to the competitive strategy to create new knowledge using prior knowledge obtained (Gonzalez & Martine, 2017). This knowledge reusing ability of an organization lead to enhance the dynamic capability of the organization (Zollo & Winter, 2002; Volberda et al., 2010) and lead to improve the performance (Cheng & Leong, 2017). Knowledge management processes which facilitate to reuse the organizational knowledge is treated as a strategic asset that generate the competitive advantage (Gonzalez & Martine, 2017; Raudeliūnienė, 2016; Ganzaroli et al., 2016). The better use of knowledge possesses in the

organization repeatedly, reduce the complexity in the innovation process and strive to adapt in critical changes (Krstić & Petrović, 2012). Therefore, the study assumes that knowledge reuse as a capability of KMO effects to improve the organizational agility.

P6: Knowledge re-use is positively related to OA which leads to organizational performance.

4. DISCUSSION AND CONCLUSION

The study focuses to identify a new approach and assess KMO-OP combination in a holistic view. As Wang et al. (2008), KMO is an ability to manage organizational memory, knowledge sharing, knowledge absorption, and knowledge receptivity. KM related literature motivated to develop a holistic model to assess the effect of KMO as various conceptualizations and measurements available in the literature are fragmented.

In this study, KMO considers using multiple dimensions including organizational memory, knowledge sharing, knowledge absorption, knowledge receptivity, and knowledge reuse as a strategic approach to assess the strategic fit of the organizational knowledge management behavior to gain the competitive advantage and enhance the firm performance.

The effect of KMO on the organizational performance is extensively examined in the literature (Farooq, 2018; Lin, 2015; Wang et al., 2008; 2012; 2009). However, the systematic review of the KMO highlighted that the relationship between KMO and organizational performance is fragmented and no consensus among study findings (Jayampathi et al., 2020; Jayampathi et al., 2021). Therefore, the current study coupled the knowledge based view theory with the dynamic capability theory to assess the relationship between KMO-OP. Thus, the study focuses on the organizational agility as a dynamic capability of the firm which is an ability of the organization to quickly respond for the changing business environments creatively and innovatively. The study hypothesized a mediating effect of organizational agility on the association between KMO and OP. Managing the organizational knowledge towards better performance may support to enrich the organizational agility as a dynamic capability which extends more benefits to the organization.

Consideration of KMO and the organizational agility has a logical reasoning. If the KMO behavior of the organization is poor, it will be a danger to develop individuals with superior knowledge to develop creative and innovative

solutions for quick market changes. Maintaining good knowledge repository, sharing culture, absorptive capacity of knowledge, assimilation of the knowledge and knowledge reuse may strengthen organizational knowledge workers and may support to develop productive decisions and generate new knowledge. The study based on the OA will be given prominent study contribution to the academia. OA cannot be separated from the use of knowledge and environmental factors. Integration of all these KMO dimensions together with organizational agility may create a superfluous competency to sustain the competitive advantage and improve the firm performance.

The study backs to the knowledge based view theory of the firm by evaluating organizational memory, knowledge sharing, knowledge absorption, knowledge receptivity, and knowledge reuse as important strategic assets to gain superior firm performance. Further, the study rationalized the propositions emerged from the study to operationalize the KMO model.

5. MANAGERIAL IMPLICATIONS

A transparent KMO taxonomy may provide an organization the ability to adapt in quick market changes and uncertainties by responding innovatively. Thus,

management of an organization needs to understand the strategic relevance of KMO to boost the organizational agility. As such, managers can develop a program to extract required knowledge with employees and use them creatively and innovatively. Creating a learning culture including sharing experience, learning by doing approaches, and provide some fringe benefits to improve knowledge capabilities of employees should be accelerated. Hosting for new knowledge creation, storing, application, and reuse will be given extraordinary advantages for the company to achieve organizational performance and the competitive advantage in uncertain market conditions. It's vital to let knowledge workers to perform their jobs in a free and an open mind. This will automatically tend employees to being creative and innovative, and continuously deal with sudden changes and unexpected situations in the market with good faith.

The study provides insights for managers to develop strategies to incorporate organizational creativity introducing knowledge management orientation practices. Business organizations can individually and mutually reinforce the knowledge management oriented behaviors to attain superior goals and objectives efficiently and effectively in the short and long run. Moreover, the study attempts

to highlight the importance of organizational agility as a crucial factor fostering organizational creativity and adaptability. Managers those who intend to develop new strategies to cope with organizations dynamics must understand the effect of agility as a major success factor in the future of their businesses.

KMO is considered as a strategic tool to assess the KM behavior of an organization. The dearth of established measurement to measure the KMO effective might be obstructing to strategic gain in superior organizational performance. First, the study identified that generating and sharing the knowledge are not only important to generate sufficient knowledge based culture in the organization. Knowledge as a strategic asset of the organization should be available for the purpose of reuse. In the long-run, knowledge reuse brings superfluous benefits to the organization to cope with the competitive advantage. The study suggests a new taxonomy to explain the KMO capability in a new array based on its characteristics.

Management of companies must understand the outcomes generated from the study and develop new mechanisms to frame out the organizational policies to create a knowledge management oriented behavior in their organizations. Managers should

provide employees with relevant learning facilities to enhance their knowledge capabilities. Availability of required facilities to store knowledge and other required data is a responsibility of organizational leaders. Management of companies always must welcome their subordinates or lower level employee's valuable ideas and reward them regularly. Following an open door policy would inspire knowledge workers and motivate towards their jobs. It's a great responsibility of managers to facilitate to create a learning culture to upgrade the existing knowledge repositories and use them repeatedly. Using secondary data sources (reuse of knowledge) which are already available in the organization will limit unnecessary investments on knowledge creation. Advantages of knowledge reuse will entertain in the long-run of the company rather short term benefits.

6. LIMITATIONS AND FUTURE RESEARCH

The present study is about the conceptualization of new research model that can be followed by an organization to achieve better results in managing their knowledge resources. Yet, the model proposed by the study has not empirically tested and still in the conceptualization stage. Therefore, it is difficult to come into a conclusion about the study propositions. Future studies may

require operationalizing the conceptualized model following a suitable and sophisticated scale development procedure. Confirmatory and exploratory factor analysis can apply to empirically validate the model and the propositions presented in the study. Future works may test the construct validity, convergent validity, discriminant validity, and composite reliability to validate the hypothetical model further. Although the study proposes the mediating role of organizational agility in the relationship between KMO-OP, it is completely based on prior research obligations and assumptions. An empirical study must be conducted to validate and

strengthen the arguments carried out from the study. Future models can be further studied to explain the real combination between KMO and OP by identifying antecedents poorly observed in the existing models, if any. Research works in future can consider some other moderating and mediating variables to understand the KMO-OP relationship better. Future studies may use size of the firm, human factors, organizational climate, leadership style, organizational learning, and entrepreneurial inclination etc. to understand whether KMO effect on business performance through direct or indirect effects of these variables.

APPENDIX

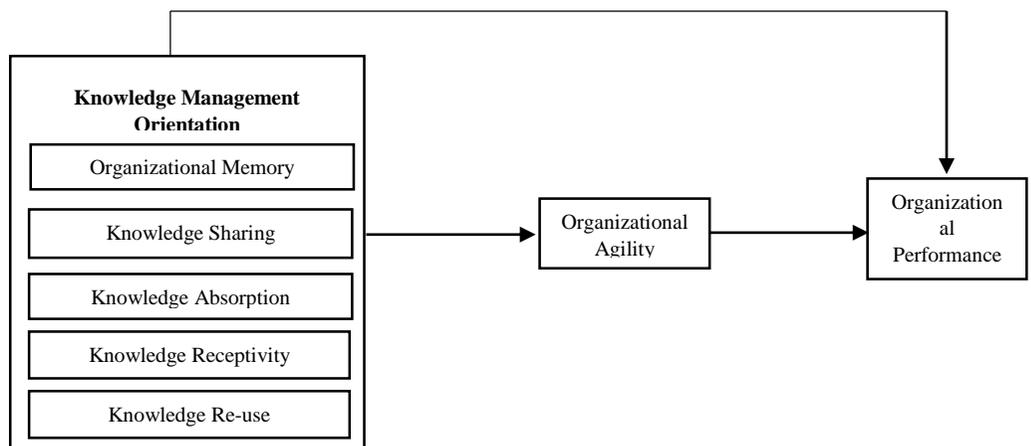


Figure 1: Proposed Conceptual Framework

Source: Literature Review (2010 -2020)

Table 1. Propositions and supportive literature

Proposition	Supportive sources
P1: Organizational agility (OA) mediates the relationship between KMO and OP.	Li et al., 2020; Chung et al., 2019; Doddy Ridwandono et al., 2019; Navarro et al., 2015; Sambamurthy et al., 2007; Sambamurthy et al., 2003; Nonaka et al., 1994
P2: Organizational memory is positively related to OA which leads to organizational performance.	Farooq, 2018; 2016; Chirumalla & Parida, 2016; Yazhou & Jian, 2013; Wang et al., 2008; Watson & Hewett, 2006
P3: Knowledge sharing is positively related to OA which leads to organizational performance.	Farooq, 2018; Farooq, 2017; Vij & Farooq, 2016; Lin, 2015; Liao et al., 2016; Yazhou & Jian, 2013; Wang et al., 2008; Tsai, 2002
P4: Knowledge absorption is positively related to OA which leads to organizational performance.	Hussein et al., 2018; Yao et al., 2013; Yazhou & Jian, 2013; Wang et al., 2008; Zahra & George, 2002; Liu & White, 1997; Cohen & Levinthal, 1990;
P5: Knowledge receptivity is positively related to OA which leads to organizational performance.	Hueesin et al., 2019; 2017; 2018; 2016; Tabar & Nemati, 2013; Yazhou & Jian, 2013; Han et al., 2008; Wang et al., 2008; Kurniawan et al., 2020
P6: Knowledge re-use is positively related to OA which leads to organizational performance.	Hussein et al., 2019; Gonzalez & Martine, 2017; Yusr et al., 2017; Gonzalez & Martine, 2017; Raudeliūnienė, 2016; Ganzaroli et al., 2016; García-Fernández, 2015; Pinho et al., 2012; Volberda et al., 2010; Yang, 2010; Volberda et al., 2010; Nielsen, 2006; Teece et al., 1997;

REFERENCES

Abuaddous, H.Y., Blaquees, J., & Sokkar, A.M.A. (2018). The Impact of Knowledge Management on Organizational Performance, *International Journal of Advanced*

Computer Science and Applications, 9 (4), 204-208.

Ambrosini, V., and Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management?,

- International Journal of Management Reviews* 11(1), 29-49.
- Atthawej, T., Ueasangkomsate, P., & Sudharatana, Y. (2020). A Literature Review and Future Research on Knowledge Management Orientation in Organizations, Joint International Conference on Digital Arts, Media and Technology, Victoria University, 87-90.
- Becerra-Fernandez, I. & Sabherwal, R. (2001). Organizational knowledge management: a contingency perspective, *Journal of Management Information Systems*, 18(1), 23-55.
- Cegarra-Navarro, J. G., Soto-Acosta, P. & Wensley, A. K. (2016). Structured knowledge processes and firm performance: The role of organizational agility, *Journal of Business Research*, 69(5), 1544-1549.
- Cegarra-Navarro, J. G., Soto-Acosta, P., & Wensley, A. K. (2016). Structured knowledge processes and firm performance: The role of organizational agility. *Journal of Business Research*, 69(5), 1544-1549.
- Cepeda, G., and Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, 60(5), 426-437.
- Cheng, L., & Leong, S. (2017). Knowledge management ecological approach: a cross-discipline case study. *Journal of Knowledge Management*, 21(4), 839-856.
- Chirumalla, K. and Parida, A. (2016). Understanding knowledge reuse process: a case study in a production maintenance organization, *IUP Journal of Computer Sciences*, 10(1), 25-42.
- Chuang, S.H. (2004). A resource-based perspective on knowledge management capability and competitive advantage: an empirical investigation, *Expert Systems with Applications*, 27(3), 459-465.
- Chung, T.T., Liang, T.P., Peng, C.H., Chen, D.N. & Sharma, P.N. (2019). Knowledge Creation and Organizational Performance: Moderating and Mediating Processes from an Organizational Agility Perspective," *AIS Transactions on Human-*

- Computer Interaction*, 11(2), 79-106.
- Chung, T.T., Liang, T.P., Peng, C.H., and Chen, D.N. (2012). Knowledge Creation and Financial Firm Performance: Mediating Processes from an Organizational Agility Perspective. System Science 45th Hawaii International Conference, 3622-3631.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3), 101-115.
- Dave, M., Singh, K., Kumar, A. and Kumar, S. (2019), "Knowledge management measures: an empirical investigation of Indian cement industry", *Benchmarking: An International Journal*, 26(3), 734-752.
- Dayan, R., Heising, P. & Matos, F. (2017), " Knowledge management as a factor for the formulation and implementation of organization strategy ", *Journal of Knowledge Management*, 21(2), 308-329.
- Du Plessis, M. (2005). Drivers of knowledge management in the corporate environment. *International Journal of Information Management*, 25(3), 193-202.
- Du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of Knowledge Management*, 11(4), 20-29.
- Dyer, J.D., Cho, D.S. & Chu, W. (1998). Strategic supplier segmentation: the next 'best practice' in supply chain management", *California Management Review*, 40(2), 57-77.
- Farooq R. & Vij, S. (2018). Linking Entrepreneurial Orientation and Business Performance: Mediating Role of Knowledge Management Orientation, *Pacific Business Review International*, 10(8), 174-183.
- Farooq, R. & Vij, S. (2020). The Relationship between Entrepreneurial Orientation and Knowledge Management Orientation. *IUP Journal of Knowledge Management*, 18(3), 23-38.

- Farooq, R. (2017). Knowledge management strategies: evidence from the past, *International Journal of Applied Business and Economic Research*, 15(9), 413-420.
- Farooq, R. (2018). A conceptual model of knowledge sharing, *International Journal of Innovation Science*, 10(2), 238-260.
- Ganzaroli, A., De Noni, I., Orsi, L., & Belussi, F. (2016). The combined effect of technological relatedness and knowledge utilization on explorative and exploitative invention performance post-M&A. *European Journal of Innovation Management*, 19(2), 167-188.
- García-Fernández, M. (2015). How to measure knowledge management: dimensions and model. *VINE Journal of Information and Knowledge Management Systems*, 45(1), 107–125.
- Garrido-Moreno, A., & Padilla-Meléndez, A. (2011). Analyzing the impact of knowledge management on CRM success: The mediating effects of organizational factors. *International Journal of Information Management*, 31(5), 437-444.
- Gonzalez, R. V. D., Martins, M. F., & Toledo, J. C. (2014). Mapping the organizational factors that support knowledge management in the Brazilian automotive industry, *Journal of Knowledge Management*, 18(1), 611-630.
- Gonzalez, R.V.D. & Martins, M.F. (2017). Knowledge Management Process: a theoretical-conceptual research, *Journal of Management Production*, 24(2), 248-265.
- Haas, M. R., & Hansen, M. T. (2005). When using knowledge can hurt performance: The value of organizational capabilities in a management consulting company, *Strategic Management Journal*, 26(1), 1-24.
- Han, X., Kwortnik, R. J. Jr, & Wang, C. (2008). Service loyalty: An integrative model and examination across service contexts, *Journal of Service Research*, 11(1), 22–42.
- Hanafizadeh, P., Keating, B. W., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption, *Telematics and*

- Informatics*, 31(3), 492–510.
- Hussein, A. S., Rahayu, M., Prabandari, S. P., & Rosita, N. H. (2017). Revisiting the dimensions of knowledge management orientation behavior in Indonesia creative industry, *International Research Journal of Business Studies*, 9(2), 63-73.
- Hussein, A.S. (2018). The Importance of Knowledge Management Orientation Behaviour and Innovation on Business Performance: A Lesson from Indonesia Creative Economy Sector, *Asia-Pacific Management and Business Application*, 7(2), 95-108.
- Hussein, A.S., Rosita, H.H. & Ayuni, R.F. (2019). Knowledge Management Orientation Behaviour and Innovation: A Lesson from Indonesia Creative Economy Sector, *International Journal of Sociotechnology and Knowledge Development*, 11 (1), 183-199.
- Igbinovia, M.O. & Ikenwe, I.J. (2017). Knowledge Management: Processes and Systems, *Journal of Information and Knowledge Management*, 8(3), 26-38.
- Jasimuddin, S. M., and Zhang, Z. (2008). The symbiosis mechanism for effective knowledge transfer, *Journal of the Operational Research Society*, 60(5), 706-716.
- Javed, M., Rashid, M. A., Hussain, G., & Ali, H. Y. (2020). The effects of corporate social responsibility on corporate reputation and firm financial performance: Moderating role of responsible leadership, *Corporate Social Responsibility and Environmental Management*, 27(3), 1395-1409.
- Jayampathi, E. K., De Alwis, A. C. & Razi, M. J. M. (2020). An Overview of Knowledge Management Orientation Literature and Future Directions, Proceedings of the 11th International Conference on Business and Information, Faculty of Commerce and Management Studies, University of Kelaniya, Sri Lanka, 132.
- Kakabadse, N. K., Kakabadse, A., & Kouzmin, A. (2003). Reviewing the Knowledge management: Towards taxonomy, *Journal of Knowledge Management*, 7(4), 75-91.

- Kebede, G. (2010). Knowledge management: an information science perspective, *International Journal of Information Management*, 30(5), 416-424.
- Kitchenham, B., & Charters, S. (2007). Guidelines for performing systematic literature reviews in software engineering, Technical report, Keele University and University of Durham, 5 (2), 1051.
- Krstić, B. & Bojan Petrović, B. (2012). The role of knowledge management in increasing enterprise's innovativeness, *Economics and Organization*, 9(1), 93-110.
- Kurniawan, R., Budiastuti, D., Hamsal, M. and Kosasih, W. (2020). The impact of balanced agile project management on firm performance: the mediating role of market orientation and strategic agility, *Review of International Business and Strategy*, 30(4), 457-490.
- Lee, J.N. (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success, *Information & Management*, 38(5), 323-335.
- Li, L., Lin, J., Turel, O., Liu, P. & Luo, X. R. (2020). The impact of e-commerce capabilities on agricultural firms' performance gains: the mediating role of organizational agility", *Industrial Management & Data Systems*, 120(7), 1265-1286.
- Li, M. & Ye, L.R. (1999). Information technology and firm performance: linking with environmental, strategic and managerial contexts, *Information & Management*, 35(1), 43-51.
- Liao, S.H. & Wu, C.C. (2010). System perspective of knowledge management, organizational learning, and organizational innovation. *Expert Systems with Applications*, 37(2), 1096-1103.
- Lin, H. F. (2015). Linking knowledge management orientation to balanced scorecard outcomes. *Journal of Knowledge Management*, 19(6), 1224-1249.
- Liu, H., Ke, W., Wei, K. K. & Hua, Z. (2012). The impact of IT capabilities on firm performance: The

- mediating roles of absorptive capacity and supply chain agility. *Decision Support Systems*, 54(3), 1452-1462.
- Liu, H., Song, D., Huang, Q. & Cai, Z. (2014). Knowledge management capability and firm performance: the mediating role of organizational agility, *Pacific Asia Conference on Information Systems*, 165.
- Lu, Y. & Ramamurthy, K. (2011). Understanding the Link between Information Technology Capability and Organizational Agility: An Empirical Examination, *MIS Quarterly*, 35(4), 931-954.
- Mills, A. M. & Smith, T. A. (2011). Knowledge management and organizational performance: a decomposed view, *Journal of Knowledge Management*, 15(1), 156-171.
- Miranda, S. M., Lee, J.N., & Lee, J.H. (2011). Stocks and flows underlying organizations' knowledge management capability: Synergistic versus contingent complementarities over time, *Information & Management*, 48(8), 382-392.
- Nielsen, A. P. (2006). Understanding dynamic capabilities through knowledge management, *Journal of Knowledge Management*, 10(4), 59-71.
- Nonaka, I., Byosiore, P., Borucki, C. C. & Konno, N. (1994). Organizational knowledge creation theory: A first comprehensive test, *International Business Review*, 3(4), 337-351.
- Overby, E., Bharadwaj, A. & Sambamurthy, V. (2006). Enterprise agility and the enabling role of information technology, *European Journal of Information Systems*, 15(2), 120-131.
- Paswan, A.K. and Wittmann, C.M. (2009). Knowledge management and franchise systems, *Industrial Marketing Management*, 38(2), 173-180.
- Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the Elusive Black Box of Dynamic Capabilities. *Decision Sciences*, 42(1), 239-273.
- Perera, M. H. D. N. & Perera, M. P. S. R. (2020). Relationship between the antecedents of ICT Adoption and the Business Performance of SMEs in the Colombo District, Sri

- Lanka, *Sri Lankan Journal of Entrepreneurshi.*, 2(1), 1-17.
- Pinho, I., Rego, A., & Cunha, M. P. (2012). Improving knowledge management processes: a hybrid positive approach, *Journal of Knowledge Management*, 16(2), 215-242.
- Raudeliūnienė, J.; Meidutė-Kavaliauskienė, I. & Vileikis, K. (2016). Evaluation of factors determining the efficiency of knowledge sharing process, *Journal of the Knowledge Economy*, 7(4), 842-857.
- Reyes, P. M., Worthington, W. J. & Collins, J. D. (2015). Knowledge Management Enterprise and RFID Systems: Adoption to Supply Chain Performance. *Management Research Review*, 38(1), 44–66.
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms, *MIS Quarterly*, 27(2), 237-263.
- Sambamurthy, V., Wei, K.-K., Lim, K., & Lee, D. (2007). IT-enabled organizational agility and firms' sustainable competitive advantage. In Proceedings of the International Conference on Information Systems. 91.
- Shahrabi, B. (2012). The role of organizational learning and agility in change management in state enterprises: A customer-oriented approach, *International Research Journal of Applied and Basic Sciences*, 3(12), 2540–2547.
- Shamim, S., Cang, S. and Yu, H. (2019a). Impact of knowledge-oriented leadership on knowledge management behaviour through employee work attitudes, *The International Journal of Human Resource Management*, 30(16), 1-31.
- Shamim, S., Cang, S. and Yu, H. (2019b). Supervisory orientation, employee goal orientation, and knowledge management among front line hotel employees, *International Journal of Hospitality Management*, 62, 21-32.
- Shamim, S., Zeng, J., Shariq, S.M. and Khan, Z. (2019c). Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: a dynamic

- capabilities view, *Journal of Knowledge Information & Management*, 14(4), 1-19. 56(6) 103135.
- Sher, P. J., and Lee, V. C. (2004). Information technology as a facilitator for enhancing dynamic capabilities through knowledge management, *Information & Management*, 41(8), 933-945.
- Tabar, H.N. & Nemati, B. (2013). Surveying and Investigation the Effect of Knowledge Management Orientation on Organizational Performance (Case Study: ERISH KHODRO Company), *Asian Journal of Social and Economic Sciences*, 2(3), 46-52.
- Teece, D. J., Pisano, A. & Shuen, A. (1997). Dynamic capabilities and strategic management, *Strategic Management Journal*, 18(7), 509-533.
- Theyel, G. & Hofmann, K.H. (2021). Manufacturing location decisions and organizational agility, *Multinational Business Review*, 29 (2), 166-188.
- Vij, S. & Farooq, R. (2016). Moderating effect of firm size on the relationship between IT orientation and business performance, *IUP*
- Volberda, H. W., Foss, N. J. & Lyles, M. A. (2010). Absorbing the concept of absorptive capacity: how to realize its potential in the organization field, *Organization Science*, 21(4), 931-951.
- Wang Y., & Lin, J. (2012). An Empirical Study of the Impact of Knowledge Management Orientation on Organizational Performance, *Journal of Convergence Information Technology (JCIT)*, 7(17).
- Wang, C. L., Hult, G. T. M., Ketchen, D. J., Jr. & Ahmed, P. K. (2009). Knowledge management orientation, market orientation, and firm performance: an integration and empirical examination, *Journal of Strategic Marketing*, 17(2), 147-170.
- Wang, C.L. (2008). Entrepreneurial Orientation, Learning Orientation, and Firm Performance, *Entrepreneurship: Theory and Practice*, 32 (4) 635-657.
- Wang, C.L., Ahmed, P.K. and Rafiq, M. (2008). Knowledge management

- orientation: construct development and empirical validation, *European Journal of Information Systems*, 17 (3), 219-235.
- Wang, Y., & Lin, J. (2013). An empirical research on knowledge management orientation and organizational performance: The mediating role of organizational innovation, *African Journal of Business Management*, 7, 604–612.
- Wang, Z., & Wang, N. (2012). Knowledge sharing, innovation and firm performance, *Expert Systems with Applications*, 39(10), 8899-8908.
- Wee, J. C. N. & Chua, A. Y. K. (2013). The peculiarities of knowledge management processes in SMEs: the case of Singapore, *Journal of Knowledge Management*, 17(6), 958–972.
- Wilden, R., Gudergan, S. & Lings, I. (2018). The interplay and growth implications of dynamic capabilities and market orientation, *Industrial Marketing Management*, 83, 21-30.
- Williams, R.I. (2018). Measuring family business performance: research trends and suggestions, *Journal of Family Business Management*, 8(2), 146-168.
- Yang, J. (2010). The knowledge management strategy and its effect on firm performance: a contingency analysis, *International Journal of Production Economics*, 125(2), 215-223.
- Yao, Z., Yang, Z., Fisher, G. J., Ma, C. & Fang, E. E. (2013). Knowledge complementarity, knowledge absorption effectiveness, and new product performance: The exploration of international joint ventures in China, *International Business Review*, 22(1), 216-227.
- Yazhou, W. & Jian, L. (2013). An empirical research on knowledge management orientation and organizational performance: the mediating role of organizational innovation, *African Journal of Business Management*, 7(8), 604-61.
- Yusr, M. M., Mokhtar, S. S. M., Othman, A. R. & Sulaiman, Y. (2017). Does interaction between TQM practices and knowledge management processes enhance the innovation performance?, *International Journal of*

- Quality & Reliability Management*, 34(7), 955–974.
- Zheng, W., Yang, B. & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management, *Journal of Business Research*, 63(7), 763-771.
- Zia, N.U. (2020). Knowledge-oriented leadership, knowledge management behaviour and innovation performance in project-based SMEs. The moderating role of goal orientations, *Journal of Knowledge Management*, 24 (8), 1819-1839.
- Zollo, M. & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities, *Organization Science*, 13(3), 339-351.